

Northeast

community college

2021/2022 COLLEGE CATALOG

NORTHEAST COMMUNITY COLLEGE

LOCATION

The College's service area consists of 20 counties in Northeast Nebraska with a total population of approximately 160,000. The district is nearly 200 miles in length and covers approximately 14,400 square miles. The main campus is located in Norfolk, Nebraska, which has a population of approximately 25,000.

DEGREES AND AWARDS

Associate of Applied Science / 2 years

Associate in Nursing / 2 years

Associate of Arts / 2 years

Diplomas / 1 year

Associate of Science / 2 years

Certificates / Less than 1 year

ACCREDITATION — INSTITUTIONAL

The Higher Learning Commission

ACCREDITATION — PROGRAMS

Associate Degree Nursing / Accreditation Commission for Education in Nursing

Automotive Technology / National Automotive Technicians Education Foundation

Food Service and Dietary Management / Association of Nutrition and Foodservice Professionals

Health Information Management Systems / Commission on Accreditation for Health Informatics and Information Management Education

Heating, Ventilation, and Air Conditioning / HVAC Excellence

Paramedic / Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions

Physical Therapist Assistant / Commission on Accreditation in Physical Therapy Education

Practical Nursing / Nebraska State Board of Nursing

Veterinary Technology / American Veterinary Medical Association

2019-20 ENROLLMENT DATA

Full-Time Equivalent (FTE) Students: 2,595

Total Credit Enrollment: 6,450

Total Noncredit Enrollment: 5,442

2019-20 FINANCIAL AID

Federal and State Programs / \$11,942,857

Institutional Tuition Waiver and Scholarships / \$1,166,659

Northeast Community College Foundation Scholarships / \$413,671

Private Scholarships / \$1,832,488

Private Alternative Loans / \$290,538

Agency Assistance and Reserves/Veteran Benefits / \$280,358

Total Financial Aid / \$15,926,571

GRADUATE PLACEMENT STATISTICS (Year 2020 Graduates)

98% of Northeast graduates are employed or continuing education

Of those who entered employment, 91% are employed in Nebraska. 56% are employed in the 20-county service area.

90% of Northeast Career and Technical program graduates are employed in a field related to their training 86% are employed in Nebraska

PRESIDENT'S MESSAGE



Welcome to Northeast Community College!

This catalog has been designed as a comprehensive guide as you become a student of Northeast. It includes academic program information and descriptions that will assist you on your postsecondary journey.

Northeast Community College offers over 130 programs and concentrations leading to 61 unique awards that either transfer to four-year colleges and universities or into the workforce. Regardless of whether you plan to pursue an associate degree, a certificate, a diploma, or just take a few courses, our faculty and staff are focused on your success.

The catalog also provides information on areas such as financial aid, academic and student support services, the academic calendar, and extracurricular activities, organizations and clubs. While your studies are certainly important, please take advantage of opportunities to make new, lifelong friends outside of the classroom.

Success in college is dependent on many things - setting goals, careful planning and a focus to put your best foot forward. Combined with our values of treating each other with respect and a desire to see you succeed, I am confident you will be well on your way to obtaining the training and skills that will allow you to become a productive member of America's workforce.

You have chosen a terrific college in which to pursue your education. Northeast has been ranked among America's top community colleges by the Aspen Institute, including being named one of the Top 150 of the nation's 1,100 community colleges in 2021. It is a testament to Northeast's stellar reputation that recognizes what our faculty and staff do each and every day to make sure our students are on the right path to achieve their goals.

On behalf of the entire faculty and staff of Northeast Community College, thank you for joining us as we prepare you for your future.

Leah A. Barrett, Ed.D.

President

Northeast

community college

WEBSITE: northeast.edu

★ MAIN CAMPUS

Northeast Community College
 P.O. Box 469
 801 East Benjamin Avenue
 Norfolk, NE 68701-6831
 (See phone numbers below.)

Nebraska



● NORTHEAST COMMUNITY COLLEGE EXTENDED CAMPUS LOCATIONS

O'Neill Extended Campus
 P.O. Box 269
 505 East Highway 20
 O'Neill, NE 68763-2314
 Phone: (402) 336-3590
 or (800) 421-6322

South Sioux City Extended Campus
 P.O. Box 989
 1001 College Way
 South Sioux City, NE 68776-3934
 Phone: (402) 241-6400
 or (888) 698-6322

West Point Extended Campus
 202 Anna Stalp Avenue
 West Point, NE 68788-1960
 Phone: (402) 372-2269
 or (888) 794-6322

□ NORTHEAST COMMUNITY COLLEGE REGIONAL OFFICES

Ainsworth Regional Office
 P.O. Box 54
 1292 East 4th Street
 Ainsworth, NE 69210-1225
 Phone: (402) 844-7661
 or (402) 387-2688 ext. 110

Hartington Regional Office
 P.O. Box 578
 107 West State Street
 Hartington, NE 68739-2712
 Phone: (402) 254-6224
 or (402) 844-7660

Campus Telephone Directory

General Information: (402) 371-2020 | Toll Free: (800) 348-9033 | Fax: (402) 844-7400

Department/Office	Department/Office
Academic Support Center..... (402) 844-7125	Human Resources..... (402) 844-7043
Accounts Payable (402) 844-7004	Institutional Effectiveness (402) 844-7066
Admissions (402) 844-7260	KHWK Cable TV (402) 844-7357
Admissions Fax..... (402) 844-7413	Library..... (402) 844-7130
ABE/ESL/GED (402) 844-7255	Lifelong Learning Center (402) 844-7246
Science, Technology, Agriculture and Math Division..... (402) 844-7180	President/Board of Governors..... (402) 844-7055
Allied Health (402) 844-7334	Public Relations..... (402) 844-7063
Alumni..... (402) 844-7065	Purchasing (402) 844-7050
Applied Technology Division (402) 844-7216	Registrar..... (402) 844-7265
Athletics (402) 844-7271	Registration Fax..... (402) 844-7396
Business and Humanities Division..... (402) 844-7290	Residence Life (402) 844-7150
Career Services (402) 844-7264	Security (402) 841-5163
Disability Services..... (402) 844-7343	Service Center (402) 844-4357
Early College (402) 844-7118	Student Accounts..... (402) 844-7001
Educational Services (402) 844-7114	Student Activities..... (402) 844-7159
EMS Services (402) 844-7720	Student Health..... (402) 844-7176
Financial Aid (402) 844-7285	Student Life..... (402) 844-7722
Financial Aid Fax..... (402) 844-7397	Student Services..... (402) 844-7272
Food Service (402) 844-7165	Testing Center (402) 844-7281
Foundation/Planned Giving (402) 844-7056	Theater Ticket Box Office..... (402) 844-7360
Hawk Shop (402) 844-7140	TRIO Student Support Services..... (402) 844-7736
Health and Public Services Division..... (402) 844-7325	Workforce Development (402) 844-7235
	Youth Apprenticeship (402) 844-7121

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NORTHEAST COMMUNITY COLLEGE BOARD OF GOVERNORS



Del Ames
Neligh
District I



Donovan Ellis
Pierce
District I



Nicole Sedlacek
O'Neill
District II



Carol Sibbel
O'Neill
District II



Steven Anderson
Concord
District III



Arlan Kuehn
South Sioux City
District III



Dr. Terry Nelson
West Point
District IV



Gene Willers
Pilger
District IV



Dirk Petersen
Norfolk
District V



Julie Robinson
Norfolk
District V



Jeffrey Scherer
Beemer
At Large

This publication should not be considered a contract between Northeast Community College and any prospective student. The College retains the right to make changes in calendar, programs, course offerings, policies, graduation requirements, tuition, fees, and refunds without notice.

Northeast Community College does not discriminate on the basis of race, color, gender, religion, national or ethnic origin, military veteran status, political affiliation, marital or family status, age, disability, sexual orientation, gender expression or identity in education programs, admissions policies, employment policies, financial aid or other College administered programs and activities. It is the intent of Northeast Community College to comply with both the letter and the spirit of the law in making certain discrimination does not exist in its policies, regulations and operations. Inquiries may be addressed to the Northeast Compliance Officer for Title IX, ADA, Section 504; Associate Vice President of Human Resources, 801 East Benjamin Avenue, P.O. Box 469, Norfolk, NE 68702-0469; phone: (402) 844-7046; email: complianceofficer@northeast.edu; or mail: Office for Civil Rights, U.S. Department of Education, One Petticoat Lane, 1010 Walnut Street, 3rd Floor, Suite 320, Kansas City, MO 64106.

Northeast Community College takes reasonable measures to protect your personal information in accordance with all applicable federal, state and local regulations.

2021-22 STUDENT CALENDAR

(All dates are subject to change.)

FALL SEMESTER 2021

August 20 Fall Orientation
 August 21-22 Residence Halls open by appointment
 August 23 Classes begin
 Tuition, fees, housing and meals due
 August 27 Last day to cancel or change a meal plan
 September 6 Labor Day - College closed
 October 1 Last day to withdraw from first eight-week classes
 October 15 First eight-week classes end
 October 18 Fall Break for students and faculty
 October 19 Second eight-week classes begin
 November 1 Registration for intercession and spring semester begins
 November 19 Last day to withdraw from fall semester classes
 November 24-26 Thanksgiving Break for students and faculty
 November 25-26

2021-22 STUDENT CALENDAR			August 2021 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
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December 1
 December 15

INTERSESSION 2021

December 20
 Dec 24-Jan 3

January 13

January 21

SPRING SEMESTER 2022

January 22-23 appointment
 January 24 Classes begin
 Tuition, fees, housing and meals due
 January 28 Last day to cancel or change a meal plan
 March 4 Last day to withdraw from first eight-week classes
 March 18 First eight-week classes end
 Residence Halls close at 5:00 p.m.
 March 21-25 Winter Break for students and faculty
 March 28 Second eight-week classes begin
 April 4 Registration for summer and fall semesters begin
 April 15-18 Spring Break for students and faculty - College closed
 April 22 Last day to withdraw from spring semester classes
 May 6 Last day to withdraw from second eight-week classes
 May 18 Semester ends
 Residence Halls close at 5:00 p.m., unless resident is participating in Commencement
 May 21 Commencement

SUMMER TERM 2022

May 23 Summer term begins
 Summer term tuition, fees, housing and meals due

PRE-SUMMER SESSION 2022

May 23 Pre-Summer and Six Week Session begins
 Cooperative Internships begin
 May 30 Memorial Day - College closed
 June 3 Pre-Summer Session ends

JUNE SESSION 2022

June 6 June Session begins
 July 1 June Session ends

JULY SESSION 2022

July 4 College closed
 July 11 July Session begins
 August 5 July Session ends
 August 12 Cooperative Internships end

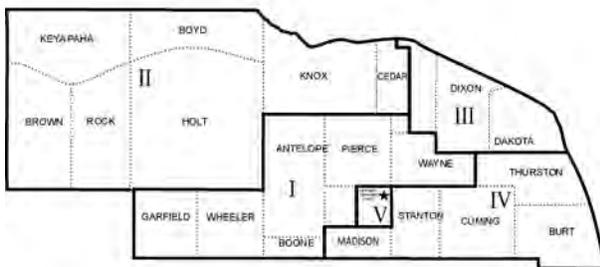
Established by the State Legislature in 1973 as a comprehensive community college offering vocational/technical, liberal arts, college transfer, and continuing education, Northeast Community College is a two-year college located at the northeast edge of Norfolk, Nebraska. It serves residents of a 20-county area in northeast Nebraska. Northeast is the only community college in the state with one- and two-year vocational, liberal arts, and adult education programs all on one main campus.

From the merger of two separate and distinct institutions—Northeastern Nebraska College and Northeast Nebraska Technical College—Northeast Community College has become a unique college with its own identity.



SERVICE AREA

According to 2010 census figures, approximately 160,000 persons live in small towns, villages, and rural areas within the College’s 20-county service area. Agriculture and agribusiness are the principle industries in the area.



Locally elected governing board members represent constituents in the area’s five districts. See page 3 for information on the Board of Governors.

ACCREDITATION

Northeast Community College is accredited by the Higher Learning Commission to award two-year Associate of Arts, Associate of Science, Associate of Applied Science, and Associate in Nursing degrees, one-year diplomas, and certificates. This regional accrediting body is located at 230 South LaSalle Street, Suite 7-500, Chicago, IL 60604. The office can be contacted by calling (800) 621-7440 or (312) 263-0456. The College is also approved by the Nebraska State Department of Education.

Northeast has three extended campuses and two regional offices to serve the needs of off-campus students in the 20-county service area. The three extended campuses are located in O’Neill, South Sioux City, and West Point. The regional offices are located in Ainsworth and Hartington.

MISSION

Northeast Community College is dedicated to the success of students and the region it serves.

VISION STATEMENT

Empower every person in our region to achieve their academic and workforce development goals

PURPOSES

Our purposes as defined legislatively include:

- applied technology and occupational education, and foundations education as necessary.
- transfer education, and foundations education as necessary.
- public service, including continuing education, economic and community development, business and industry training, and personal development.
- applied research.

STRATEGIC PRIORITIES

- Student Pathways to Success
- Excellence and Innovation in Educational Programs
- Rewarding and Inspirational Place to Work
- Effective Resource Management

VALUES

Basic and fundamental beliefs which describe our motives behind purposeful action.

WE CHAMPION STUDENT SUCCESS

Create an inclusive and welcoming environment that provides multiple pathways and services to meet all students where they are and help them reach their educational goals

WE PRACTICE CONTINUOUS IMPROVEMENT

Use data informed approaches to increase effectiveness, efficiency, and satisfaction through assessment of processes, programs, and services

WE ARE MINDFUL STEWARDS OF RESOURCES

Focus on the efficient management of our funds, workforce, facilities, land, and technology

WE BUILD PARTNERSHIPS AND COLLABORATIONS

Leverage the skills and knowledge of our students, co-workers, and trusted partners to advance our mission

WE ASPIRE TO CREATE AN INCLUSIVE, DIVERSE CULTURE.

Foster a culture where every person is heard, engaged, and feels valued. Communicate with transparency, assume positive intent, and be open to different perspectives and ideas

WE ARE LEADERS

Leadership at Northeast is about action and purpose. We each bring out the best in those around us and inspire others. We are expected to become an expert in our field and share that expertise with others and our customers.

TUITION AND FEES

The Board of Governors annually reviews and sets tuition and fee rates, which are subject to change. All tuition and fees must be paid by the first day of the semester. Classes beginning in the second eight-week period of the semester are also considered due the first day of the semester. (Any student who registers for a semester and later decides not to attend must notify the Admissions and Registration Office in writing or use My Northeast to withdraw from classes.)

Tuition

Nebraska Resident Students (hereafter referred to as Resident Students):	
Each semester credit hour	\$105.00
Iowa (IA) and South Dakota (SD) Resident Students:	
Each semester credit hour	\$106.00
Nonresident Students:	
Each semester credit hour	\$147.00
Noncredit Continuing Education:	
Each contact hour	\$10.00

Fees

Student Services Fee: (Paid each semester)	
Each credit hour	\$5.00
Facility Fee: (Paid each semester)	
Each credit hour	\$9.00
Technology Fee: (Paid each semester)	
Each credit hour	\$6.00
Course Fee: Additional course fees may be assessed for programs with high material/equipment costs.	
Returned Check Charge	\$18.00
Late Payment Fee	\$50.00

Campus Housing Rates Per Semester

Path Hall (4BR Suite)	
with 10 meals/week plan*	\$4,840
Path Hall (2BR Suite)	
with 10 meals/week plan*	\$4,340
Apartment with 10 meals/week plan*	\$4,340
Burkhardt Hall with 10 meals/week plan*	\$4,140
Simon Hall with 10 meals/week plan*	\$3,940
Housing Administration Fee (Non-refundable).	\$150
Housing Application Fee (Non-refundable)	\$25

* Includes basic cable television, wireless internet service, and all utilities.

Meal Plans Per Semester

\$250 Express Card	\$250
67 meals	\$405
10 meals/week plan (with \$50 flex dollars)**	\$1,540
Unlimited meals with \$100 flex plan	\$1,675

** Minimum required plan for campus housing residents.

Basic Costs

The basic costs for a resident student attending college for one year, based on 30 credit hours in two semesters, are:

Tuition (2020-21 rate)	\$3,150.00
Fees	\$600.00
Books and Supplies	\$1,316.00 (estimate♦)
Room and Board (campus housing)	\$7,880 - \$9,950

Costs for meals not covered by the meal plan, personal expenses, and transportation must be added to these basic costs. These expenses vary widely depending on individual situations, programs, and spending habits.

♦ Estimate based on full retail price of new textbooks and supplies.

Tools and Uniforms

The following programs require tool kits and/or uniforms. Students who enroll in any of these programs are responsible for purchasing the required tools as specified by the program department. Cost of the tools range from about \$50 to \$7,500. For additional information, contact the Admissions and Registration Office.

- Auto Body Repair Technology
- Automotive Light Service Technician
- Automotive Technology
- Building Construction
- Diesel Technology
- Digital Cinema
- Digital Journalism
- Drafting
- Electrical Construction & Control
- Electromechanical
- Heating, Ventilation, & Air Conditioning
- Machining & Manufacturing Automation
- Media Arts
- Nursing
- Physical Therapist Assistant
- Plumbing
- Skilled and Technical Science Education
- Utility Line
- Veterinary Technology
- Video Production Certificate
- Welding
- Wind Energy
- Other programs as the need arises

Residency Status

To be eligible for Nebraska, Iowa, or South Dakota resident tuition at Northeast, students must establish residency according to Nebraska statutes. For more information, contact the Dean of Student Success.

Residency Guidelines and Procedures

Residency Guidelines and Procedures

I. Definitions - For the purpose of these regulations, the following definitions shall apply:

A. "Nebraska Resident Tuition" shall mean the Nebraska resident tuition rate set by the Board of Governors applicable to the academic program in which an individual intends to enroll.

B. "Iowa or South Dakota Resident Tuition" shall mean the Iowa or South Dakota resident tuition rate set by the Board of Governors applicable to the academic program in which an individual intends to enroll.

C. "Nonresident Tuition" shall mean the nonresident tuition rate set by the Board of Governors applicable to the academic program in which an individual intends to enroll.

D. "Legal Age" shall be the age of majority (age 19) set by Nebraska state statute.

E. "Minor" shall be individuals who have not reached the age of majority.

F. "Emancipated Minor" shall be an individual who by virtue of marriage, financial status, or for other reasons has become independent of his or her parents or guardians.

G. The phrase "Established a Home" shall mean that an individual who continuously maintains a place of abode in Nebraska, Iowa, or South Dakota, which the individual maintains as his or her domicile. On-campus housing cannot be considered as a domicile or permanent residence for establishing residency.

H. "Lawful Permanent Resident" refers to an individual who is not a U.S. citizen who has been lawfully accorded the privilege of residing permanently in the United States as an immigrant in accordance with immigration laws.

II. Requirements for Residency – An individual will qualify as a resident of the State of Nebraska, Iowa, or South Dakota for tuition purposes at Northeast Community College if he or she meets the standards set in any one of the following categories. Documented proof is required (See Section III).

A. A person of legal age or an emancipated minor who has resided in Nebraska, Iowa, or South Dakota for a period of at least six (6) months immediately prior to applying for resident status.

B. A minor whose parent(s) or guardian(s) has established a home in Nebraska, Iowa, or South Dakota.

C. A person of legal age and a dependent, for federal income tax purposes, of parent(s) or guardian(s) living in Nebraska, Iowa, or South Dakota.

D. An individual who is married to a Nebraska, Iowa, or South Dakota resident and who has proof of residence in Nebraska, Iowa, or South Dakota. (A copy of the marriage certificate must be provided in addition to documentation requirements in Section III)

E. Lawful permanent residents or individuals who have been granted asylum or refugee status and who have established a home in Nebraska, Iowa, or South Dakota for a period of at least six (6) months.

F. An individual who is a dependent of a staff member at the College.

G. An individual who has served a period of not fewer than ninety (90) days in the active United States military and has been discharged within three (3) years of the initial enrollment date at the College, or the spouse or dependent of such individual, or an individual using military educational benefits under the Post 9/11 or Montgomery GI Bill®.

H. For Nebraska Resident Tuition rate only: An individual who is a graduate of an accredited Nebraska senior high school and who was a legal resident of Nebraska at the time of graduation or an individual who has previously been enrolled at the College as a Nebraska resident student.

III. Documentation - Individuals identified in Sections IIA through IIE must provide at least three (3) of the following items. All documents must be dated at least six (6) months prior to the first day of classes and must reflect the individual's name.

A. Record of Nebraska, Iowa, or South Dakota voter registration,

B. Nebraska, Iowa, or South Dakota income tax return for the most recent year,

C. Nebraska, Iowa, or South Dakota driver's license,

D. Nebraska, Iowa, or South Dakota vehicle registration,

E. Evidence of ownership of Nebraska, Iowa, or South Dakota property,

F. Nebraska, Iowa, or South Dakota housing rental agreement,

G. Nebraska, Iowa, or South Dakota insurance policy,

H. Evidence that parent(s) as Nebraska, Iowa, or South Dakota resident(s) claim(s) the student as a dependent, or

Financial Information

I. Other documentation as approved by the Registrar.

Any student who has been classified as a nonresident for tuition purposes and believes that he or she may qualify as a Nebraska, Iowa, or South Dakota resident must file a Request for Nebraska, Iowa, or South Dakota Residence Status form with the Registrar by the first day of the term for which the tuition fee was charged.

The Request for Nebraska, Iowa, or South Dakota Residency Status form, as well as further information regarding residency classification, is available from the Admissions & Registration Office.

It is the student's responsibility to initiate a change in residency status.

An individual who believes that he or she has been incorrectly denied a Nebraska, Iowa, or South Dakota residency determination made by the Registrar may appeal the decision through the Vice President of Student Services, then the President, and subsequently the Board of Governors.

STUDENT ACCOUNTS/ PAYMENT PROCEDURES

Your student account balance is available through your "My Northeast" account. Log on using your ID and PIN to view and print your billing information.

All costs are paid one term at a time. **Classes are not guaranteed until the student pays all tuition and fees or makes arrangements for payment.** Nonpayment of tuition and fees by the due date may result in late payment fees and/or withdrawal from classes for the term.

Payment options are:

1) Students may pay in person in Norfolk at Student Accounts or use the drop box located at Student Accounts in Norfolk for payments made after hours.

2) Payments may be made online using a credit card (MasterCard, Visa, or Discover) or via telephone by contacting Student Accounts. Any credit card payment made via telephone will not be reflected on the student's account until the next business day.

3) Students may send their payment by mail. Students who choose to mail their payment of tuition and fees should allow sufficient time for their payment to reach Student Accounts by the due date.

4) Northeast Community College will accept tuition assistance (sponsor) agreements in lieu of payments at the time of registration, but students

will be responsible for all amounts owed if the sponsoring agency does not remit payment in full.

Students who have been approved for financial aid by the Financial Aid Office will see authorized aid on their statements. The student must complete a one-time direct master promissory note, direct loan entrance counseling and the annual student loan acknowledgement at Northeast before loans are processed. If the tuition, fees, room, and board charges exceed the amount of any estimated aid, the balance is due immediately and payable no later than the first day of the term. If the estimated aid equals or exceeds the tuition and fee charges, the student will not be required to make a payment at that time. If there is a change in your financial aid status, payment for any balance is due the first day of the term.

IMPORTANT NOTE: If the Northeast Community College Financial Aid Office has not received your required application documents early enough to complete your financial aid award (tuition waiver, PELL, SEOG, NOG, Stafford Loans, scholarships, room, or board waiver), you must be prepared to pay the balance due from other means by the due date. Students should be prepared to pay for his or her textbooks and course materials. For students receiving financial aid, the cost of textbooks and course materials is one of the items paid from the family's contribution. If a student is receiving more financial aid than is required to cover tuition, fees, and other institutional charges, the student may charge textbooks and course materials to the student's account through the first week of classes. Textbooks and course materials may not be charged to the student's account prior to the Monday before the first day of the semester and not after the first week of the semester.

All financial aid, scholarships, and loans which are ready for distribution will be credited to student accounts at the beginning of each term. Financial aid more than tuition, fees, books, room, and board charges will be refunded to students within 14 days after the start of the semester. Financial Aid is disbursed on attending hours. This means if your classes do not begin on the first day of classes, your disbursement will be delayed until classes begin. This can impact the amount and timing of your refund check of excess aid.

Interest-Free Monthly Payment Plan

To help students meet their educational expenses, Northeast Community College offers Nelnet Campus Commerce as a convenient budget payment plan. This is not a loan program and there are no interest or finance charges. Students are charged a \$25 non-refundable enrollment fee each semester they are enrolled in the program.

To budget and pay tuition and fees with the Nelnet Campus Commerce payment plan, students or parents may have payments transferred from a bank account or automatically charged to a credit card on the fifth day of each month.

Students may access Nelnet Campus Commerce information online or may contact a Student Accounts Specialist in Student Accounts for more information about the Nelnet Campus Commerce payment plan.

REFUND POLICY

If a student withdraws, tuition and fees will be refunded according to the refund schedule. **After the second week of the semester, students cannot withdraw online and must officially withdraw from the term by submitting a completed Withdrawal Form to the Admissions and Registration Office.** The day the Form is received by the Admissions and Registration Office is the date used to calculate the refund.

If the student was receiving federal financial aid, a Return to Title IV Funds calculation will be completed. Aid paid from other sources will be returned to those sources as agreements determine. All remaining credit balance refunds may be paid to the student by check or the student may sign up for Direct Deposit to have funds deposited directly into a checking or savings account. Refunds are generally issued within two or three weeks from the date the Withdrawal Form is received.

Course and materials fees are not refundable once a class begins, except when the College cancels a class.

REFUND SCHEDULE

Tuition and fees are refundable according to the following schedule:

FULL-TERM CLASSES

Weeks of Semester	Percent of Refund
First and Second Week.....	100%
Third and Fourth week	50%
After Fourth week.....	NO REFUND

LESS THAN FULL-TERM CLASSES

Classes more than one (1) week in length

Follow the same refund schedule as full term class, adjusted accordingly for the length of the class.

Classes one (1) week or less in length

If dropped prior to the day the class begins, 100% refund; if dropped the day the class begins or later, no refund.

Summer Term Classes

Follow the same refund schedule as full term class, adjusted accordingly for the length of the class.

Credit Courses

Once a term begins, the student must officially withdraw from a class or classes they are not attending by completing a Drop/Add Form or Withdrawal Form and submitting the completed Form to the Admissions and Registration Office. Depending on the length of the course, the student may be able to withdraw from courses online utilizing My Northeast. The date the form is received by the Admissions and Registration Office, or the date the withdrawal is completed on My Northeast, is the date used to calculate the refund.

If a student has received financial aid, a tuition refund will be used to restore amounts to the aid programs involved. All educational costs incurred up to the time of withdrawal will be considered in determining any additional overpayment of aid. Financial aid repayment is established according to federal regulations pertaining to federal student aid.

Noncredit Courses

Request for refunds must be made through the Director of an Extended Campus prior to the first class meeting.

Return of Funds Policy

Students receiving financial aid or military tuition assistance who withdraw or stop attending will, in most cases, be required to return a portion of funds received.

The Higher Education Act, as reauthorized and signed into law on October 7, 1998, established the Return of Title IV Funds Policy.

The concept behind the policy is that the college and the student are allowed to retain only the amount of Title IV (Federal) aid that is earned. If a student withdraws or stops attending classes, a portion of the aid received is considered to be unearned and must be returned to the Title IV programs from which it was received. For Title IV purposes, the last date of attendance is one of the following: the date the formal withdrawal process begins, the date the student otherwise gives official notice of intent to withdraw (i.e., letter, phone call, e-mail, in-person), the mid-point of the term, or the last documented date of attendance in an academically-related activity. Northeast uses the last documented date of attendance in an academically-related activity. If a student attends through 60 percent of the term, all Title IV Aid is considered earned.

Definitions

Administrative Drop - A drop processed by the Admissions and Registration Office due to the student's failure to start a course. The Administrative Drop allows for a 100% refund of tuition and fees.

Financial Information

Official Withdrawal - Withdrawal from a course that was initiated by the student by completing the official withdrawal process. Student will receive a grade of W.

Unofficial Withdrawal - Withdrawal from a course initiated by the institution for a student who has stopped attendance. No refund is given. Students who stop attending a course will be unofficially withdrawn and given a grade of an Unearned F.

Federal Title IV Refund Calculation

The Financial Aid Office determines, based on the federally mandated formula, the amount of FSA/Title IV assistance a withdrawn student has earned, based on their determined withdrawal date. The Return of Title IV Funding (R2T4) calculation policy is outlined below:

Step 1) The first step is a series of formulas to determine the amount of aid which must be returned. Following the determination of the last date of attendance, the school must calculate the number of days attended and the total number of days in the term; weekends count and any period of no classes that is five days in length or greater is excluded. Days attended are then divided by days in the term to calculate percentage completed. That percentage is multiplied by total aid for which the student is eligible to determine the amount of aid earned ($\% \text{ completed} \times \text{total aid} = \text{earned aid}$). $\text{Total aid} - \text{earned aid} = \text{unearned aid}$ (aid to be returned).

Step 2) The next step is for the school to determine total institutional charges and multiply that figure by the percentage of unearned aid ($100\% - \% \text{ completed} = \% \text{ unearned}$). It makes no difference which type of resource actually paid the school bill; the law assumes that Title IV aid goes first to pay institutional charges. $\text{Institutional charges} \times \% \text{ unearned} = \text{Amount returned by school}$ (up to amount indicated as unearned in Step 1).

The school must then return the amount of unearned aid up to the maximum received, to each of the Title IV programs in the following order:

1. Unsubsidized Federal Stafford Loan
2. Subsidized Federal Stafford Loan
3. Federal PLUS Loan
4. Federal Pell Grant
5. Federal Supplemental Educational Opportunity Grant (FSEOG)

Step 3) The school then calculates the amount for which the student is responsible by subtracting the amount returned by the school from the total amount which is unearned. That remaining amount is the student's share and is allocated in the same order as stated above. $\text{Total amount unearned} - \text{amount returned by school} = \$\$$ for which student is responsible.

Once the school determines dollar amounts and which individual programs must be repaid, the student will be notified of any amounts he or she owes. Funds that must be returned by the student to the loan programs can be paid in full in accordance with normal loan repayment terms. For grant dollars that must be repaid, the amount due from a student is limited to the amount by which the original grant overpayment amount due from the student exceeds half of the total Title IV grant funds received by the student. A student has 45 days to make repayment and does not have to repay a grant overpayment of \$50 or less. Unpaid balances will be turned over to the Department of Education for collection. Until overpayments are repaid or satisfactory arrangements to repay have been made, students will be ineligible for further Title IV aid.

This policy is totally separate from the institutional refund policy. Unpaid balances due to Northeast that result from amounts returned to Title IV programs and other sources of aid will be charged back to the student. If a student does not begin attendance in all classes or ceases attendance during the 100% refund period, aid may have to be reduced to reflect appropriate status prior to calculating Return of Title IV Funds. Before withdrawing or stopping attendance in classes, the student should be aware of the proper procedure for withdrawing from classes and the consequences of either withdrawing or stopping attendance.

For Students Enrolled in Modules

A student is considered withdrawn if the student does not complete all of the days in the payment period that the student was scheduled to attend. If a student withdraws from a course in a later module while still attending a current module, the student is not considered as withdrawn. However, a recalculation of aid based on the change in enrollment status may be required.

If a student provides written notice to the Financial Aid Office at the time of withdrawal from a current module that she/he plans to attend a later module in the same payment period, she/he is not considered a withdrawal. If the student does not provide that written confirmation, the R2T4 recalculation of aid will be done. However, if the student does return in a later module in the same payment period, regardless of whether prior written confirmation was received, the R2T4 process will be reversed and the student will be awarded the funds that she/he is eligible to receive at the time of return.

Post-Withdrawal Disbursement

If the student did not receive all of the funds that were earned prior to withdrawing, a post withdrawal disbursement may be due. If the post-withdrawal disbursement results in the student's being eligible to receive either Federal

Direct Stafford Subsidized or Unsubsidized Loan proceeds, she/he will be contacted via US Mail by the Financial Aid Office. Written authorization from the student will be requested and is required before loan proceeds can be processed and disbursed to the student. Northeast will automatically use all or a portion of the post withdrawal disbursement of grant funds for any outstanding charges for tuition, fees, room and board charges. Students will be notified of a post-withdrawal disbursement eligibility within 30 days of the date of withdrawal determination and Northeast will return any unearned funds within 45 days.

If a student remains enrolled only in non-Title IV- Eligible courses

A student's schedule sometimes includes courses that the student is taking for credit and for which the student may not receive Title IV funds. If a student ceases attendance from all his or her Title IV eligible courses and remains enrolled in only non-Title IV eligible courses the student is considered a withdrawal for Title IV purposes.

Any questions on Return to Title IV Funds may be addressed to the Director of Financial Aid. Questions regarding withdrawal should be addressed to the Admissions and Registration Office or the Dean of Enrollment Services.

More Information:
Financial Aid Office
finaid@northeast.edu
(402) 844-7285

UNEARNED MILITARY TUITION ASSISTANCE

Military Tuition Assistance (TA) is awarded to a student under the assumption that the student will attend the classes for which the assistance is awarded. When a student withdraws, officially or unofficially, the student may no longer be eligible for the full amount of TA funds originally awarded.

To comply with regulations set by the U.S. Department of Defense (DOD) Northeast Community College is required to return unearned TA funds on a prorated basis through at least the 60% portion of the period for which the funds were provided. TA funds are earned proportionally during an enrollment period, with unearned funds returned based upon the date the student stops attending. These funds are returned to the military Service Branch.

In accordance with DOD regulations, Northeast uses the following calculations to determine the return of unearned TA funds.

$$\frac{\text{Number of course days completed (start date to Last Attendance Date)}}{\text{Total days of the course (start date to end date)}} = \text{Percent of TA EARNED}$$

Once the student has attended at least 60% (Percent of TA EARNED) of the course for which TA funds were approved, the student is considered to have earned the full amount of awarded TA funding. No funds will be returned to the Service Branch.

The number of course days completed is determined by the student's Last Attendance Date. The Last Attendance Date is defined as the last documented date of attendance in an academically-related activity and is reported by the instructor.

The start date of a student's enrolled course/courses may be found in the student's MyNortheast account

Return of unearned TA funds may result in a balance due on the student account. However, if a Service member is called to a military service obligation, Northeast will work with the affected Service member to identify solutions that will not result in a student debt for the returned portion.

FINANCIAL AID

The Northeast Financial Aid Office works with students, parents, and counselors to determine eligibility for one or more types of assistance to help meet the costs of education when the student and family cannot contribute the full amount. Most students who receive financial aid qualify on the basis of need; however, some receive scholarships for academic or activity achievements.

Northeast Community College offers the following types of financial aid: Federal Pell Grants, Federal Supplemental Educational Opportunity Grants, Nebraska Opportunity Grants, Federal Work-Study, Federal Stafford Loans, and Federal PLUS Loans, student emergency loans, part-time employment, and scholarships.

Students are encouraged to contact the Department of Vocational Rehabilitation Services, the Veterans Administration, the Bureau of Indian Affairs, or the Workforce Development Office if potential eligibility exists.

FINANCIAL AID APPLICATION

Who is eligible to apply for Financial Aid?

All students in need of financial assistance or interested in scholarships are encouraged to apply. For federal programs the student must:

1. Enroll in an eligible program of study leading to a degree, diploma, or certificate.

2. Be a U.S. citizen or an eligible noncitizen.
3. A student must have completed one of the following: a high school diploma, GED, or homeschooling at the secondary level.
4. Not be in default on any loan previously received from any college nor owe an overpayment of Title IV Funds.
5. Be registered with Selective Service if required to do so.
6. Demonstrate financial need (except for unsubsidized Stafford and PLUS loans).
7. Maintain the standards of satisfactory academic progress.
8. Sign a Statement of Educational Purpose promising that any aid received will be used for costs of attendance at Northeast Community College.

FEDERAL AND STATE AID APPLICATION PROCESS

1. Complete the Northeast Community College Application for Admission and return it to the Admissions and Registration Office, Northeast Community College, P.O. Box 469, Norfolk, NE 68702-0469.
2. Obtain the Free Application for Federal Student Aid (FAFSA) from your high school guidance counselor or the Northeast Financial Aid Office, or access the electronic process at www.fafsa.ed.gov. You can access your Renewal FAFSA on the web if you filed a FAFSA the preceding year. If you file the FAFSA yourself electronically, a FAFSA on the Web Worksheet, which should be used instead of the regular FAFSA, is available at www.fafsa.ed.gov. **The Northeast code is 002556.** You will need the following information before applying for financial aid:
 - A. Federal tax returns and W2s.
 - B. Statements showing amounts of untaxed income, such as child support.
 - C. A Federal Student Aid (FSA) username and password. This will be used to electronically sign your FAFSA. Both you and one parent, if you are a dependent student, will need a FSA username and password. You can obtain them at www.fafsa.ed.gov.
3. Choose from the following options for FAFSA processing:

Option A (preferred):

 - Print and complete a FAFSA on the Web Worksheet found on the www.fafsa.ed.gov website.
 - File your FAFSA on the web at www.fafsa.ed.gov. The Northeast code is 002556.
 - Be sure you and your parent (if you are a dependent student) sign your FAFSA using separate usernames and passwords (without completed signatures, your FAFSA will reject) or print the signature page and send the completed form to the Central Processing Center.

• Use the IRS Data Retrieval when submitting your tax information online.

• Additional documentation may be required when Northeast receives your FAFSA information electronically; corrections could delay the award process.

Option B: If you do not have access to the internet, send the following to the Northeast Financial Aid Office for verification; your FAFSA will be submitted electronically by Northeast Community College:

 - Verification Worksheet
 - Tax transcript and W2's
 - Parents' or spouse's tax transcript and W2's
 - Other documentation as requested by the Financial Aid Office

All Northeast Community College Financial Aid forms can be downloaded from the Northeast website at northeast.edu.
4. Your application will be analyzed and a federal formula will be applied to determine how much you and your family are expected to contribute toward your college costs. The Student Aid Report (SAR) from the processor will provide your college with the information needed to determine your eligibility for all types of student aid. When you receive the SAR, check it for errors, giving special attention to items the Processing Center may be questioning.

If you have no corrections and have listed Northeast and our school code for one of your schools, we should receive the information electronically and do not need the SAR.

If you have corrections, enter the changes on Part 2 of the SAR, sign and forward all pages of the SAR to the Financial Aid Office, Northeast Community College, P.O. Box 469, Norfolk, NE 68702-0469. Any corrections will be reprocessed by the Northeast Financial Aid Office. **Do not** mail the SAR and other documents back to the Central Processing Center.
5. Financial aid applications are selected for verification by the central processor. Additional files may be selected by the Financial Aid Office if estimated tax returns were used or if other information on the SAR indicates a possible error. If your application is selected for verification, the Financial Aid Office will request signed copies of you and your family's federal

tax transcript and other documents to verify that we have the correct SAR information. It is important that you respond promptly to any requests for additional information. No further action will be taken on your application until requested information has been received.

If corrections must be made to the SAR data, we must have a corrected SAR by the student's last date of attendance or no aid will be available. Student loans must be certified prior to the last day of the period of enrollment as well. Aid will be awarded based on the student's enrollment status at the time a valid SAR is received in the Financial Aid Office. The student must be meeting satisfactory academic progress requirements at the time.

6. Students completing applications for financial assistance will receive a letter explaining how to access their account on My Northeast. The official method of communication with the Financial Aid Office is email. The Financial Aid Office will send an email to the students personal email address on file, if no personal email address is provided the email will go to the student's email address provided on the FAFSA. Communication about your financial aid will be sent to you through your email account and you will be directed to view your account on My Northeast. The student will be able to view any documents required prior to processing their financial aid award and they will be able to view their award once the file is complete. A student's financial need is determined by the following federal formula:

Estimated Cost of Attendance (NOT your bill)
 - Expected Family Contribution =
 Financial Need.

We will try to fill need by awarding various types of financial aid. The Pell Grant is determined first. Then any scholarships are added to the aid package. You will then be considered for a federal supplemental grant, a state grant, an institutional grant, or Federal Work-Study. Students are awarded according to institutional policy and on a first-completed, first-awarded basis, which means that early application is necessary if you are to be considered for all possible types of aid.

7. When you are notified that your award is available on your My Northeast account, you must accept or decline the aid offered online. If loan eligibility exists, you must then decide if a loan is required, complete the Direct Loan Master Promissory Note, complete online Direct Loan Entrance Counseling and complete the Annual Student Loan Acknowledgment.

Aid offers could be modified if the student is not enrolled full-time on the tenth day of

classes. No adjustments will be made after that date unless the student receives additional outside aid or the student does not begin attending all classes for which he or she is registered. Student status is determined as follows:

- Full-time (FT): 12 or more credits attempted per semester.
- Three-quarter time (TT): 9-11 credits attempted per semester.
- Half-time (HT): 6-8 credits attempted per semester.
- Less-than-half-time (LTHT): 5 or fewer credits attempted per semester.

COLLEGE FINANCING PLAN

In addition to your award notification, the Financial Aid Office at Northeast, in cooperation with the U.S. Department of Education, has implemented the College Financing Plan.

The College Financing Plan is a form that was designed by the federal government in an effort to create a standardized way for schools to communicate cost information to families while incorporating specific financial aid awards. It is designed to make it easier for families to do a side-by-side cost comparison for each of their selected schools. In addition, information on the school's default rate, graduation rates, median federal loan borrowing amounts, and repaying your loans is included. The Department of Education created the form to assist families in making an informed decision about how to pay for college.

A student may access their personalized College Financing Plan via their My Northeast account. Students will also need to view their award notification on their My Northeast account and accept/decline their financial aid.

SATISFACTORY ACADEMIC PROGRESS

Northeast Community College is required to establish minimum academic standards that students must meet to be eligible or maintain eligibility for federal, state and institutional aid including but not limited to grants, loans, Federal Work Study, institutional scholarships and waivers. Northeast Community College must notify students of this policy and monitor the progress of all students receiving financial aid to insure their continued compliance with the policy. Refer to College SAP Board Policy and Procedure AP 5130-0.

Students who are receiving financial aid or seek to receive financial aid in the future are required to meet these minimum academic standards. Failure to meet these standards means

Financial Information

the student is no longer eligible to receive financial aid. It is the responsibility of all students receiving financial aid to familiarize themselves with the policy and to insure that the standards are met.

Enrollment Status

Student status is based on the following:

- Full-time (FT): Attempting 12 or more credits
- Three-quarter time (TT): Attempting 9-11 credits
- Half-time (HT): Attempting 6-8 credits
- Less-than-half-time (LTHT): Attempting 5 or fewer credits

For financial aid awarding purposes, enrollment status is based on credit hours for which the student is enrolled as of the published date considered to be the **tenth** day of the term for the majority of students. Financial aid will be adjusted to reflect less-than-full-time status if the student is not registered for at least 12 credits hours on that date. Financial aid will not be adjusted to reflect credit hours added after that date. Students who are registered for a class on the first day of the term but never begin attendance in that class cannot include that class in determining enrollment status for financial aid purposes. Aid will be adjusted if students are reported as a no show in their class.

Requirements

The following components are measured to determine whether the student is meeting Satisfactory Academic Progress (SAP) standards: Cumulative GPA, Pace Requirement, and Maximum Timeframe.

Grade Point Average (GPA) – Cumulative GPA: A student must maintain a cumulative GPA of at least 2.000.

Pace Requirement or Completion Ratio

The pace requirement or completion ratio component of the satisfactory academic policy is measuring the pace at which a student must progress through his or her program of study to ensure completion within the maximum timeframe permitted and provides for a measurement of the student's progress at the end of each evaluation. Pace or completion ratio is calculated by determining the cumulative number of credit hours the student has successfully completed divided by the number of cumulative credit hours the student has attempted. To meet the pace requirement, the student's completion ratio must be 67% or higher. Attempted credits include any course taken for credit while attending Northeast. Credit hours transferred in from another institution are included in both attempted and completed credits. Successfully completed credit hours include letter grades of A+, A, B+, B, C+, C, D+, D or P. Credit hours that will not count as successfully completed include letter grades of F (Fail), UF (Unearned F),

I (Incomplete), W (Withdrawal), AU (Audit), and credit by exam (i.e. CLEP). Repeats of successfully completed credits will be considered in the hours attempted and may be used in determining enrollment status for financial aid purposes. Title IV funds can pay for repeat coursework previously taken in a program as long as it is not a result of: more than one repetition of a previously passed course, or any repetition of a previously passed course due to the student failing other coursework.

Maximum Time Frame Measure

Rate of Program Completion (Maximum Time Frame): Students are expected to complete their program of study within a reasonable time period. A student's maximum time frame is based on total credit hours attempted at Northeast plus any transfer credits accepted towards their program of study and the student's degree objective. **These limits apply regardless of whether or not the student has received federal funding.** Students are eligible to receive aid for up to 150% of the published number of credit hours for a program of study (see program descriptions in the College Catalog).

Example: If a program of study requires 78 credit hours to graduate, the maximum credit limit you could take and receive financial aid would be 117 (78 x 150 percent). All credit hours attempted by you including transitional and ESL classes are counted, maximum time frame may be adjusted by the number of transitional or ESL credits taken.

At the end of each semester, the total number of attempted credit hours will be counted to see if you have reached the maximum number of credit hours for your program. All credit hours are counted. This includes:

- Credit hours attempted in semesters you did not receive financial aid.
- Credit hours attempted prior to a change in your program of study. Students nearing maximum time frame due to a change in their program of study will be reviewed for an academic plan.
- Credit hours transferred from another institution into your program of study at Northeast.

Consequences

Financial Aid Warning

Financial Aid Warning status is assigned to a student who fails to meet one or more of the SAP measures indicated above at the conclusion of a payment period. During a warning semester, the student may still receive financial aid. The student's future financial aid eligibility is dependent upon how well the student does during the warning semester. If the student completes the warning semester and now has a cumulative GPA of 2.000

or higher, and the student is meeting the pace or completion ratio requirement, the student will be removed from financial aid warning status and restored to good standing. If, however, the student again fails to meet one or both of those requirements, the student will be placed on financial aid suspension.

Suspension: A student will be placed on financial aid suspension if he/she fails to meet the academic progress requirements at the end of a warning semester.

Regaining Eligibility

A student whose financial aid eligibility has been suspended has two options for regaining eligibility.

1. A student may qualify for reinstatement of financial aid eligibility by enrolling at his/her own expense and bringing their cumulative GPA above 2.0 and by bringing their pace or completion ratio requirement up to 67% to meet the minimum requirements of the satisfactory academic progress policy.
2. A student may appeal their financial aid suspension if extenuating circumstances (death of a relative, injury or illness of the student, or other special circumstance) exist. Appeals must be made in writing to the Director of Financial Aid and must include supporting documentation of the extenuating circumstances. In the appeal request the student must provide information regarding why the student failed to make SAP and what has changed in the student's situation that would allow them to demonstrate satisfactory academic progress at the next evaluation. If a student's appeal is granted he or she will be placed on Financial Aid Probation. A student on Financial Aid Probation may receive aid (federal, state, or institutional) for one payment period. At that point, the student must meet Northeast's standards of academic progress or the requirements of an academic plan that was established on an individual student basis as a result of the appeal process. Denied appeals may be directed to the Vice President of Student Services in accordance with the Northeast Community College Policy for Student Grievance Procedure.

Additional Information

Transitional Classes: Students may receive financial aid for a maximum of 30 credits of transitional classes.

Incompletes: A student who is placed on warning or suspension because of incomplete credits may request that the Financial Aid

Office review his/her status once the course has been completed.

Academic Amnesty: A student who applies for and receives Academic Amnesty to have credits attempted and grades earned in previous semesters excluded from the calculation of the student's GPA are not automatically returned to satisfactory standing. The federal student aid program regulations make no provision for the concept of academic amnesty or academic renewal. The Financial Aid Office must always include all courses, whenever taken, in evaluating a student's satisfactory academic progress.

Additional Degree: If a student has completed one program of study, he/she may qualify for federal, state or institutional aid for one additional qualifying program of study. The student will be required to meet with the Financial Aid Office for a credit evaluation to determine eligibility. Students seeking a second degree will not be able to obtain aid for hours above 125% of the credit hours required for that second degree. *Federal aid time limits may apply.

Withdrawal from Northeast Community College: Students withdrawing during a semester will be placed on financial aid warning or suspension. Those students who received financial aid should be prepared to repay a portion of aid received according to federal regulations and the Northeast refund policy, which is printed in the College Catalog and financial aid brochure.

Evaluation Timeframe: Northeast Community College will evaluate a student's satisfactory academic progress at the end of each payment period; fall, spring, and summer. All summer sessions jointly are considered one term. A student placed on financial aid warning or suspension will be notified via U.S. mail to the current mailing or permanent address on record. It is the responsibility of the student to keep their address updated.

The complete standards of satisfactory academic progress can be located on the Northeast website or they may be requested from the Financial Aid Office.

FEDERAL AND STATE PROGRAMS AT NORTHEAST COMMUNITY COLLEGE

Federal Pell Grant

The Pell Grant assists undergraduate students who need financial help for their education and, like other grants, does not have to be repaid. Applicants must submit the Free Application for Federal Student Aid (FAFSA) to determine eligibility for the grant. The amount was as little as \$639 or as much as \$6,345 in 2020-2021, if the student had eligibility. Duration of eligibility is the equivalent of 12 full-time semesters.

Federal Supplemental Educational Opportunity Grant (FSEOG)

The purpose of the FSEOG Program is to provide additional grants to students who are Pell eligible and who demonstrate exceptional financial need.

Nebraska Opportunity Grant (NOG)

The NOG is available to Pell eligible Nebraska residents who demonstrate substantial unmet need. Nebraska Opportunity Grants are a combination of federal and state monies with the majority of funding coming from the state.

Federal Work-Study (FWS)

The work-study program provides jobs for eligible students who show unmet need. Student workers are paid biweekly as hours are worked. Most FWS students are employed on campus and work an average of 8 to 10 hours per week at a salary of at least minimum wage. Some jobs are designated community service jobs as students are assisting individuals in the greater northeast Nebraska area. Northeast also provides FWS students for an off-campus reading tutors program for lower-elementary school children.

LOANS

- All loans must be repaid by the borrower and should be taken with extreme caution and forethought. Failure to repay a loan will negatively affect the student for years.
- A first-time borrower at Northeast must complete a Master Promissory Note.
- Before receiving a first disbursement, first-time borrowers at Northeast must complete direct loan entrance counseling and the annual student loan acknowledgment, which may be completed online at www.studentaid.gov.
- Students and parents are required to complete the annual student loan acknowledgment every year to acknowledge that they understand how much they owe and how much more they can borrow.
- Loans for the academic year will have two disbursements, one at the beginning of the fall semester and one at the beginning of the spring semester.

- Loans will be credited directly to the student's account. After the student's school expenses are covered, excess amounts will be returned to the student within fourteen days to be used for other costs of education

Subsidized Federal Stafford Loan

To be eligible for the subsidized Stafford Loan, a student must show need and be enrolled at least half-time. The government subsidizes the loan by paying the interest for the student during periods of at least half-time enrollment. Freshmen (level one) students may be eligible for a maximum of \$3,500 and sophomores (level two) may be able to borrow up to \$4,500. Contact the Financial Aid Office for current interest rates.

Students who are borrowing a subsidized Stafford loan for the first-time on or after July 1, 2013, will be subject to a limitation on the amount of time that they can receive the loans. The time limitation may not exceed 150 percent of the length of the borrower's educational program.

Unsubsidized Federal Stafford Loan

The terms of the unsubsidized Federal Stafford Loan are identical to those of the subsidized loan with two exceptions – a student is not required to show need for the unsubsidized Federal Stafford Loan and interest is the student's responsibility from the beginning. The government does not pay interest for the student. Subsidized loan eligibility reduces available unsubsidized limits. Dependent student may have up to \$2,000 of additional eligibility above the \$3,500 for level one students and \$4,500 for level two students. Independent students may have up to \$6,000 of additional eligibility above the \$3,500 for level one students and \$4,500 for level two students. Contact the Financial Aid Office for current interest rates.

Parent Loan for Undergraduate Students (PLUS)

The PLUS loan is available to parents of dependent students to help meet remaining costs of education. Maximum eligibility is total cost of education minus financial aid. Contact the Financial Aid Office for current interest rates.

STUDENTS' RIGHTS AND RESPONSIBILITIES

Students have the right to:

- Know what federal, state, and institutional financial assistance is available.
- Know financial aid procedure and how aid is awarded.
- Know how and when financial aid is paid.
- Know the cost of attendance at Northeast.
- Know and comply with the Return of Title IV Funds policy for withdrawal.
- Know what portion of financial aid is grant aid.
- Know what portion of financial aid is loan and the terms of the loan at the time it is made. This

includes interest rate, grace period, and terms of payback, including a sample repayment schedule.

- Know how much need has been met by the institution.
- Know the criteria for continued aid eligibility.

Students are responsible for:

- Knowing and meeting financial aid deadlines.
- Providing all information/documentation requested by the Financial Aid Office.
- Reading and understanding all forms and correspondence pertaining to financial aid and keeping copies of these.
- Accepting responsibility for all agreements signed by the student.
- Reporting any drastic changes in financial circumstances (i.e., death of parent or spouse or divorce) that would change financial need.
- Returning all financial aid forms by the date requested.
- Knowing and complying with Northeast's refund policy and the Return of Title IV Funds policy.
- Notifying lenders if there is a change in name, address, or enrollment status.
- Complying with employment requirements for Federal Work-Study.
- Applying for financial aid as soon after January 1 as tax returns can be prepared for the preceding year.
- Repaying all Stafford loans.
- Maintaining satisfactory academic progress at Northeast.

SCHOLARSHIPS

Northeast offers students a number of scholarships and performance grants established by the College, by the Northeast Community College Foundation, and by private organizations and individuals. Qualifications, deadlines, and amounts vary. When scholarships are need-based, the FAFSA on file will be used to assist the Scholarship Selection Committee in the selection of recipients. Department performance grants are awarded in limited numbers through the individual departments on campus.

For a complete list of scholarships and the application process, contact the Financial Aid Office or visit the Northeast Community College website.

SHORT-TERM LOANS

Northeast provides short-term, interest-free loans to students with unexpected financial need. Contributors to this fund are Baker Memorial, Robert McMullen Memorial, Sears & Roebuck, and Eva Maas Memorial.

GENERAL ADMISSIONS GUIDELINES

The application process to Northeast is simple. There is no application fee. Applications for

Admission are accepted from students age 18 and older or those students who will receive their high school diploma or GED certificate prior to their enrollment start date.

Admission to Northeast Community College does not guarantee admission to all courses or programs of study. Students may be required to take prerequisites and/or academic skills courses before enrolling in certain classes. Program requirements are outlined in the College Catalog. The College may require a person to provide a medical statement from a physician for admission to a specific program or when it is otherwise in the best interest of the student and/or Northeast Community College.

Northeast Community College reserves the right to deny admission or continued enrollment to any student who may create an unreasonable risk of harm to the health, safety, welfare, or prosperity of the College, members of the College community, or him/herself.

The language of instruction at Northeast Community College is English; therefore, students are required to have a certain level of English proficiency to improve chances of success. Students whose native language is not English will be required to provide proof of English proficiency prior to enrolling in Northeast Community College courses at the 1000 level or higher. Students must prove language proficiency in one of the following ways:

1. An official TOEFL (Test of English as a Foreign Language) score report with a minimum of 500 on the written exam, 173 on the computer exam, or 61 on the iBTTOEFL. Northeast Community College's institutional code for TOEFL is 6473.
2. An official transcript from an accredited U.S. educational institution verifying successful completion of a college English course, at the 1000 level or higher, with a grade of "C" or better.
3. An official ACT score report with an English sub-score minimum of 18. If submitted English sub-scores are lower than 18, the appropriate ESL placement test will be administered.
4. Completion of the appropriate English as a Second Language Placement Test with qualifying test scores in Reading and Writing. A qualified writing sample may be requested.

Specific application procedures for degree-seeking, non-degree-seeking, and former Northeast Community College students are outlined below. International student applicants see Special Admissions Guidelines.

APPLICATION PROCEDURES

Degree-Seeking Students

1. Submit the Application for Admission on the Northeast Community College website or complete the Application for Admission in its entirety and return to:

Admissions and Registration Office
Northeast Community College
P.O. Box 469
Norfolk, NE 68702-0469

2. Send all official high school, home school, and/or GED transcripts (if applicable) to the Admissions and Registration Office. Students who are still in high school should wait to send transcripts until after high school graduation. Previous college transcripts should be sent to the Admissions and Registration Office at the aforementioned address.
3. Complete an orientation/registration session and provide official Placement test scores taken within the last three years. Exceptions must be approved by the Dean of Student Success. Information regarding orientation/registration will be sent to you from the Admissions and Registration Office.

Students will receive notification of acceptance to the College within two weeks of application submission.

Non-Degree Seeking Students

Students enrolling in classes for personal enrichment, or those not working toward a degree or certificate, are considered non-degree seeking students. Until a student is accepted into a degree-seeking program, no advisor will be assigned, no financial aid will be available, and no degree can be earned. Students are encouraged to request a meeting with an advisor at any time for assistance with educational planning or to become a degree-seeking student.

Non-degree seeking students must complete the non-degree Application for Admission form prior to enrollment. These forms are available in the Admissions and Registration Office or on the Northeast website. Mandatory Placement requirements apply to anyone taking math and/or English classes. There are also some classes that require specific test scores/prerequisites. Guidelines can be found on the Northeast website or by contacting the Northeast Community College Testing Center.

Returning Students

Former Northeast Community College students who have not been enrolled for one year must complete a new Application for Admission to be eligible to register for classes. If it has been over one year since enrollment, students will follow the most current catalog.

Appeals

Appeals to the admissions process will be considered by the Vice President of Student Services in consultation with the appropriate Division Dean. All appeals must be submitted in writing.

SPECIAL ADMISSIONS GUIDELINES

Early College Students

The Early College program provides the opportunity for students currently enrolled in high school level courses to enroll in college credit courses. Early College students may enroll in courses that are 1000 level or higher. Students under age of 16 must have approval of the academic dean and the Registrar.

Early College students must complete an Early College Application for Admission. This can be done on the Northeast website, through the high school counselor, or the Northeast Admissions and Registration Office.

An Early College student who plans to attend Northeast Community College after high school graduation must submit an official Degree-seeking or Non-Degree seeking Application for Admission.

The credits and grades earned will become part of the student's permanent Northeast transcript.

Early High School Graduates

Early high school graduates who will not receive their high school diploma prior to their enrollment start date and who are applying as a degree-seeking student must provide the following:

1. An official transcript, a completed Special Admission: Early High School Graduate Form, and a completed Application for Admission indicating their intent to enroll in a program which leads to an associate's degree (certificate and diploma programs do not meet the criteria). Students under age 16 must have approval of the Academic Dean and the Registrar.
2. Appeals to the admissions process will be considered by the Vice President of Student Services. All appeals must be submitted in writing.

Home School Students

Home school completers who are applying as a degree-seeking student prior to the age of 18 must provide one of the following:

1. If state (where applicant has residency) law requires a home schooled student to

obtain a secondary school completion credential for home school (other than a high school diploma or its recognized equivalent), an official copy of that credential.

2. If state (where applicant has residency) law does not require a home schooled student to obtain a secondary school completion credential for home school (other than a high school diploma or its recognized equivalent), an official transcript or the equivalent, signed by the student's parent or guardian, that lists the secondary school courses the student completed and documents the successful completion of a secondary school education in a home school setting.
3. Students under age 16 must have approval of the Academic Dean and the Registrar.
4. Appeals to the admissions process will be considered by the Vice President of Student Services. All appeals must be submitted in writing.

International Students

International students applying to Northeast with the intention of obtaining a Certificate of Eligibility, (Form I-20), for the purpose of acquiring an F-1 visa, must complete all general and international student admission requirements. Only after the student meets these requirements will the Form I-20 be issued. Students under age 16 must have approval of the Academic Dean, the Registrar, and the Director of Global Engagement.

It is recommended that applicants residing in a foreign country initiate the application process six months prior to their anticipated enrollment date. All completed application materials must be received in the Admissions and Registration Office by July 1 for those planning to enroll for the fall semester and November 15 for students planning to enroll for the spring semester.

To meet all international student admissions requirements, international students should send the following to the Director of the Center for Global Engagement, Admissions and Registration Office, Northeast Community College, 801 East Benjamin Avenue, P.O. Box 469, Norfolk, NE 68702-0469:

1. Completed International Student Application for Admission.
2. Official copies of all high school and college academic records (with English translations).

3. An international applicant whose native language is not English must demonstrate English proficiency. Students may do this by submitting one of the following:
 - a. An official Test of English as a Foreign Language (TOEFL) score report with a minimum of 500 on the written exam, 173 on the computer exam, or 61 on the TOEFL. Northeast Community College's institutional code for TOEFL is 6473.
 - b. An official International English Language Testing System (IELTS) minimum score of 6.5.
 - c. An official transcript from an accredited U.S. educational institution verifying successful completion of a college English course, at the 1000 level or higher, with a grade of "C" or better.
 - d. An official ACT score report with an English subscore minimum of 18. If submitted English subscores are lower than 18, an additional placement exam will be administered.
 - e. An official SAT score report with a verbal subscore minimum of 440. If submitted verbal subscore is lower than 440, an additional placement exam will be administered.
 - f. Satisfactory completion of a Northeast's placement test for Language and Reading.
 - g. Verification of successful completion of a U.S. English Language program.
 - h. "TOEFL Waivers" will not be accepted. All test scores must be verifiable. Foreign students who are in the United States on another type of visa and wish to enroll in courses at Northeast must follow the English Proficiency Requirements. For further assistance, international students should contact the Director of the Center for Global Engagement.
 - i. Students must submit written verification of adequate financial resources, in American dollars, to fund the estimated cost to attend Northeast for the current academic year, as per financial aid calculations. Northeast has determined that adequate financial resources include, but shall not be limited to, sufficient funds over and above the cost to attend as per financial aid cost of attendance guidelines. Adequate financial resources include monies to provide for the student's

- everyday living needs and expenses while in the United States, and health insurance coverage with an insurance company licensed to do business in the United States.
- j. Appeals to the admissions process will be considered by the Vice President of Student Services. All appeals must be submitted in writing.
4. International students are required to have all tuition, fees, housing and meal plans paid in full prior to registering for classes. Balance details can be obtained by contacting Student Accounts and Cashiering.
5. Prior to registering for classes, international students shall be required to present proof of health insurance coverage. International students must provide such verification for each year of attendance at Northeast to the Director of the Center for Global Engagement.
- a. The health insurance coverage set forth above shall include coverages for medical expenses associated with accident, sickness, hospitalization, major medical procedures, and repatriation of remains. Coverages shall provide for the following minimum coverages:
- Medical benefits of at least \$50,000 per accident or illness;
 - A deductible (the amount for which the student is responsible) not to exceed \$500 per accident or illness;
 - Repatriation of remains coverage in the amount of \$7,500; and
 - Expenses associated with medical evacuation of the student to their home country in the amount of \$10,000. Northeast Community College does not have health insurance coverage for its students. Students are responsible for their own medical expenses.
6. Prior to enrollment, international students must complete an Orientation/Registration session and take a placement test (if not already provided).
7. Immigration laws require F-1 students to pursue a full course of study. At Northeast, this means maintaining a minimum of 12 credit hours per semester in a program of study and making satisfactory progress toward degree completion.
8. International students present in the United States on temporary visas are considered nonresidents for purposes of tuition payments. Length of stay, payment of taxes, ownership of property, etc., do not imply legal residency.
9. International students who wish to transfer to Northeast from another U.S. institution must complete the appropriate transfer forms. Transfer forms can be requested from the Director of the Center for Global Engagement at Northeast.
10. International applicants who are in the United States on another type of visa and wish to enroll in courses at Northeast must follow the English Proficiency Requirements. For further assistance, please contact the Director of the Center for Global Engagement.

Nursing Program Applicants

The Nursing Program has a selective admission policy. All applicants must initially apply to Northeast as a Pre-Nursing (PRN) major. As a condition of admission to the College, students are subject to placement testing and mandatory placement for general education courses. Required general education courses may be taken prior to acceptance in the Nursing Program, or concurrently once accepted into the program. All general education course work is required to have a grade of “C” or better to meet the Nursing Program’s standards for admission or progression. Students wishing to transfer in required courses should see a nursing program advisor for transcript evaluation. The Division Dean makes all final decisions in collaboration with the Registrar on acceptance or equivalency of transfer courses.

Nursing Program Selective Admission

All nursing program applicants are required to complete a Nursing Applicant Form, provide official transcripts, and complete the Nursing Program Entrance Exams (TEAS and Critical Thinking). The GPA in required coursework and entrance exam scores factor into an “Admission Score”, by which students are selected annually for program admission.

Both PN and ADN programs have a limited number of applicants accepted for fall admissions. It is possible that not all applicants will be admitted for a given term. Completed application packets must be received by February 1 to be considered for the fall class of that year.

Northeast sets program admission numbers annually, taking the top admission scores for nursing program admission. Students are notified of conditional program admission in the spring semester prior to the August program

start. Conditional program admission is granted and contingent upon successful completion of spring/summer coursework (“C” or better in required courses and a minimum GPA of 2.7), criminal background check, and drug testing. All conditional program applicants are required to have a criminal background check before full acceptance is granted for the fall semester.

Minimum admission requirements:

- Evidence of a GED, or high school diploma
- Acceptable entrance exam score (see nursing program packet)
- Cumulative GPA of 2.7 in required courses, including a 2.7 science GPA
- Direct high school to program admits must have a cumulative high school GPA of 3.5 with successful completion of the highest level English, Math and Science courses
- LPN to ADN students are required to hold an unencumbered LPN license from Nebraska or another compact state
- Successfully complete a Nurse Aide course and be listed on the Nebraska Nurse Aide Registry

Nursing Program Grade and Graduation Requirements

(Effective for all NURS coursework fall 2007 and after.)

Students enrolled in either Practical Nursing or Associate Degree Nursing coursework are held to program specific grading standards.

The Nursing Program specifies that a student must obtain the following grades in order to complete either the PN Diploma or Associate Degree in Nursing. Also, a student is eligible to take the NCLEX-PN or NCLEX-RN exam upon satisfactory completion of the following graduation requirements:

1. A “C” or better in all general education coursework.
2. A “B” or better in all nursing (NURS) coursework.
3. “P” or pass grade in select NURS coursework; the “P/F” grade is reserved for laboratory or clinical coursework only; a pass grade is determined by the instructor’s evaluation of the student meeting specific course competencies and is equivalent to a “B” grade in a theory or classroom course.

Physical Therapist Assistant Applicants

In addition to the Northeast Community College application and admission process,

students must also apply to the Physical Therapist Assistant (PTA) program.

Applicants to the PTA program must:

- Apply to Northeast Community College with a declared major of Physical Therapy: Preprofessional
- Begin the prerequisite coursework detailed in the required PTA Program of Study. A minimum of a “C” must be achieved in each of those courses, and the required science classes must have been completed within the past five years.
- Earn a cumulative GPA of at least a 2.5 in the prerequisite coursework detailed in the required PTA Program of Study. The mid-term grade of courses in progress will be used to calculate the GPA at the time of the selection procedure.
- The PTA Application Packet is updated each spring semester and can be accessed beginning April 1 through the Northeast Community College website, or by email request to PTA@northeast.edu. The application requirements must be completed, and materials returned or postmarked as instructed by the deadline of October 1. Required application material includes:

- PTA Program Application for Admission Form
- PTA Job Shadowing Forms
- Professional resume and cover letter

Based on the scoring rubrics for GPA, Observation Forms, Resume and Cover Letter, up to 35 students with the highest cumulative scores will be invited by the PTA Admissions Committee for an interview.

Students are accepted into the program based on total points earned on GPA, observations, resume and cover letter, and interviews.

Students of the PTA program will be required to complete and submit the following in order to participate in the clinical education component of the curriculum:

- Physical examination
- Required vaccinations
- Tuberculosis test
- Criminal background check
- Drug screen

Utility Line Applicants

Admission to the Utility Line program (hereafter referred to as the program) is contingent upon the applicant meeting the College mandatory placement test scores for reading, writing, and mathematics as required by the program (see program of study):

1. All students must have a valid CDL learner's permit, along with a valid driver's license, in their possession when classes begin. Students must maintain that valid CDL learner's permit and their driver's license until which time they are directed to obtain a class A or A/O CDL. Once a student obtains his/her class A or A/O CDL they must maintain that license throughout the remainder of their course of study, including the summer internship. Any student who loses his/her driver's license or CDL will be unable to continue any further in the program. Students wanting to re-enter the program must re-apply.

Each student must provide a current driving record from the student's state of residence by the end of the second week of classes for each term in which they are enrolled, including summer internship. Nebraska resident students will have their records request sent to the Nebraska Department of Motor Vehicles by the program. Out-of-state students will be responsible to secure their own drivers record in the allotted time. Failure to provide a current driver's record will result in the removal of that student from the program.

2. All students will be required to pass a medical examination and obtain a medical examiners certificate for drivers. Students are also required to be in a drug and alcohol testing program which consists of pre-admittance, random, post-accident, and reasonable suspicion testing. All examinations and testing will be provided by the program.
3. Any student who is unable to obtain a medical examiners certificate, fails a drug or alcohol test, refuses to take a drug or alcohol test, intentionally attempts to alter the outcome of any drug or alcohol test, or does not appear in the allotted time to take a drug or alcohol test will be unable to enter or continue in the program.

Any student who has been removed from the program due to the drug or alcohol testing policies and wishes to re-enter the program must re-apply and will be required to provide evidence of successful completion of a substance abuse program from a substance abuse professional(SAP) prior to being re-admitted.

4. If a student has fulfilled all first semester requirements but does not complete all the second semester requirements he/she may re-enter the second semester the following January, if an opening exists.
5. For the safety of the students and to ensure

the student's ability to perform the skills required, any student who does not meet all first or second semester requirements and sits out at least one semester must re-take UTIL 1030 and 1040 or UTIL 1140 and 1150, whichever is appropriate for the semester in which they are returning to regardless of prior grades received as well as any classes or labs that were not completed as required.

6. Students must either successfully complete their summer internship or have sufficient hours to be eligible for an incomplete grade prior to beginning their sophomore year. No student will be allowed to take sophomore classes or labs without either the successful completion of their summer internship or having been approved for and received an incomplete grade.
7. No student currently enrolled in utility line classes may place his/her name on the wait list. Students who wish to be placed on the wait list must first withdraw from all utility line classes.
8. Any student re-applying for any reason will be either accepted or placed on the wait list in order by date that all admission requirements were submitted and complete.

Drafting and Electromechanical Technology

Admission to the Drafting and Electromechanical Technology programs is contingent upon the applicant meeting the College mandatory placement test scores for reading, writing, and mathematics as required for the program (see program page for scores). Any student that does not meet minimum placement scores for all test areas will be admitted to the College, but must successfully complete required transitional skills courses or attain required placement test scores to be admitted to the program.

Veterinary Technology Applicants

In addition to Northeast Community College application and admission, students must also apply to the Veterinary Technology Program. Applicants to the Veterinary Technology Program must:

1. Submit completed required application materials to the program by October 1st. Materials include the following:
 - a. Professional resume.
 - b. *Veterinary Technician observations (See Veterinary Technology Program of Study).

- c. Personal statement.
- d. *Disclosure statement.

*Specific forms and guidelines are provided by the program. Applicants need to obtain and complete the specified forms.

2. Complete the coursework detailed in the required Program of Study with a minimum of a “C+” in all VTEC courses. (See Veterinary Technology Program of Study). Your grades as of November 1st of the year in which you are applying will be used to tabulate your GPA in the VTEC courses for your application.

Based on an evaluation score of the above criteria, the student may be invited in by the Veterinary Technology Admissions Committee for an interview.

Those students selected to continue in the Veterinary Technology Program must complete the following:

- Physical examination.
- Rabies vaccination (or sign waiver).
- Proof of health insurance.
- Criminal background check and drug screen.
- Complete all veterinary technology courses with a minimum grade of C+.

Veterinary Technology Program Grade Requirements

1. Students must earn a C+ or above in all VTEC coursework.
2. In the event of course failure or withdrawal, a student will be allowed to repeat the course to earn a qualifying grade.
3. A total of two course failures or withdrawals are allowed. Upon failure or withdrawal from the third course, students are dismissed from the program.

Incoming Transfer Students

For those students wanting to transfer into the program from another institution:

1. Must be transferring from an AVMA accredited program and submit the following:
 - a. An official transcript of veterinary technology course work.
 - b. Completed Northeast Community College Veterinary Technology Program Disclosure Statement.
 - c. A signed letter of good standing from

the director of an AVMA accredited program. Students who cannot provide a letter of good standing from the program’s director or who were dismissed from the program for academic or behavioral issues will not be accepted.

2. Transfer students must complete the same selection process as all of Northeast’s students. To determine their GPA, the program director will use course grades that are C+ or higher in an equivalent course. If there is no equivalent course work, the transferring student must take the Northeast Community College Veterinary Technology Program’s required course.
3. Transferring students with a 2.5 GPA in the four veterinary technology courses may be invited to interview for the program.
4. If admitted into the program, the veterinary technology course work that the student wishes to transfer in will be at the discretion of the Northeast Community College Veterinary Technology program director. All other college course work will be evaluated by the college registrar for acceptance. Only grades of C+ or higher in veterinary technology courses will be accepted.
5. All transferring students must agree to follow the Northeast Community College Veterinary Technology Program requirements.
6. All transfer students who have been admitted into the program must take the following courses through Northeast Community College: VTEC 2612, VTEC 2611, VTEC 2622, VTEC 2621, VTEC 1410, VTEC 1411, VTEC 1211, VTEC 2562, VTEC 2561, VTEC 1220, VTEC 2520, VTEC 2521, VTEC 2680, and VTEC 2660. No equivalency course will be accepted for these courses.

Veterans

Northeast Community College programs are approved by the Department of Education for students eligible to receive veterans educational benefits. Northeast Community College proudly supports its veterans. Services are provided through the Admissions and Registration Office in the College Welcome Center. A dedicated Veteran Lounge provides a comfortable spot for studying or socializing. The Student Veteran Organization (SVO) helps to ease the transition into collegelife, as well as provide service opportunities within the community. Northeast also offers college credit for qualifying military experiences, based on

Admissions and Records Information

American Council on Education (ACE) guidelines. Qualifying students are eligible for in-state tuition rates.

Consistent with the Veterans Benefits and Transition Act of 2018, Section 3679 of title 38, United States Code, Section 103, Northeast Community College not impose any penalties due to the delayed disbursement of a payment by the U.S. Department of Veteran Affairs, VA, on recipients of Chapter 31 and Chapter 33 VA Benefits. Northeast will permit any covered individual to attend or participate in the course of education during the period beginning on the date on which the individual provides Northeast Community College with a certificate of eligibility for entitlement to educational assistance under Chapter 31 or 33, and ending on the earlier of the following dates: 1) The date on which payment from the VA is made to the institution or 2) 90 days after the date the institution certified tuition and fees following the receipt of the COE (Certificate of Eligibility).

Additionally, Northeast will not require that a covered individual borrow additional funds, on any covered expense because of the individual's inability to meet his or her financial obligations to the College, due to the delayed disbursement of funding from the Department of Veterans Affairs under Chapter 31 or 33. A Covered Individual is any individual who is entitled to educational assistance under Chapter 31, Veterans Readiness and Employment Services, or Chapter 33, Post 9/11 GI Bill® benefits, and has been verified by the school certifying official as benefit eligible. This requirement is limited to the portion of funds paid by VA.

A veteran and/or eligible person must make satisfactory progress toward an approved educational objective leading to employment. Veteran and/or eligible person Standard of Progress will be determined utilizing the Academic Standards as listed in the College catalog, consisting of overall grade point average, Student Attendance, page 31, and the Student Code of Conduct, located in the Student Handbook.

Students planning to use any type of military educational benefit must complete the Northeast Community College Request Certification Form in each term. This electronic form is located on the Veteran Support page of the Northeast website.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at <http://www.benefits.va.gov/gibill>

ADMISSIONS TESTING AND COURSE PLACEMENT

All degree-seeking and non-degree seeking students requesting to register in a math or English course, are required to complete an assessment of academic abilities prior to enrollment. This requirement can be fulfilled in one of the following ways:

- Complete a pre-enrollment placement exam through Northeast's Testing Center.
- Submit recent, taken within three years, ACT, SAT, Accuplacer or MAP scores.
- Submit an official college transcript demonstrating successful (2.0 or higher on a 4.0 scale) completion of a college-level English and/or math course.

Placement test scores and previous college transcripts must be on file in the Admission and Registration Office prior to class registration. Scores and transcripts will be reviewed during advisement and used to determine appropriate levels of coursework.

If students do not have current placement test scores and have not successfully complete a college-level English or math course, a pre-enrollment assessment will be administered at the Norfolk campus or any of Northeast's extended campus locations. Distance learning students who cannot access testing services at these locations need to arrange for testing at a site near them and transfer their scores to Northeast.

The ACT is the Nebraska state test and is administered to juniors in the high schools. A full range of alternate testing services (aptitudes, abilities, interest, personality preference, and occupational preference) are available upon request. For further information on alternate testing services, contact the Testing Center.

ENROLLMENT PROCEDURES FOR NEW STUDENTS

Under the following conditions, students are eligible to enroll. If the student has:

- Completed the Application for Admission,
- No outstanding financial obligations to the College,
- Not been dismissed for conduct reasons or academic suspension, and
- Provided official placement test scores or submitted official college transcripts demonstrating successful (2.0 or higher on a 4.0 scale) completion of college-level English and/or math coursework.

NEW STUDENT REGISTRATION

All degree-seeking students are required to attend a New Student Registration event prior to their first enrollment at Northeast.

New students are notified of dates when they can register for the upcoming semester. The College informs students of registration dates on the Northeast website and notices on campus. Although multiple New Student Registration events are held prior to the start of each semester, students will find it to their advantage in terms of course and time selections to register as early as possible.

During a New Student Registration event, students will meet with an advisor and register for courses after thorough discussion and review of program and college requirements. Advisors will assist student to register (the process of enrolling) for classes using My Northeast, a web-based student information system. My Northeast can be accessed through the My Apps portal on the website. My Northeast houses the course schedule for each academic term as well as the student's academic and financial records.

While the focus of New Student Registration is advising and registration, students will be able to gather valuable information about required tools, equipment and program uniforms and access a variety of student support services.

FALL ORIENTATION

All new degree-seeking students will attend Fall Orientation, which is held prior to the beginning of fall semester. This program serves to familiarize students with campus procedures and the College environment. Orientation activities may include classroom and Student Services tours, introductions to advisors, and activities to help students get to know the College and community.

ENROLLMENT PROCEDURES FOR CURRENT, RETURNING, OR TRANSFERRING STUDENTS

Students who are currently or have been previously enrolled at Northeast and students who are transferring to the College may register for the following semester during scheduled times in the spring and fall. The College informs students of registration dates on the Northeast website and the published academic calendar. Students will find it to their advantage in terms of course and time selections to register as early as possible.

ADVISING

All students are required to meet with an academic advisor prior to registration until they

have earned 28 credit hours and are academically in Good Standing. Every degree-seeking student is assigned an advising team, made up of a First Year/Retention Advisor and a Program Advisor.

Advisors help students with schedule building and adjustment, transfer planning, career exploration and development, changes of major, academic recovery, and other issues impacting academic success. First Year/Retention Advisors are located in the College Welcome Center. Program Advisors are typically faculty within the student's program of study. Advisor assignments can be found in the student's My Northeast account.

While advisors provide guidance, final responsibility for planning courses, meeting requirements, and observing regulations lies with the student. Students should read this catalog carefully as their source of information on requirements and regulations. Electives and/or substitutions must have the approval of the Advisor and/or Dean of the Division of the student's major.

CAREER EXPLORATION

For students who are undecided about a program of study, Northeast Community College offers many opportunities for career exploration. Northeast offers a one-credit hour Career Planning course that includes assessment, career research and activities to help students make short-term and long-term career decisions. Students may also seek career guidance by visiting with their First Year/Retention Advisor or staff in Career Services. Additionally, there are several no-charge career assessments available on the website to help students make career decisions based on their unique interests, abilities, values, and personality.

CHANGE OF MAJOR OR CONCENTRATION

Students may change their major, change their concentration, or add a new major by completing an "Add or Change of Major Form." This form must be signed by the student and their First Year/Retention Advisor after careful consideration of the impact a change of major will have, if any, on financial aid, transfer and degree completion timeline.

The form must be filled out completely, including a new tentative graduation date, and submitted to the Admissions and Registration Office for processing. Forms submitted after the second week of any semester will not go into effect until the following academic term. Exceptions may be granted with approval from the Vice President of Student Services or his/her designee.

If the student is requesting a change to a limited enrollment program major, the student must check with the Admissions and Registration

Office regarding the availability of space in the program. Changing one's major to a limited enrollment program major does not guarantee a place in the program.

COURSE DROP and ADD

Students wishing to change their course schedule may drop or add courses within the predetermined drop/add period. Students are encouraged to consult their advisor prior to dropping or adding courses.

Adding a Full-Semester Course

Once registration opens for an upcoming semester, students may continue to register for full-semester courses in their My Northeast account through the first week of the term. Students wishing to add a course during the second week of the semester must submit a Drop/Add Form to the Admissions and Registration Office. The completed form must be signed by the student and the instructor. Registration within subsequent weeks of the term is highly discouraged and requires a completed Drop/Add Form with signatures from both the instructor and the Registrar.

Dropping a Full-Semester Course

Students may drop courses online in their My Northeast account through the second week of the semester. Once the online drop period has ended, students must submit a completed Drop/Add Form to the Admissions and Registration Office. The Drop/Add Form can be obtained from the Admissions and Registration Office or downloaded from the College's website. Students wishing to drop a course(s) must do so by the last date to withdraw from full-term courses which is published in the academic calendar found in the Student Handbook and College's catalog and on the website.

Short-Term Courses

Courses with a shortened or alternate schedule will not follow standard drop/add periods. Students should consult with their Advisor or the Admissions and Registration Office for dates.

Veteran Students

Students receiving Veteran benefits and withdrawing from a course(s) which will drop them below the required credit level may be required to reimburse the Department of Veteran Affairs for payments received for that term. Students may contact the Northeast School Certifying Official with questions.

TERM WITHDRAWAL

Students wishing to withdraw from all their courses following the two-week online drop

period must complete a Term Withdrawal Form. This form is available in the Admissions and Registration Office or from their advisor.

Students who submit a Term Withdrawal Form will receive a "W" grade for each course they were enrolled in. Students must submit the form prior to the official last date to withdraw for that part of term.

Any student who stops attending classes and does not officially withdraw prior to the official last date to withdraw will receive a "UF" (Unearned "F") grade.

In the case of extenuating circumstances, the Dean of Student Success or his/her designee can determine that the student qualifies for a "W" grade after the withdrawal period has officially ended.

The term withdrawal date for the purpose of returning unearned military tuition assistance and/or Federal financial aid program funds will be determined by the student's last day of attendance. Students receiving Veteran benefits who withdraw from Northeast without extenuating circumstances may be required to reimburse the Department of Veteran Affairs for payments received retroactive to the beginning of the term.

TRANSFER PLANNING

Northeast Community College strives to make the transfer process to four-year institutions as seamless as possible. Students planning to transfer to another institution should work closely with their First Year and Program Advisors to select courses that best fit their transfer plans.

Northeast has transfer articulation agreements with several institutions in Nebraska, South Dakota, and Iowa. Transfer information can be accessed on the Advisement page on the website.

The Nebraska Transfer Initiative was signed in 1995 by 25 post-secondary institutions in Nebraska. This initiative is a cooperative effort by Nebraska's public and private higher education institutions to facilitate the transfer of students who have earned an Associate of Arts or Science degree into baccalaureate-level programs. The signing of this document has led to increased cooperation in the transfer of courses between Nebraska's community colleges and its four-year institutions. Through this initiative, associate and baccalaureate-granting institutions are equal partners in providing the first two years of a baccalaureate degree.

In addition to articulation agreements, Northeast has now joined the other Nebraska higher education institutions with the Transfer Nebraska website. Students may refer to the Transfer Nebraska link on the Northeast website (northeast.edu) for transfer equivalency

information. This one-stop site allows students to easily check transferability of classes to and from various colleges, including Northeast. Instant access to accurate information helps students to plan better schedules thus saving time and money.

FOUNDATIONAL COURSEWORK FOUNDATIONAL ENGLISH

Foundational English is designed to improve and enhance English skills in reading, writing, spelling, and vocabulary. Instruction is based on the student's individual needs, such as use of context clues, five step paragraph development, thesis statements, grammar, sentence types, correction of fragments and run-ons, main ideas, relationships, inferences, and the author's purpose and tone. In addition, students can receive English assistance in other courses. See course descriptions section.

FOUNDATIONAL MATH

The foundational math program is designed to build and enhance skills necessary for student success in college-level mathematics. There are multiple pathways to progress through foundational mathematics depending on placement and degree requirements. Instruction is based on individual needs, and enables students to progress from where they are, to where they need to be. Foundational courses emphasize skill-building and concepts related to the required college math course needed for graduation. Students can receive individual assistance for their required courses. See course descriptions.

FIRST YEAR EXPERIENCE

Successful transition to college happens by design, not accident. The First Year Experience is a credit course designed to increase a student's likelihood of attaining and maintaining academic, personal, and career success. Students will learn techniques that foster success in college and in life within this engaging and rewarding learning environment.

LEARNING SKILLS FOR SUCCESS

Learning Skills for Success is a credit course designed to help students acquire skills and attitudes that promote success in the classroom and in life. The course focuses on helping students learn how to learn, how to access learning resources, and how to develop effective life skills.

ENGLISH AS A SECOND LANGUAGE (ESL)

Northeast Community College offers a sequence of classes for students who want to develop English language proficiency. Students may enroll in non-credit offerings through the Adult Education Office with classes that begin with basic

literacy instruction and continue through more advanced language and writing skills. Credit classes are also offered that will develop English language skills through advanced levels in preparation for the TOEFL exam or college coursework.

Students are required to complete assessment testing to determine appropriate placement into the sequence of courses. Additional information concerning non-credit ESL instruction can be obtained by contacting the Adult Education Office. For information about credit ESL courses and language placement testing, contact the Student Services Office in the College Welcome Center.

STUDENT ATTENDANCE

Students are expected to attend classes and complete assignments, including those missed due to absence, as scheduled. Each instructor develops and enforces the attendance requirements for their course(s). Students who cannot attend a class must notify the course instructor. In cases of extended illness, students must also notify the Dean of Student Success. Students who miss class due to military obligations must notify the College's VA Certifying Official in the Admissions and Registration Office. In addition, instructors are required to report students who fail to establish attendance and/or students who stop attending class, as described in the following:

Student Failure to Start Attendance/ Administrative Withdrawal

Northeast Community College is required to verify the enrollment and participation of students who participate in Federal Title IV student aid programs and/or who receive educational benefits through alternate funding sources. Attendance is established when a student physically attends a class or submits an assignment in an online class. Submitting the syllabus confirmation does not qualify as active participation. Students who fail to start a class and never complete an assignment will be administratively withdrawn from the course and the student's financial aid will be adjusted to reflect eligibility for only those courses attended.

Students who have been administratively withdrawn from a course will have the course and all tuition and fees associated with the course removed from their record. Students who are administratively withdrawn will receive email notification from the Admissions and Registration Office.

Students who have not had any active participation in a course in the first two weeks of the term will not be allowed to re-enroll in the course. In the event that the student can prove

he/she had active participation within the first two weeks, the student must appeal to the course instructor to be re-enrolled.

Students Who Stop Attending/ Unofficial Withdrawal

Students are expected to follow the College's Drop/Withdrawal procedures. Students who stop attending a course after attendance has been established must drop the course and/or withdraw from the term or they will be reported for non-attendance. Stopping attendance during a term is defined as not actively participating in a course for 14 consecutive calendar days. Stopping attendance does not cancel tuition charges or prevent the course and grade from appearing on the student's academic record. Students who have stopped attending a course and fail to officially drop the course will be unofficially withdrawn and assigned a "UF" (Unearned "F") grade.

A "UF" grade is counted as a failure in the calculation of grade point average and academic standing. A student who is assigned a "UF" grade will not be allowed to return to the class for the current term. The issuance of a "UF" grade will activate re-evaluation of the student's financial aid and may result in repayment as noted in the Return to Title IV guidelines.

Students who have been issued a grade of "UF" can officially withdraw from the course by submitting a Drop/Add or, if withdrawing from all courses, a Term Withdrawal form to the Admissions and Registration Office by the official last date to withdraw for that part of term. This will replace the "UF" grade with a "W" for the course(s) from which they are officially withdrawn.

ACADEMIC STANDARDS

Every student who enrolls at Northeast Community College is expected to make progress toward the completion of their education goal. Students are evaluated at the end of each term, resulting in the following:

President's List

Academic Standing Measures: Student must earn a 4.0 GPA after completing at least 12 credit hours in nominated semester.

Academic Outcomes: Student will be recognized as an outstanding student.

President's List for Part-Time Students

Academic Standing Measures: Student must earn a 4.0 GPA after completing at least 6 credit hours in nominated semester.

Academic Outcomes: Student will be recognized as an outstanding student.

Dean's List

Academic Success Measures: Student must earn a GPA of 3.75 to 3.99 after completing at least 12 credit hours in nominated semester.

Academic Outcomes: Student will be recognized as an outstanding student.

Dean's List for Part-Time Students

Academic Success Measures: Student must earn a GPA of 3.75 to 3.99 after completing at least 6 credit hours in nominated semester.

Academic Outcomes: Student will be recognized as an outstanding student.

Good Standing

Academic Standing Measures: Student must earn and maintain a cumulative GPA of 2.0 or higher.

Academic Outcomes: Student may pursue their academic goals with no restrictions. Student must attain a cumulative GPA of 2.0 or higher in their graduating term to receive a degree, diploma or certificate.

Academic Warning

Academic Standing Measures: Student earns a cumulative GPA of 1.99 or less.

Academic Outcomes: Student will be placed on Academic Warning and restricted to no more than 12 credit hours in the following semester. A registration restriction will be placed on student's account. Student must meet with a First Year/Retention Advisor prior to or at the beginning of the academic warning semester to develop an Academic Recovery Plan and adjust schedule. Student must meet with a First Year Advisor to register for any subsequent terms until cumulative GPA is 2.0 or higher.

Student will remain in Academic Warning until their cumulative GPA is 2.0 or higher as long as a semester GPA of 2.0 or higher is earned in every subsequent term. Student returns to Good Standing when their cumulative GPA is 2.0 or above. Appeals for an increase in credit hours should be directed to the Dean of Student Success once an Academic Recovery Plan has been developed.

Academic Probation

Academic Standing Measures: Student on Academic Warning and did not achieve a 2.0 semester GPA in the next semester.

Academic Outcomes: Student will be placed on Academic Probation and restricted to no more than 6 credit hours in the following semester. Student must meet with a First Year/Retention Advisor prior to or at the beginning of the academic probation registration for the following

semester to develop an Academic Recovery Plan and adjust schedule. A registration restriction will be placed on student's account. Student must meet with a First Year/Retention Advisor to register for any subsequent terms until cumulative GPA is 2.0 or higher.

Student will remain on Academic Probation until their cumulative GPA is 2.0 or higher as long as a semester GPA of 2.0 or higher is earned in every subsequent term. Student returns to Good Standing when their cumulative GPA is 2.0 or above. Requests for an increase in credit hours for students on academic probation should be directed to the Dean of Student Success once an Academic Recovery Plan has been developed.

Academic Suspension

Academic Standing Measures: Student on Academic Probation and did not achieve a 2.0 semester GPA in the next semester.

Academic Outcomes: Student will be placed on Academic Suspension and prohibited from enrolling for one semester, excluding the summer term. Student will be administratively withdrawn from any classes they are enrolled in for the next term. Student must meet with a First Year/ Retention Advisor to develop an Academic Recovery Plan prior to re-enrolling.

To appeal Academic Suspension, student must submit an Academic Suspension Appeal packet and meet with the Dean of Student Success. If an appeal is granted, student will remain on Academic Probation, adhering to any requirements imposed by the Dean of Student Success. Failure to follow through with requirements and achieve a 2.0 semester GPA will result in Academic Suspension for two full semesters. Student returns to Good Standing when their cumulative GPA is 2.0 or above.

To maintain financial aid eligibility, students must comply with the Satisfactory Academic Progress (SAP) standards outlined on page 15. Academic standing impacts other services and activities, to include Veteran's benefits, collegiate athletics and housing.

TRANSCRIPTS

Official academic transcripts may be requested through Northeast Community College's Electronic Transcript Order Site. The order site can be used to request both electronic delivery and mailed transcripts. Directions on requesting transcripts through the online order site can be found on the Records and Registration page of the Northeast website.

Printed transcripts may also be requested directly from the Admissions and Registration Office by submitting a completed Transcript Request Form in person, through email, or via fax. Please allow 1-2 business days for processing

Transcripts cannot be released if the student has unmet financial obligations to Northeast. In the event of outstanding financial obligations, students may request an unofficial copy of their transcript or access an unofficial copy through their My Northeast account in the My Apps portal.

Northeast cannot release another institution's transcript to a third party, including the student to whom the record belongs. These records must be requested through the original credit-granting institution.

Northeast Community College abides by the Family Educational Rights and Privacy Act of 1974 (FERPA).

DISABILITY SERVICES

Northeast Community College is committed to providing equal access to all instructional material, facilities, services, and activities for all students to include those with disabilities (permanent or temporary to include those who are pregnant) who require reasonable accommodations to participate fully. A student requesting accommodations must disclose a permanent or temporary diagnosed disability exists to the Disability Services Office and complete an application. A student provides documentation of a disability as defined by the Americans with Disability Amendment Act 2008 (ADAAA) and Section 504 of the rehabilitation act of 1973. Under the ADAAA and Section 504, a person has a disability if a physical or mental impairment substantially limits one or more major life activities that includes but is not limited to caring for oneself, performing manual tasks, seeing, hearing, sleeping, walking, standing, lifting, bending, speaking, breathing, learning, reading, concentrating, thinking, and communicating.

Students with a disability (SWD) have a right to:

- Equal access to courses, programs, services, jobs, activities, and facilities
- Reasonable, appropriate, and effective accommodations, academic adjustments, and or auxiliary aids that are determined on an individual basis; and
- Have all documentation pertaining to their disability kept confidential with the choice of whom to disclose information to, except as required by law.

The Disability Services Office is the designated office to receive and file disability related documents. Reasonable accommodations are determined on an individual basis following a comprehensive intake interview with the student by Disability Services staff. The Director of Disability Services is Northeast's designated staff person who determines necessary and appropriate accommodations with the student.

Examples of appropriate accommodations, academic adjustments, and/or auxiliary aids consist of testing accommodations which may include listening to exams, extended time for exams, calculator usage, and/or taking exams in a lower distracting environment; obtaining textbooks in an electronic format to listen to the textbook while reading; note-taking accommodations such as copies of lecture notes, access to Power Point presentations, and/or recording lectures; usage of note-taking technology such as smart pens and apps; usage of computer software and apps including, but not limited to, speech recognition software and text-to-speech software; FM systems; interpreters for students who are deaf; and adjustments to course participation. Some accommodations may take several weeks to put into place, so please make requests known early.

To obtain additional information and or to schedule an appointment, you may go to the Disability Services Office at the College Welcome Center, Room 1263, call (402) 844-7343, send an e-mail to disability@northeast.edu or visit <https://northeast.edu/Support-Services/Disability-Services/Request-Accommodations.aspx>

The Section 504/ADA/Title IX Compliance Officer at Northeast Community College is the Associate Vice President of Human Resources, Lifelong Learning Center.

INSURANCE

Because Northeast does not provide insurance coverage for illness or injury, the College urges students to carry some form of personal health insurance.

Northeast highly recommends that any student living either on campus or renting off campus invest in renter's insurance or verify that his/her family's home-owners insurance covers his/her rental unit.

CAMPUS ALERT

Northeast believes that your safety on the main and extended campuses is of paramount importance. Northeast has partnered with Rave Mobile Safety, the leader in mobile safety, to offer an emergency notification system. Campus Alert is available to all staff, faculty, and enrolled students. Northeast's Campus Alert system will disseminate timely emergency notifications and severe weather announcements via text message, email, and voice messages. For more detailed information, visit the Northeast website.

STUDENT RESPONSIBILITIES, RIGHTS, AND FREEDOMS

Members of an academic community are expected to conduct themselves in a mature and

responsible manner. It is the policy of Northeast Community College to allow students maximum freedom consistent with good scholarship and good citizenship. Good citizenship implies high standards of conduct both on campus and elsewhere, and requires conformity to the laws of the United States, State of Nebraska, and its subdivisions, and to College policies and regulations. Student conduct is governed by the Northeast Community College Student Code of Conduct as published in the Student Handbook. This information is also available on the Northeast website northeast.edu.

Northeast Community College does not discriminate on the basis of race, gender, religion, national or ethnic origin, military or veteran status, political affiliation, marital or family status, age, disability, sexual orientation, gender expression or identity in educational programs, admissions policies, employment policies, financial aid or other College administered programs and activities. It is the intent of Northeast Community College to comply with both the letter and the spirit of the law in making certain discrimination does not exist in its policies, regulations and operations. Inquiries may be addressed to the Northeast Compliance Officer for Title IX, ADA, Section 504; Associate Vice President of Human Resources, 801 East Benjamin Avenue, P.O. Box 469, Norfolk, NE 68702-0469; phone: (402) 844-7046; email: complianceofficer@northeast.edu; or mail: U.S. Department of Education, Office for Civil Rights, One Petticoat Lane, 1010 Walnut Street, 3rd Floor, Suite 320, Kansas City, MO 64106.

STATEMENT OF STUDENT/PARENTS' RIGHTS AS RELATED TO STUDENT EDUCATIONAL RECORDS

Northeast Community College complies with all federal, state, and local laws, which relate to student records including the Family Educational Rights and Privacy Act (FERPA) and pursuant regulations. Regardless of the student's age, rights under FERPA begin when a student enrolls at Northeast Community College.

The College Registrar through the Vice President of Student Services is responsible for maintaining and controlling all student education records. An individual who believes that the College has failed to comply with the requirements of FERPA may file a complaint with the:

U.S. Department of Education
400 Maryland Avenue, SW
Washington, DC 20202-8520

Under the law, directory information may be released by the College without the student's

consent. The following items are considered directory information: the student's name, address (mailing and email), telephone number, program of study, participation in officially recognized sports and activities, weight and height of athletic team members, terms of enrollment, certificates, diplomas, or degrees conferred, college honors and awards received, enrollment status (full-time or part-time), photographs, and the most recent previous institution attended by the student. If a student does not desire such directory information to be released, a request in writing must be filed in the Admissions and Registration Office.

Release of information other than directory information normally requires written permission from the student. The College may release non-directory information without consent in specific cases as outlined in College policies. Northeast maintains a record of all disclosures, and if a student so requests, a copy of the disclosure will be given to the student.

Northeast officials may release information without student's prior written consent to the following groups:

- Northeast Community College faculty and staff with a legitimate educational interest and needs to review an educational record in order to fulfill his or her professional responsibilities for the College.
- Person or company with whom the College has contracted as its agent to provide a service instead of using College employees or officials (such as an attorney, auditor, collection agent, verification agency such as the National Student Clearinghouse.)
- Specified officials for audit or evaluation purposes.
- Appropriate parties in connection with financial aid to a student.
- Organizations conducting certain studies on or on behalf of the school.
- Accrediting organizations.
- To comply with a judicial order or lawfully issued subpoena.
- Appropriate officials in cases of health and safety emergencies.
- State and local authorities, within a juvenile justice system, pursuant to specific State law.

Students have the right to inspect their educational records. The College will not withhold a student's record from a student who has properly requested information under the conditions described in College policies and presented valid identification. A student has the right to request an amendment of their record, obtain a hearing related to their record, or add a statement to their

record. An individual who believes that he or she has been denied the right to view appropriate records may appeal the decision with the Vice President of Student Services through the student grievance procedure. This procedure does not apply to disputes about grades assigned by faculty. For information on the grade appeal policy and procedure, refer to the Student Handbook or College Catalog.

For additional information regarding students' rights and freedoms, refer to the Student Code of Conduct section of the Student Handbook, available in the Student Services office. To obtain a complete copy of the College's policy governing educational records, contact the Vice President of Student Services.

STUDENT CONSUMER INFORMATION

The following list is a sample of consumer information that is available upon request in the Student Services Office: the rate of retention, number of students who complete the programs they start at Northeast, types of financial aid available and how to apply, how and when financial aid is distributed, criteria for continued financial aid eligibility, the refund and Return of Title IV Funds policy, admission and registration information, athletic equity information, the drug and alcohol policy including treatment recommendations, statistics related to crime and security, fires, and crime prevention information.

STUDENT COMPLAINT PROCESS

Occasionally, a student will encounter a College-related problem that he or she does not know how to resolve. When this happens, students should always try to work out the problem by first discussing it with those directly involved with the issue. If, however, an issue or problem still exists, there is a formal complaint process at Northeast Community College that students may initiate. All formal complaints must be put in writing using the online Student Complaint Form. If a form is submitted without a student's name, the complaint will not be considered. All written complaints will be tracked to ensure an action has been taken. In addition, outcomes of appeal processes are not subject to further consideration through this process.

Complaint: A written concern or formal charge of dissatisfaction with a person, service, or process that requires clarification, investigation, and resolution. This requires completion of the Student Complaint Form.

Exclusions: The Student Complaint Process does not apply to grade appeals, complaints of

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sexual harassment, or any student-to-student complaints. Please refer to the Student Code of Conduct for procedures regarding these types of complaints.

Instructions for initiating a formal complaint:

1. Attempt to resolve the issue by speaking directly with the individual(s) or office(s) involved.
2. Complete and submit the online Student Complaint Form.
3. When the complaint is received by the Director of Student Conduct, it will be forwarded to the appropriate individual to review and address the issue.
4. After the concern has been addressed, the student/future student will receive communication from the Director of Student Conduct documenting the receipt, review, and resolution of the complaint.

If a student feels the administrative response is not satisfactory, the Formal Student Grievance Process may be initiated.

Distance Education Student Complaints

In compliance with the Higher Education Opportunities Act of 2008, the U.S. Department of Education conducted a Negotiated Rule Making Process in 2010, and institutions offering distance education must provide enrolled and prospective students with contact information for filing complaints with its accrediting agency and with the appropriate state agency for handling complaints in the student's state.

It is recommended that students taking online classes at Northeast Community College first pursue their concerns locally. Students taking online classes at Northeast Community College who reside out-of-state should follow the instructions for initiating a formal complaint listed above.

Northeast Community College is required to have contact information on its website for out-of-state students who want to file a complaint within their home state. We provide additional resources for filing student complaints that provides phone numbers, emails and/or other contact information for state education agencies.

STUDENT GRIEVANCES

A grievance is a protest or allegation against a party which gives rise to the filing of a formal complaint. The grievance may be based upon an event(s) or condition(s) which affects the welfare

of the student. This includes the interpretation, meaning, or application of any College policy, procedure, or an action or position taken by the College or by a College staff member.

Student Grievance Procedures

Step One — Within ten (10) College working days of the event or condition giving rise to a complaint, the student [the grievant] shall file a written notice, in any format, stating the nature of the grievance by delivering such notice to the accused College staff member (the accused), and by delivering copies of such notice to the immediate supervisor of the accused and the Human Resources Office. In the event that the grievance concerns a College policy or procedure, the Associate Vice President of Human Resources shall become the accused for purposes of this grievance procedure. Within five (5) College working days after the written complaint has been filed, the accused, his/her immediate supervisor, and the appropriate divisional vice president shall meet and review the grievance. This meeting shall be set up by the divisional vice president or his/her designee. Within ten (10) College working days from the date of filing the written notice, the grievant and the accused shall meet at a mutually agreed upon time and place to discuss the grievance (set up by the divisional vice president or his/her designee). If a meeting time and place cannot be agreed upon, the grievant shall notify the Human Resources Office, who shall then set a time and place for the meeting. The grievant shall have the option of requesting the attendance of the accused's immediate supervisor and/or divisional vice president at this meeting.

Step Two — If the grievance cannot be resolved in Step One and the grievant desires to pursue the grievance further, the grievant must file a "Formal Student Grievance Report" on a form available from the Dean of Students within five (5) College working days of the informal meeting identified in Step One. The Dean of Students shall schedule a formal grievance hearing within ten (10) College working days of the date the "Formal Student Grievance Report" is filed. A "Grievance Committee" shall hear the grievance. A Grievance Committee consisting of two (2) representatives of each College employee group (exempt, non-exempt, and Faculty) shall be appointed by the Dean of Students or Vice President of Student Services respectively, and three (3) Student Leadership members who shall be selected by the Dean of Students. The grievant or the accused shall have the right to strike any of the committee members selected from the employee groups or the Student Leadership prior to the hearing. Any stricken committee member shall be replaced by a new member selected by either the president of that employee group or by the Dean of Students. The committee chairperson shall be elected by the members of the Grievance Committee. The

Grievance Committee shall issue a decision either supporting or not supporting the grievance within five (5) College working days and shall file a “Formal Grievance Disposition” with the Human Resources Office. The Human Resources Office shall send the “Formal Grievance Disposition” to the grievant and the accused by certified mail, return receipt requested, within three (3) College working days of the receipt of the “Formal Grievance Disposition”. The Human Resources Office shall also provide a copy of the disposition to the Student Leadership President and the Dean of Students. The grievant or the accused may elect to proceed with the grievance regardless of the decision of the Grievance Committee.

Step Three — If the grievance is not resolved in Step Two and the grievant or the accused desires to pursue the grievance, the grievant or the accused must submit the “Formal Student Grievance Report” to the Dean of Students within five (5) College working days of either the grievant’s or accused’s acceptance of the certified mail receipt of the “Formal Grievance Disposition” rendered by the Grievance Committee in Step Two. The Dean of Students shall review the grievance and shall issue a written decision to support or not support the grievance within five (5) College working days of the submission of the grievance with the Dean of Students and shall file the same in the Human Resources Office. The Human Resources Office shall provide copies of the Dean of Student Life and Athletic’s written decision to the grievant and the accused by certified mail, return receipt requested, within three (3) College working days of the Dean of Students filing his/her decision in the Human Resources Office. The Human Resources Office shall also provide a copy of the disposition to the Student Leadership President. Decisions rendered by the Dean of Students are final within the College.

Time Limits

1. The failure of the grievant or the accused to act within the prescribed time limits will act as a bar to any further appeal.
2. The failure of the Grievance Committee or the designated administrator to give a written decision within the prescribed time limits shall permit the grievance to proceed to the next step.
3. Any grievances not appealed within the time limits shall be deemed settled on the basis of the Grievance Committee or designated administrator’s last written response.
4. Time limits may be extended at any step by mutual consent of both parties involved. Notice of any such extended time limits shall be provided to the Human Resources Office in writing, at which time the new date shall be controlling.

Separate Grievance File

All documents, communications, and records dealing with the processing of a grievance involving a student shall be filed in a separate grievance file and shall not be kept in the student file or the employee file of any participant until the final decision is rendered, at which time the disposition will be placed in the student or employee file.

Documentation

1. Step 1 — Time, date, who attended, and a copy of the signed written agreement, if resolved at this level, is to be filed with the parties involved and the Human Resources Office.
2. Step 2 — The Formal Grievance Disposition will be completed and signed by the chairperson of the Grievance Committee.
3. Step 3 — The Dean of Students will submit a written decision to the Human Resources Office.
4. A recording of the proceedings in Step 2 shall be made and shall be the official transcript of the proceedings; no other recordings shall be permitted.

Retribution or Retaliation

Under no circumstances will any person who in good faith files a grievance or assists in a hearing and/or investigation be subject to any form of retribution or retaliation. Any person who makes or participates in such retribution or retaliation, directly or indirectly, will be subject to disciplinary action. A person who believes he or she has been or is being subjected to retribution or retaliation should immediately notify the Associate Vice President of Human Resources or his or her designee (employees) and/or the Vice President of Student Services or his or her designee (students).

Other

Under Step Three, the Dean of Students shall have authority to reverse, modify, or sustain the action or decision of the accused which constitutes the basis for the grievance, or to take whatever other action that is appropriate and within the scope of the administrative and disciplinary policies of the College permissible to such administrator.

None of the meetings and hearings under these procedures shall be conducted in public, except as provided in this procedure, and shall include only the grievant, the accused, committee members, and individuals called to give testimony.

Costs associated with additional copies of materials, reports, certified mail, or written transcripts requested by the grievant and not identified in these procedures shall be paid by the grievant.

Transcripts, reports, or other information

generated as a result of the grievance shall be confidential records and shall be reviewed only with the parties involved in the grievance process.

ASSESSMENT OF STUDENT LEARNING

Northeast Community College measures student learning as part of its ongoing efforts to improve co-curricular and academic programs. Through the assessment of student learning, Northeast Community College continuously monitors its effectiveness and implements changes for improvement.

The College utilizes a variety of direct and indirect measurements for assessment of Student Learning.

Examples include:

- Entry-level tests and assessments for beginning students.
- Comprehensive exams at the course and program levels.
- Nationally standardized tests.
- Formal and informal surveys.
- Strategies that assess general education learning-outcomes within courses and/or through specially scheduled activities.
- Post-graduation surveys.

STUDENT PARTICIPATION IN COLLEGE ASSESSMENT ACTIVITIES

Admission to Northeast Community College implies each student's willingness to participate in various efforts of the College to assess learning outcomes and the effectiveness of its co-curricular and academic programs. All students enrolled at Northeast may be asked to participate in assessment activities. Students should take their assessment activity participation seriously.

The cost to the student is a small amount of time; the results are improved programs, services and instruction. Information collected is used to determine program and institutional effectiveness with regard to student learning outcomes. Assessment reports present data in aggregate form. Analysis and results focus on group rather than individual outcomes.

GENERAL EDUCATION PHILOSOPHY

General Education at Northeast Community College provides students with a cohesive set of coursework that supports their educational, personal, and career development. General Education expands students' perspectives beyond the skills required in their chosen disciplines and provides them with a foundation for lifelong

learning. Experiences in general education form the basis necessary for making informed and reasoned contributions at work, at home, and in society.

GENERAL EDUCATION GOALS

Members of society need to communicate effectively, apply critical thinking/problem solving skills, and demonstrate social and cultural awareness as responsible citizens. Northeast Community College has established a set of general education goals to enhance these attributes, and provides learning opportunities that promote:

- Individual and collaborative effort
- An emphasis on ethical practice, and
- Utilization of technological resources that are common in today's world.

General education goals can be achieved in general education courses, degree-specific courses and during College-sponsored activities. The following core competencies identify the general education goals and learning objectives that are integrated into a variety of courses and activities at the College.

Communication: Students will effectively articulate ideas through oral and written forms of expression.

They will be able to:

- Deliver a purposeful message with appropriate physical presence and vocal variety.
- Write with a sense of purpose, organization, and mechanical correctness.

Critical Thinking/Problem Solving: Students will use critical and creative thinking to arrive at reasoned conclusions using methods of quantitative reasoning, scientific inquiry, and comparative thought.

They will be able to:

- Apply knowledge, concepts, information, experience, theories, and techniques to draw conclusions, arrive at solutions, select a course of action, and evaluate the outcome.

Global Perspective: Students will demonstrate behaviors that constitute active global citizenship, a respect for diversity, and cultural awareness related to personal decisions.

They will be able to:

- Express a foundational understanding of how diversity among people and belief systems impacts society.

- Recognize ethical and responsible behavior in society, the global community, and the natural world.

GENERAL EDUCATION REQUIREMENTS

All students seeking an Associate Degree from Northeast Community College must complete general education requirements as specified by degree type.

Each associate degree offered by Northeast Community College includes the core curriculum requirements. Additional general education requirements vary according to the intended degree. A specific listing of general education courses as they apply to each of the Associate of Arts (A.A.), Associate of Science (A.S.), and the Associate of Applied Science (A.A.S.) Degrees can be found on pages 40-42. The Associate Degree of Nursing (A.D.N.) can be found on pages 152-154.

Students who are considering transferring credit to another institution are encouraged to select general education courses based on transferability. Students should meet with their advisors to plan for registration and academic transfer. For more information regarding the transfer of credit, please refer to the section on Transfer located in the Student and Academic Support Services section of this Catalog.

The core competencies identified on the previous page are part of the Northeast general education curriculum. These competencies are woven into the general education core and program curriculums. Students receive instruction regarding each of the core competencies through the completion of requirements for an associate degree.

GENERAL GRADUATION REQUIREMENTS

Students intending to receive a degree, diploma, or certificate from Northeast Community College must:

1. Attain a cumulative Grade Point Average (GPA) of 2.0 in their graduating term.
2. Take a minimum of 15 credit hours of course instruction from Northeast Community College for a degree, 9 credit hours for a diploma, and 6 credit hours for a certificate.
3. Follow the Catalog that was in effect when the student first enrolled. A new Catalog will be followed if there has been a break in enrollment, if the student has changed majors, or if the previous program curricula is not available.
4. Complete the Graduation Application.

5. Meet the additional requirements specified for the degree, diploma, or certificate (See Catalog section in Degree, Diploma, Certificate, or Programs of Study).
6. If a student has a financial obligation with the College, the degree will be awarded but a diploma will not be issued until all debts are paid in full.

DIPLOMA REQUIREMENTS

The diploma programs at Northeast Community College are designed for students who want a skill in less time than it takes for an Associate of Applied Science Degree. These programs are complete programs of study leading to specific employment skills. Students who satisfactorily complete a prescribed program of 30 or more semester credit hours must have a cumulative grade average of "C" or better to receive a diploma. A student with transfer hours must take a minimum of 9 credit hours from Northeast Community College when seeking a diploma.

Note: Hours earned in courses below the 1000 level will not be counted towards the required 30 hours for a diploma.

CERTIFICATE REQUIREMENTS

Certificates are awarded for successful completion of a planned curriculum of credit courses for a specific skill area with a minimum of 16 semester credit hours. Students must have a cumulative grade average of "C" or above. A student with transfer hours must take a minimum of 6 credit hours from Northeast Community College when seeking a certificate. Certificates of Continued Learning are also awarded for noncredit classes.

DEGREE REQUIREMENTS

Northeast Community College offers the following degrees: The Associate Degree in Nursing (A.D.N.), Associate of Applied Science Degree (A.A.S.), Associate of Arts Degree (A.A.), and the Associate of Science Degree (A.S.). See "Nursing" in the Degree Offerings section of this Catalog for A.D.N. requirements. The number of required general education credit hours vary by degree. Specific course requirements for each degree are listed on the following pages.

Associate of Arts Degree Requirements

The Associate of Arts Degree is conferred upon the completion of all requirements for graduation in a liberal arts curriculum, including academic/college transfer.

- A. A student must satisfactorily complete a minimum of 60 semester hours in a course of study with a cumulative grade point average of “C” or better.

Note: Hours earned in courses below the 1000 level will not be counted towards the required 60 semester hours for graduation.

- B. A student must satisfy the following minimum general education requirements:

1. Communication.....6 Cr. Hours (must earn a C or above in each)

Oral (select one)

- a. SPCH 1010 Fundamentals of Communication (3 cr.)
- b. SPCH 1110 Public Speaking (3 cr.)

Written (required)

- a. ENGL 1010 English Composition I..... (3 cr.)

2. Behavioral & Social Sciences.....9 Cr. Hours

Behavioral Science (select one)

- a. SOCI 1010 Introduction to Sociology..(3 cr.)
- b. PSYC 1810 Introduction to Psychology.(3 cr.)

History (select one)

- a. HIST 1030 European Civilization I.....(3 cr.)
- b. HIST 1040 European Civilization II.....(3 cr.)
- c. HIST 1050 World History I(3 cr.)
- d. HIST 1060 World History II.....(3 cr.)
- e. HIST 2010 American History I.....(3 cr.)
- f. HIST 2020 American History II.....(3 cr.)

Social Science (select one)

- a. GEOG 1020 World Reg. Geography.....(3 cr.)
- b. ECON 2110 Prin. of Macroeconomics ..(3 cr.)
- c. POLS 1000 American Government.....(3 cr.)
- d. POLS 1600 International Relations.....(3 cr.)

3. Health Education.....3 Cr. Hours

- a. HPER 1550 Lifetime Wellness.....(3 cr.)

4. Humanities6 Cr. Hours

English/Literature (select one) (must earn a C or above)

- a. ENGL 1020 English Composition II(3 cr.)
- b. ENGL 2190 Comparative Mythology(3 cr.)
- c. ENGL 2030 Creating Poetry I.....(3 cr.)
- d. ENGL 2050 Creating Stories I(3 cr.)
- e. ENGL 2070 Tech Communications I.....(3 cr.)
- f. ENGL 2100 Introduction to Literature .(3 cr.)
- g. ENGL 2140/THEA 2140 Intro. to Shakespeare(3 cr.)
- h. ENGL 2150 American Lit. to 1865.....(3 cr.)
- i. ENGL 2160 American Lit. after 1865(3 cr.)
- j. ENGL 2200 British Lit. to 1800.....(3 cr.)
- k. ENGL 2210 British Lit. after 1800.....(3 cr.)
- l. ENGL 2730 The Novel and the Movie ..(3 cr.)
- m. THEA 1010 Introduction to Theatre(3 cr.)

Fine Arts and Language (select one)

- a. ARTS 1050 Intro. to Art Hist. & Criticism I. (3 cr.)
- b. ARTS 1060 Intro. to Art Hist. & Criticism II(3 cr.)

- c. MUSC 1010 Introduction to Music.....(3 cr.)
- d. SPAN 1200 Elementary Spanish I.....(4 cr.)
- e. FREN 1200 Elementary French I.....(4 cr.)
- f. HUMS 1100 Introduction to Humanities(3 cr.)
- g. Any other college level foreign language

5. Mathematics (select one) 3-5 Cr. Hours

- a. MATH 1010 Math for Elem. Teachers (Elementary Education and Early Childhood majors only)(3 cr.)
- b. MATH 1025 Math for Health Cares Professionals (Pre-nursing or Associate Degree Nursing majors only)(3 cr.)
- c. MATH 1100 Topics & Ideas in Mathematics(3 cr.)
- d. MATH 1140 Intermediate Algebra.....(4 cr.)
- e. Any other higher level of college math

6. Natural Science (select one)..... 4-5 Cr. Hours

- a. BIOS 1010 General Biology(4 cr.)
- b. CHEM 1090 General Chemistry I(4 cr.)
- c. PHYS 1100 Physical Science.....(4 cr.)
- d. PHYS 1410 Elementary General Physics I with Algebra and Trigonometry.....(5 cr.)
- e. Any other higher level of Natural Science with lab

Associate of Science Degree Requirements

The Associate of Science Degree is conferred upon completion of all requirements for graduation in a course of study, including academic college transfer, with particular emphasis on science and mathematics.

- A. A student must satisfactorily complete a minimum of 60 semester hours in a course of study with a cumulative grade point average of “C” or better.

Note: Hours earned in courses below the 1000 level will not be counted towards the required 60 semester hours for graduation.

- B. A student must satisfy the following minimum general education requirements:

1. Communication..... 6 Cr. Hours (must earn a C or above in each)

Oral (select one)

- a. SPCH 1010 Fundamentals of Communication(3 cr.)
- b. SPCH 1110 Public Speaking(3 cr.)
- c. ENGL 2080 Tech Communications II..... (3 cr.)

Written (select one)

- a. ENGL 1010 English Composition I.....(3 cr.)
- b. ENGL 2070 Tech Communications I.....(3 cr.)

2. Behavioral & Social Sciences.... 3-6 Cr. Hours (select at least one)

- a. HIST 1030 European Civilization I (3 cr.)

- b. HIST 1040 European Civilization II..... (3 cr.)
- c. HIST 1050 World History I..... (3 cr.)
- d. HIST 1060 World History II (3 cr.)
- e. HIST 2010 American History I (3 cr.)
- f. HIST 2020 American History II..... (3 cr.)
- g. GEOG 1020 World Reg. Geography (3 cr.)
- h. ECON 2110 Prin. of Macroeconomics .. (3 cr.)
- i. POLS 1000 American Government..... (3 cr.)
- j. POLS 1600 International Relations..... (3 cr.)
- k. PSYC 1810 Introduction to Psychology (3 cr.)
- l. SOCI 1010 Introduction to Sociology ... (3 cr.)

3. English/Literature 3-6 Cr. Hours
(select at least one) (must earn a C or above)

- a. ENGL 1020 English Composition II..... (3 cr.)
- b. ENGL 2190 Comparative Mythology (3 cr.)
- c. ENGL 2030 Creating Poetry I..... (3 cr.)
- d. ENGL 2050 Creating Stories I (3 cr.)
- e. ENGL 2070 Tech Communications I..... (3 cr.)
- f. ENGL 2100 Introduction to Literature. (3 cr.)
- g. ENGL/THEA 2140 Introduction to Shakespeare..... (3 cr.)
- h. ENGL 2150 American Lit. to 1865 (3 cr.)
- i. ENGL 2160 American Lit. after 1865 (3 cr.)
- j. ENGL 2200 British Lit. to 1800 (3 cr.)
- k. ENGL 2210 British Lit. after 1800..... (3 cr.)
- l. ENGL 2730 The Novel and the Movie (3 cr.)
- m. THEA 1010 Introduction to Theatre..... (3 cr.)

4. Fine Arts and Language..... 0-4 Cr. Hours
(see note below)

- a. ARTS 1050 Intro. to Art Hist. & Criticism I (3 cr.)
- b. ARTS 1060 Intro. to Art Hist. & Crit. II. (3 cr.)
- c. MUSC 1010 Introduction to Music..... (3 cr.)
- d. SPAN 1200 Elementary Spanish I..... (4 cr.)
- e. FREN 1200 Elementary French I..... (4 cr.)
- f. Any other college level foreign language

Note: A total of 9 credit hours is required between categories 2, 3, and 4 with 3 hours required from both 2 and 3.

5. Mathematics6 Cr. Hours
(select at least 3 credit hours at the 1600 level or above)

- a. MATH 1100 Topics & Ideas in Mathematics(3 cr.)
- b. MATH 1140 Intermediate Algebra (4 cr.)
- c. MATH 1150 College Algebra..... (3 cr.)
- d. MATH 1220 Trigonometry..... (3 cr.)
- e. MATH 1600 Analytic Geometry and Calculus I (5 cr.)
- f. MATH 2010 Analytic Geometry and Calculus II..... (5 cr.)
- g. MATH 2020 Analytic Geometry and Calculus III (5 cr.)
- h. MATH 2170 Applied Statistics (3 cr.)
- i. Any other higher level approved Math course

6. Natural Science (select two).....8 Cr. Hours

- a. AGRI 1131 Plant Science (3 cr.)
- AGRI 1132 Plant Science Lab (1 cr.)

(Agriculture transfer and Pre-Veterinary Technology majors only)

- b. BIOS 1010 General Biology (4 cr.)
- c. CHEM 1090 General Chemistry I..... (4 cr.)
- d. PHYS 1100 Physical Science (4 cr.)
- e. PHYS 1410 Elementary General Physics I with Algebra and Trigonometry..... (5 cr.)
- f. Any other course of Natural Science

7. Technology 3 Cr. Hours

- a. ENGR 1020 Programming and Problem Solving (3 cr.)
- b. INFO 1010 Fundamentals of Information Technology (3 cr.)
- c. INFO 1100 Microcomputer Applications (3 cr.)
- d. INFO 1710 Web Page Development (1 cr.)
- e. INFO 2100 Spreadsheet Applications.... (3 cr.)
- f. AGRI 1500 Microcomputer Applications in Agriculture (3 cr.)
- g. OFFT 1500 Microsoft Office (3 cr.)

Note: Upon approval, other technology courses may be substituted for the courses listed above to meet the Northeast graduation requirements. Students should contact their advisors.

Final note: General education courses listed under the Associate of Arts and/or the Associate of Science Degree requirements or recognized equivalent courses as specified within an individual program's prescribed course of study may be substituted for courses listed above. For more information, please speak with an advisor.

Associate of Applied Science Degree Requirements

The Associate of Applied Science Degree is conferred upon the completion of all requirements for graduation in a career and technical education program intended to lead to an occupational career following completion. Although some college and universities may accept these courses for elective transfer credit, they are not intended to transfer to four-year colleges and universities.

*Courses marked with an asterisk are part of the Nebraska Transfer Initiative and do transfer to a four-year college.

- A. A student must satisfactorily complete a minimum of 60 semester hours in a prescribed course of study with a cumulative grade point average of "C" or better.

Note: Hours earned in courses below the 1000 level will not be counted towards the required 60 semester hours for graduation.

- B. A student must take a minimum of 15 credit hours of general education requirements. See Program of Study page for suggested general education requirements.
- C. A student must satisfy the following general

education requirements:

1. Communication 3-6 Cr. Hours

Must select one from each of the written and oral categories or one from the combination category

a. Written and Oral Category

WRITTEN

*ENGL 1010 English Composition I..... (3 cr.)

ORAL (select one)

*SPCH 1050 Career Communication.....(1 cr.)

*SPCH 1010 Fund. of Communication.....3 cr.)

*SPCH 1110 Public Speaking(3 cr.)

Or any other higher level approved Speech class

b. Combination Category

BSAD 2050 Business Communications ..(3 cr.)

ENGL 1050 Workplace Communication (3 cr.)

2. Behavioral Science 2-3 Cr. Hours (select one)

a. PSYC 1000 Human Relations(2 cr.)

b. *PSYC 1810 Intro. to Psychology(3 cr.)

c. *SOCI 1010 Introduction to Sociology..(3 cr.)

d. AGRI 1420 Interpersonal Skills(3 cr.)

e. BSAD 1000 Human Relations and Ethics (3 cr.)

f. Any other higher level approved behavioral science

3. Mathematics 3-6 Cr. Hours

(Must meet math requirement for Program of Study)

a. *MATH 1010 Math for Elementary Teachers.....(3 cr.)
(Early Childhood Education Majors only)

b. MATH 1020 Technical Mathematics I ... (3 cr.)

c. MATH 1025 Math for Health Care Prof (3 cr.)

d. MATH 1060 Technical Mathematics II. (3 cr.)

e. *MATH 1100 Topics & Ideas in Mathematics(3 cr.)

f. *MATH 1140 Intermediate Algebra (4 cr.)

g. *MATH 2170 Applied Statistics(3 cr.)

4. Social Science or Exploratory Studies..... 2-3 Cr. Hours

Social Science

a. ECON 1010 Personal and Business

Finance(2 cr.)

b. ECON/BSAD 1040 Personal Finance (2-3 cr.)

c. *ECON 2110 Principles of Macroeconomics(3 cr.)

d. AGRI 1410 Introduction to the Economics of Agriculture (3 cr.)

Exploratory Studies

a. LEAD 1010 Introduction to Community Leadership.....(3 cr.)

b. BSAD 2250 International Business(3 cr.)

c. *SOCI 2150 Issues of Unity & Diversity (3 cr.)

d. CAPL 1290 Introduction to Job Search and Employment(1 cr.)

e. LNSK 1010 First Year Experience(2 cr.)

5. Science or Technology 2-6 Cr. Hours Science

a. AUDR 1580 Physics of Sound.....(3 cr.)

b. INDT 1040 Industrial Process Dynamics..... (2 cr.)

c. HVAC 2230 Physics of Building Science(2 cr.)

d. Any Natural Science Course

Technology

Technology course not listed needs to be approved by your program advisor.

a. AGRI 1500 Microcomputer Applications in Agriculture(3 cr.)

b. INFO 1000 Basic Computer Applications.....(2 cr.)

c. INFO 1010 Fund of Info Technology....(3 cr.)

d. INFO 1100 Microcomputer Applications.....(3 cr.)

e. OFFT 1090 Microsoft Word I.....(3 cr.)

f. OFFT 1500 Microsoft Office(3 cr.)

g. OFFT 1510 Microsoft Word(1 cr.)

h. OFFT 1520 Microsoft Excel.....(1 cr.)

i. OFFT 1530 Microsoft Access(1 cr.)

j. OFFT 1540 Microsoft PowerPoint(1 cr.)

k. INFO 1710 Web Page Development(1 cr.)

l. UTIL 1280 Computer Literacy.....(2 cr.)

Note: For programs that integrate technology extensively into the program curriculum, the technology course requirement has been met.

GRADING SYSTEM

The following grades are used to record student achievement in courses of instruction:

A+, A Superior; work of exceptional character

B+, B Above average work

C+, C Average quality of work

D+, D Below average

F Failing work

UF Unearned F grade

P Pass; can only be used for a pass/fail class; credit awarded; no quality points

W Withdrawal; recorded after a student formally withdraws from a class. A student must initiate action for withdrawal through the Admissions and Registration Office prior to the end of the withdrawal period.

I Incomplete. The temporary grade of "I" may be issued when a student has completed most of the course requirements but is unable to complete the remainder due to circumstances clearly beyond his/her control (i.e., serious illness or an emergency). It is the student's responsibility to request an Incomplete

Form from the instructor. Arrangements will then be made for the completion of the course objectives. An incomplete should not involve the student attending the majority of the class sessions during a subsequent term. An "I" must be completed by the date specified on the Incomplete Form, never more than one year after the course has concluded. If course work is not completed during this time, the "I" will be changed to an "F" on the student's permanent transcript.

AU See Audit.

Remedial coursework (courses at the zero level) will have an R notation in front of the grade.

RA+, RA Superior, work of exceptional character

RB+, RB Above average work

RC+, RC Average quality of work

RD+, RD Below average

RF Failing work

Continuing Education courses are not offered for college credit and do not count toward degree requirements. Although these classes may have a grade, no credit is given and they do not count in GPA calculations. The following grading scale is used for continuing education courses:

NA+, NA Superior, work of exceptional character

NB+, NB Above average work

NC+, NC Average quality of work

ND+, ND Below average

NF Failing work

NP Pass, can only be used for a pass/fail class

REG Registered for course only; grade not required for course

ACADEMIC AMNESTY

Academic Amnesty removes all courses, credit hours, grades, and grade points taken during the identified academic amnesty term(s), including courses that were successfully completed. Academic Amnesty procedures can be found in the Student Handbook or information is available in the Admissions and Registration Office.

GRADE APPEAL POLICY

Grade appeal allows a student to appeal the final grade in a course in accordance with the grade appeal procedures. A formal grade appeal shall be filed before the end of the first regular semester immediately following the term during which the

grade was assigned. Grade appeal procedures can be found in the Student Handbook or information is available in the Admissions and Registration Office.

GRADE POINT AVERAGE

The grade point average, usually referred to as GPA, is a function of the grading system used to determine academic status, including scholastic probation, scholastic honors, and eligibility for graduation. Grade points are allocated for each credit hour earned as follows:

A+	4.0 points
A	4.0 points
B+	3.5 points
B	3.0 points
C+	2.5 points
C	2.0 points
D+	1.5 points
D	1.0 point
F	0.0 points
UF	0.0 points

To compute GPA, multiply the semester hours of credit for each course by the grade points and then divide the sum of the grade points by the total number of credits attempted.

CREDIT HOUR

A credit hour is a unit measurement used to ascertain the educational value of course work offered by the institution to students enrolling in such course work, earned by such students upon successful completions of such course work, and for which tuition is charged. Credit/contact time ratio guidelines for semester are outlined in Nebraska state statute 85-1503.

Semester

1:15 = Classroom Hour

1:30 = Academic Transfer, General Education & Academic Support Lab Hour

1:45 = Vocational Laboratory & Clinical Hour

1:45 = Practicum Hour

1:60 = Cooperative Work Experience

CREDIT BY TRANSFER

Credits earned in accredited institutions will be considered for transfer at Northeast. Credits earned at nonaccredited institutions may be allowed after being evaluated by the Northeast division dean. Students should note that such courses taken at a nonaccredited institution and accepted by Northeast may not be accepted by any other transfer institution.

Coursework for which the student earned less than a "C" grade will not be accepted for credit by transfer. In addition, coursework under the 1000 level will not be accepted for credit by transfer.

A transfer student must send an official transcript from each institution previously attended to the Admissions and Registration Office at Northeast. Decisions on the applicability of credits will be made by the division dean, department personnel, and Registrar.

PRIOR LEARNING ASSESSMENT

Prior Learning Assessment is a process that involves identification, documentation, assessment, and recognition of the learning you have acquired through formal and informal study.

Prior Learning Assessment includes learning from work and life experiences; correspondence and extension courses; individual study and reading; civic, community, and volunteer work; and participation in informal courses and in-service training sponsored by associations, business, government, and industry.

For information on how to begin the process of prior learning assessment, contact any division dean or the Registrar.

ALTERNATE STUDY COURSES Special Topics

Special topics courses are designed to provide opportunities for the College to offer classes based on the interest of students and faculty. Students may repeat a special topics class in a discipline area up to four times. Any offerings in that same discipline area beyond four times will be considered a repeat offering and the credits will not accumulate on the student's transcript.

- ___ 0980 Special Topics I in _____ 1-3 Credits
- ___ 0990 Special Topics II in _____ 1-3 Credits
- ___ 1990 Special Topics I in _____ 1-3 Credits
- ___ 2990 Special Topics II in _____ 1-3 Credits

Cooperative Internship Education

Through cooperative internship education, regularly enrolled Northeast students have the opportunity to participate in College-sponsored on-the-job training before graduation. Cooperative internship education is a requirement in some programs; other programs consider the experience as an elective. Check the specific programs for more information.

AUDIT

Auditing a course allows students to attend classes without earning college credit. Students may audit any classes that do not include laboratories or studio activities with the permission of the course instructors.

Students auditing courses pay the same tuition and fees as those taking courses for credit. The audited courses are marked "audit" at the time of registration or before the second meeting of the course. Students who have registered to audit courses may not change to college credit after the second week of the semester.

CLASSIFICATION OF STUDENTS

Northeast classifies students as freshmen or sophomores by the number of credit hours they have completed and also as full-time or part-time by the number of credit hours they are attempting.

- Freshmen: Students who have completed less than 28 semester credit hours.
- Sophomores: Students who have completed 28 or more credit hours.
- Full-time: Students taking 12 or more semester hours.
- Part-time: Students taking less than 12 semester hours.

Students should note that all degree programs require a minimum of 60 semester credit hours for completion. Hours below 1000 level do not count toward the required hours.

DISTANCE EDUCATION Online Degrees

Northeast Community College is committed to providing opportunities to fit education into busy lives by offering fully online degree programs as well as many online general education and program courses. Standard admission policies apply to online students.

Basic skills assessment is available at selected sites in the Northeast Community College 20-county service area. Out-of-service area applicants may submit test results obtained at other qualified test centers. Results of the basic skills assessment are used for initial placement in English, reading and math courses. The College provides coursework to equip students with the academic skills necessary to succeed in college-level courses; however, Foundational English, Foundational Reading, and Prescriptive Math classes are not available in an online format.

Listed below are the fully online options available: Associate of Arts Degree with a concentration in:

- Administrative Professional
- Academic Transfer
- Accounting
- Agriculture
- Behavioral Science
- Business Administration
- Criminal Justice
 - Corrections
 - Law Enforcement

- Elementary Education
- Human Services
- Social Science
- Social Work

In partnership with other Nebraska community colleges, Associate of Arts Degree with a concentration in:

- Library and Information Services

Associate of Applied Science Degree with a concentration in:

- Administrative Professional
- Business
- Criminal Justice
- Early Childhood Education

Diploma/Certificate

- Administrative Professional
- Business
- Computer Application Specialist
- Drug and Alcohol Counseling
- Early Childhood Education
- Entrepreneurship
- Food Service and Dietary Management
- Insurance Services
- Office Management

Email onlineadvisor@northeast.edu to learn more about online courses, degrees, and academic and student services available to online students.

Online courses are not right for every learner. It requires you to be disciplined, focused, and have a high level of computer competency. Online students are expected to work in their online courses 2-3 hours per week for every credit hour of the course. For example: a 3 credit hour course requires 6-8 hours per week of study, preparation, and assessment of learning activities. If you do not own a computer or just purchased one, you may want to consider a face-to-face basic computer course as a starting point.

Hybrid

Northeast offers hybrid courses that combine traditional face-to-face instruction and online technology. Many learning activities in the course are delivered online, reducing the number of face-to-face meetings for students and allowing greater flexibility in their educational pursuits.

Distance Learning

Northeast Community College offers many of its classes via distance learning to students who are not physically “on site” in a traditional classroom environment. Distance learning delivery methods utilized videoconferencing software.

ADVISORY COMMITTEES

For each occupational program of study, Northeast Community College has organized an advisory committee made up of interested leaders

in area businesses, agriculture, industries, and the professions. The College and the advisory committees work together to determine training and employment needs; to develop new programs and courses; to evaluate present programs, facilities, and graduates; and to assist in placement and follow-up of students. A complete list of advisory committee members can be found in the back of this Catalog.

EARLY COLLEGE - COLLEGE CREDIT FOR STUDENTS IN HIGH SCHOOL

Students who want to earn college credit while still attending high school are Early College students. They can earn credit two different ways—Dual Credit and college credit only.

Dual Credit

A cooperative program between Northeast Community College and participating area high schools, Dual Credit provides a mechanism for high school juniors and seniors to take entry-level college courses and earn college credits. These courses are offered to students online through Northeast at any of our campuses or at their local high school during the regular high school day and are of the same content and rigor as the courses taught on campus. Dual Credit courses may be taught at the high school by high school faculty who qualify as Northeast Community College adjunct instructors, with advanced degrees in their subject areas or by Northeast Community College faculty who are dually certified.

The courses offered through the Dual Credit program are the same courses offered at Northeast. The course material, textbook, and instructor syllabus are equivalent to those used on campus. Dual Credit courses are of greater depth, take more time, and require more work than a normal high school class.

Tuition is offered at a reduced tuition rate. Dual Credit students complete an online High School Early College Application and register online through My Northeast. Tuition is due in full at the beginning of the semester. Students also adhere to College drop, withdrawal, and refund policies.

Textbooks may be provided at the local school’s discretion or they may be purchased by individual students through the Hawks Shop.

Successful completion of the Dual Credit course earns grades and credit to be recorded on a Northeast Community College transcript. These credits may be used at Northeast or transferred to another college or university. The receiving institution has the ultimate decision about accepting transfer credits, so it is important to check with potential colleges before taking a

Educational Services Information

particular class. Northeast also has written transfer agreements in place with a number of regional colleges.

College Credit Only

Early College students may take classes for which they receive only college credit, not high school credit.

Among the ways that students take college credit only classes are: 1) through interactive distance learning in a specially-equipped classroom at the high school, 2) in an online class, or 3) by attending live classes on-campus or at one of the extended campus locations.

Students must follow the Early College student admission and registration procedures described in the Admissions section of this Catalog.

High School Career Pathways

Northeast Community College works in conjunction with area K-12 schools to build pathways for students to transition from high school to college. Opportunities also exist for students to gain a head start on their college education while exploring a specific career field.

Further information is available by contacting the Director of Early College Programs at Northeast Community College.

WORKFORCE DEVELOPMENT

The focus of the Workforce Development department is to provide excellence in education and training to meet workforce needs as seen through the eyes of employers and communities. This focus will be delivered through: business and industry training, continuing education, work-based learning, and community education.

Businesses, industries, and communities in northeast Nebraska can get a helping hand through a variety of services at the College.

Northeast assists in community economic development in cooperation with the Nebraska Department of Economic Development, the Nebraska Development Network, Growing Together, and other regional development partners. Community needs assessment, strategic planning, leadership training, and rural development assistance are available to all northeast Nebraska communities throughout the College service area.

Northeast Community College assists communities within the 20-county service area by providing coaching, facilitation, and coordination of economic development resources in efforts to encourage "Rural Revitalization" throughout the region.

Adult and Continuing Education

The College offers adult education programs in Norfolk and throughout the 20-county service

area. Courses are offered at flexible daytime and evening hours to assist individuals in upgrading their present job skills, training for new careers, developing or enhancing recreational and cultural interests, preparing for high school completion tests, improving basic education skills, and earning college credits.

These adult and continuing education programs are made as accessible as possible for students by making them available in their local community. Classes are made available through cooperative agreements with local high schools, hospitals, libraries, civic organizations, businesses, industries, and churches for any person in the 20-county area. Education and training needs are specific to each community. The Northeast Community College staff work with community leaders to identify and facilitate these classes.

To make suggestions, submit requests, or obtain more information about the adult and continuing education programs described in this section, contact workforce@northeast.edu.

Job Upgrading and Preparation/ Customized Training

Adults who want to upgrade skills for their present jobs or learn new skills for a different job may do so through adult education classes. Northeast offers both credit and noncredit classes for job upgrading, job preparatory, and professional re-licensure. These classes are offered based on the needs of area businesses, industries, employers, and advisory committees. Through Workforce Development, the College has provided start-up training for new industries in the area, as well as employee improvement training both in-plant and on the campus. Customized training courses are available to new or existing business and industries and are developed by one-on-one consultation, assessment of training needs, development of training packages, and location of grants and resources for training to help reduce or eliminate training costs for the business.

Workshops and seminars are scheduled on a regular basis with topics geared toward business and industry. These can also be scheduled at various locations with sufficient enrollment.

Allied Health

The Allied Health Department at Northeast Community College offers many opportunities for individuals to upgrade job skills and take job preparatory classes. These workshops and classes are available to healthcare providers, social workers, drug and alcohol counselors, and the general public.

Some of the available programs for healthcare providers are:

- Advanced Cardiac Life Support (ACLS)
- Basic Nurse Aide (CNA)

- Community Health Worker
- CPR/AED
- First Aid
- Food Service/Dietary Management
- Medication Aide
- Pediatric Advanced Life Support (PALS)

The Allied Health staff develops workshops and conferences for healthcare providers that renew required state certificates and licenses.

Allied Health works closely with other health care facilities and organizations to provide a high quality education for the community. Some of these facilities and organizations are: The Nebraska Nurses Association; Nebraska Health Care Association; Faith Regional Health Services; Nebraska State Department of Health and Human Services; Nebraska Department of Social Services; Northeast Nebraska Area Agency on Aging; Prevention Pathways; Northern Nebraska Area Health Education Center (AHEC); American Heart Association; and American Red Cross.

Emergency Medical Services

Rural health care is important to the citizens of northeast Nebraska, just as providing quality education to Emergency Medical Services (EMS) personnel is important to the EMS and Paramedic program at Northeast Community College.

Northeast Community College, working cooperatively with the Nebraska Department of Health and Human Services EMS Division, offers classes for all levels of Emergency Medical Technicians. Classes offered are Emergency Medical Responder, Emergency Medical Technician (EMT), Pre-hospital Emergency Care for Nurses, and Paramedic. Northeast Community College also offers classes to maintain all levels of pre-hospital licensure from Emergency Responder to Paramedic.

Northeast also offers Paramedic as an Associate of Applied Science Degree. This state approved program is offered at diverse times and evenings, allowing students to maintain other job and family commitments. See Paramedic Program of Study.

Northeast Community College is approved as an advanced EMT training agency, recognized by the Nebraska Department of Health and Human Services. For further details on the required EMT classes, see Paramedic Course Descriptions or call the Director of EMS Services.

The Paramedic program at Northeast is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

ABE/GED®/ESL Department

Northeast Community College provides learner services in conjunction with the Nebraska State Department of Education; the

U.S. Department of Education; and with private organizations, agencies, and businesses. Classes are offered in several primary locations across our service area and individual tutoring sessions in other locations as learner needs arise.

The Adult Education Department offers two primary kinds of services, including preparation for a high school diploma and English Language instruction. The program is free to persons 16 years of age or older and who are not enrolled in a secondary school. Other areas of focus include instruction in basic skills in reading, writing, mathematics, civics, job preparation, and consumer education. Students are requested to attend an orientation session to register and take diagnostic tests to determine what skills are needed and develop a learning plan.

Preparation for the Nebraska High School

Diploma: Adult and out-of-school youth who want to prepare for the General Educational Development GED® tests to qualify for the Nebraska High School Diploma attend weekly classes or tutoring sessions in various regional locations and/or daily class sessions on campus.

Learners spend individualized sessions studying for the GED® tests in literacy, science, mathematics, and social studies. When prepared, learners may test at our primary test center located in Norfolk. Call (402) 844-7254 or (402) 844-7253 for testing information. Testing is scheduled through ged.com. The student is able to test at any GED® approved testing center.

Preparation of the Law Enforcement

Academy and State Fire Marshal Entrance Test: Adults may brush up on basic skills to prepare for the entrance test. The entrance test is administered at the Adult Education Office on campus and must be scheduled in advance. A \$10.00 fee is required for administering these tests. Testing is scheduled through ged.com. Students are able to test at any GED® approved testing center.

English Language Learner (ESL)

Adults who speak limited English may take English Second Language (ESL) classes. Classes are designed to serve individuals ranging from beginning learners, intermediate learners, and advanced learners. The classes are designed to stress communication, pronunciation, basic sentence patterns, essential vocabulary as well as speaking and writing skills.

Personal Improvement Courses: (AE)

Personal improvement courses provide instruction in basic skills such as reading, writing, mathematics, English language fluency, money management, or job preparatory skills. Classes are designed for adults who are not seeking a GED®. Classes and individualized sessions give learners as much help and time as needed to reach their goals.

Academic Transfer Concentrations (AA)

- Academic Transfer
- Accounting
- Administrative Professional
- Agriculture
- Art
- Behavioral Science
- Biology
- Business Administration
- Communication
- Criminal Justice Corrections
- Criminal Justice Law Enforcement
- Education Early Childhood
- Education Elementary
- Education Secondary
- Education Paraprofessional
- English
- General Studies
- Global Studies
- Graphic Design
- Health, Physical Education, & Recreation
- Human Services
- Information Technology Computer Information Systems
- Information Technology Computer Science
- Library & Information Services
- Mass Media
- Music Business
- Music Education
- Music Performance
- Personal Training
- Physical Education - Teacher Education
- Pre-Professional Culinary Arts & Management
- Pre-Professional Nursing
- Pre-Professional Physical Therapy
- Pre-Professional Radiologic Technology
- Pre-Professional Respiratory Care
- Pre-Professional Surgical Technology
- Social Science
- Social Work
- Theatre

Academic Transfer Concentrations (AS)

- Academic Transfer
- Agriculture
- Athletic Training
- Biology
- Chemistry
- Exercise Science
- Mathematics
- Natural Resources
- Nursing: UNMC Transfer
- Physics
- Pre-Medical Assisting
- Pre-Professional Dietetics
- Pre-Professional Engineering
- Pre-Professional Nursing
- Pre-Professional Physical Therapy
- Pre-Professional Veterinary Technology

- Public Health - College Transfer
- Skilled & Technical Sciences Education

Career & Technical Programs (AAS, ADN)

- Accounting - AAS
- Administrative Professional - AAS
- Agriculture Mechanized - AAS
- Agriculture Urban - AAS
- Agribusiness - AAS
- Agronomy - AAS
- Animal Science - AAS
- Auto Body Repair Technology - AAS
- Automotive Technology - AAS
- Building Construction - AAS
- Business - AAS
- Criminal Justice - AAS
- Diesel Technology - AAS
 - Agriculture
 - Truck
- Diversified Agriculture - AAS
- Drafting - AAS
 - Architectural
 - Mechanical
 - Structural
- Early Childhood Education - AAS
- Electrical Construction & Control - AAS
- Electromechanical Technology - AAS
- Graphic Design - AAS
- Health Information Management Systems - AAS
- Heating, Ventilation, & Air Conditioning - AAS
- Horticulture & Golf Course Management - AAS
- Information Technology - AAS*
 - Cisco Networking
 - IBMi Application Development
 - Information Security
 - Technical Services Support
 - Web & Visual Application Development
- Media Arts - AAS
 - Audio Recording Technology
 - Broadcasting - Radio/TV
 - Digital Cinema & Media
 - Digital Journalism and Social Media Management
- Nursing - ADN
- Paramedic - AAS
- Physical Therapist Assistant - AAS
- Precision Agriculture - AAS
- Utility Line - AAS
- Veterinary Technology - AAS
- Wind Energy Technology - AAS

Diplomas/Certificates/Courses

- Accounting - D, C
- Administrative Professional - C, D
- Automotive Light Service Technician - C
- Automotive Technology - D
- Banking - C
- Basic Nurse Aide - S
- Broadcast Production - C

- Business - D
- Cisco Networking Academy - C
- Community Health Worker - C
- Computer Application Specialist - C
- Dairy Technician - D
- Drafting - C, D
- Drafting - Mechanical - C, D
- Drug and Alcohol Counseling - C
- Early Childhood Education - C
- Emergency Medical Technician (EMT) - S
- English as a Second Language (ESL) - S
- Entrepreneurship - C
- Food Service/Dietary Management - C
- Horticulture - General - D
- IBMi Application Development - C
- Information Security - C
- Information Technology - C
- Insurance Services - C
- Machining and Manufacturing
 - Automation - C, D
- Media Production - C
- Medication Aide - S
- Nursing - Practical - D
- Office Management - C
- Paramedic - D
- Plumbing Technology - D
- Real Estate - C
- Recording Studio Production - C
- Technical Services Support - C
- Truck Driving - S
- Video Production - C
- Web & Visual Application Development - C
- Welding - D
- Wind Energy Technology - D

KEY:

- AAAssociate of Arts
- ASAssociate of Science
- AASAssociate of Applied Science
- ADN.....Associate Degree in Nursing
- DDiploma
- C.....Certificate
- S.....Course

All concentrations listed with AA or AS are designed to transfer for completion of a Bachelor's Degree at a four-year school.

AAS Degree concentrations are shown as indented under the program of study.

* Choose two concentrations for your unique AAS Degree (see Information Technology program page in the Degree Offerings section for details.) Visit northeast.edu/Admissions/Transfer for more information.



DEGREE OFFERINGS

ACADEMIC TRANSFER

An associate degree with a concentration in academic transfer is designed for students who may be unsure of their career goals but who intend to continue their education at a four-year institution after attending Northeast Community College. Depending on a student's general interest area, either an associate of arts degree or an associate of science degree may be applicable.

Students are advised to work closely with advisors at Northeast Community College and with the transfer office of their four-year institution as they plan their coursework.

Required Program of Study for Associate of Arts Degree (2 years)

Course	Credits
Communication*	6
Humanities*	6
Behavioral and Social Sciences*	9
Mathematics*	3-5
Natural Science*	4
Health Education*	3
Electives***	27-29
	60

*See associate of arts degree general education requirements

Required Program of Study for Associate of Science Degree (2 years)

Course	Credits
Communication**	6
Humanities**	3-6
Behavioral and Social Sciences**	3-6
Mathematics**	3-10
Natural Science**	8-15
Technology**	3
Electives***	14-34
	60

**See associate of science degree general education requirements.

***Electives typically applicable include:

Additional history class.....	3
Additional fine arts class.....	3
Additional science class.....	4-5
Foreign language.....	4
Additional math class.....	3-5
Additional writing or literature class.....	3
and/or more electives in areas of interest	

To earn an associate of arts degree or an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

ACCOUNTING

The accounting associate of arts degree is a two-year liberal arts curriculum for those students who plan to transfer to a four-year college for the completion of a bachelor degree in the area of accounting. This program of study emphasizes instruction in accounting, business law, business communications, economics and statistics which will prepare the student to be successful at the transfer institution.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ACCT 1200 Principles of Accounting I***	3
BSAD 2700 Business Law I **	3
INFO 1010 Fundamentals of Information Technology	3
ENGL 1010 English Composition I	3
Mathematics*	3-5
	15-17

Second Semester	
Course	Credits
ACCT 1210 Principles of Accounting II***	3
BSAD/MATH 2170 Applied Statistics **	3
History *	3
Behavioral Science *	3
English/Literature *	3
	15

SOPHOMORE YEAR

First Semester	
Course	Credits
ACCT 2010 Spreadsheet Accounting**/**	3
ECON2110 Principles of Macroeconomics***	3
HPER 1550 Lifetime Wellness	3
Oral Communication *	3
Elective *	3
	15

Second Semester	
Course	Credits
BSAD 2050 Business Communications**	3
ECON 2120 Principles of Microeconomics***	3
INFO 2100 Excel Spreadsheet Applications***	3
Fine Arts and Language*	3
Natural Science*	4-5
	16-17

Total Credit Hours 61-64

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Students transferring to a four-year institution should verify with that institution before registering for this course.

***Must be taken during this semester or in this sequence.

Note: Students with no accounting experience are encouraged to take ACCT 1060 Basic Accounting Procedures prior to ACCT 1200 Principles of Accounting I.

ACCOUNTING

The accounting associate of applied science degree teaches the basic concepts, definitions, terminologies, and methods of operating an accounting system. Outstanding career opportunities await students who are accurate, conscientious, and analytical. Northeast prepares graduates for immediate employment in an entry-level accounting position.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ACCT 1200 Principles of Accounting I *	3
BSAD 1050 Introduction to Business or BSAD 2540 Principles of Management or ENTR 1050 Introduction to Entrepreneurship	3
MATH 1100 Topics and Ideas in Mathematics	3
BSAD 2700 Business Law I	3
INFO 1010 Fundamentals of Information Technology * or INFO 1100 Microcomputer Applications or OFFT 1500 Microsoft Office	3
	15

Second Semester	
Course	Credits
ACCT 1210 Principles of Accounting II *	3
ACCT 2020 Accounting with QuickBooks *	3
BSAD 1070 Business Math	3
BSAD 2160 Customer Service and Business Etiquette	3
ECON 2110 Principles of Macroeconomics or ECON 1040 Personal Finance	3
	15

SOPHOMORE YEAR

First Semester	
Course	Credits
BSAD 1300 Cooperative Internship	3
ACCT 2010 Spreadsheet Accounting *	3
ACCT 2200 Intermediate Accounting I *	3
ACCT 2260 Individual and Business Income Tax *	3
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
	15

Second Semester	
Course	Credits
ACCT 2030 Payroll Accounting *	3
ACCT 2700 Accounting Capstone *	3
BSAD 2050 Business Communications	3
INFO 2100 Excel Spreadsheet Applications*	3
Approved Elective	3
	15

Total Credit Hours 60

* Must be taken during this semester or in this sequence.

Note: Students with no accounting experience are encouraged to take ACCT 1060 Basic Accounting Procedures prior to ACCT 1200 Principles of Accounting I.

**Approved electives: BSAD 1040 Personal Finance, BSAD 1050 Introduction to Business, BSAD 1310 Cooperative Internship, BSAD 1320 Cooperative Internship, BSAD 1600 Real Estate Principles and Practices, BSAD 2130 Salesmanship, BSAD 2140 Principles of Banking, BSAD 2170 Applied Statistics, BSAD 2240 Principles of Insurance, BSAD 2250 International Business, BSAD 2350 Security and Loss Prevention, BSAD 2520 Principles of Marketing, BSAD 2540 Principles of Management, ECON 2110 Principles of Macroeconomics, ECON 2120 Principles of Microeconomics, ENTER 1050 Introduction to Entrepreneurship, BSAD 2710 Business Law II.

ACCOUNTING

The accounting certificate consists of 21 credit hours of selected courses from accounting, business, and information technology. The certificate is specifically intended for individuals wishing to update their skills after having been out of the workforce for a number of years, or for working adults wishing to change occupations. All of the course work will apply to both the diploma and associate of applied science degree.

Required Program of Study for Certificate (18 months)

Fall Semester		Spring Semester	
Course	Credits	Course	Credits
ACCT 1200 Principles of Accounting I*	3	ACCT 1210 Principles of Accounting II*	3
BSAD 1070 Business Math	3	ACCT 2020 Accounting with QuickBooks*	3
INFO 1010 Fundamentals of Information Technology, or INFO 1100 Microcomputer Applications, or OFFT 1500 Microsoft Office	3	ACCT 2030 Payroll Accounting*	3
	9		9
Fall Semester		Total Credit Hours	
Course	Credits		
ACCT 2260 Individual and Business Income Tax*	3		21
	3		

Note: Students with no accounting experience are encouraged to take ACCT 1060 Basic Accounting Procedures prior to ACCT 1200 Principles of Accounting I.

*Must be taken in this semester or in this sequence.

The accounting diploma consists of 33 credit hours of selected courses from accounting, business, information technology, administrative professional, and economics. The diploma is designed for individuals wishing to focus on accounting and related course work and is intended primarily for adults who have previous successful work experience. All of the credit hours apply to the associate of applied science degree.

Required Program of Study for Diploma (18 months)

Fall Semester		Spring Semester	
Course	Credits	Course	Credits
ACCT 1200 Principles of Accounting I*	3	ACCT 1210 Principles of Accounting II*	3
ECON 2110 Principles of Macroeconomics or ECON 1040 Personal Finance	3	ACCT 2020 Accounting with QuickBooks*	3
INFO 1010 Fundamentals of Information Technology,* INFO 1100 Microcomputer Applications,* or OFFT 1500 Microsoft Office*	3	ACCT 2030 Payroll Accounting*	3
BSAD 1070 Business Math	3	BSAD 2050 Business Communications	3
	12		12
Fall Semester		Total Credit Hours	
Course	Credits		
ACCT 2010 Spreadsheet Accounting*	3		33
ACCT 2260 Individual and Business Income Tax*	3		
Elective (Advisor Approved)**	3		
	9		

*Must be taken in this semester or in this sequence.

**Approved electives: BSAD 1000 Human Relations and Ethics, BSAD 2140 Principles of Banking, BSAD 2160 Customer Service and Business Etiquette, BSAD 2240 Principles of Insurance, BSAD 2250 International Business, BSAD 2520 Principles of Marketing, BSAD 2540 Principles of Management, ECON 2120 Principles of Microeconomics, INFO 2100 Excel Spreadsheet Applications, INFO 2110 Access Database Applications, or others as approved by advisor.

Note: Students with no accounting experience are encouraged to take ACCT 1060 Basic Accounting Procedures prior to ACCT 1200 Principles of Accounting I.

ADMINISTRATIVE PROFESSIONAL

As technology continues to expand in businesses and offices, the role of office personnel has evolved to include a wide range of responsibilities. Graduates of this program are prepared for jobs in a variety of office occupations. The administrative professional program prepares individuals in software and system applications and develops the administrative interpersonal skills necessary to perform the duties of administrative support personnel. With additional education and/or work experience, there is opportunity for advancement into supervisory or managerial positions.

Required Program of Study for Diploma (34 weeks)

The Administrative Professional diploma program is designed for students seeking fundamental skills in office processes, with emphasis on human relations, customer service, communication, professional behaviors, administrative skills, and computer technology applications. The diploma program provides students with the knowledge and skills necessary to be employed in a variety of office occupations. All of the course work in the diploma program will apply to the associate of applied science degree.

First Semester		Second Semester	
Course	Credits	Course	Credits
OFFT 1050 Introduction to Windows Operating System	1	ACCT 1060 Basic Accounting Procedures or ACCT 1200 Principles of Accounting*	3
OFFT 1580 Microsoft Outlook	1	ENGL 1010 English Composition I	3
OFFT 1090 Microsoft Word I**	3	BSAD 2160 Customer Service and Business Etiquette.....	3
INFO 2100 Excel Spreadsheet Applications	3	OFFT 1540 Microsoft PowerPoint	1
BSAD 1000 Human Relations and Ethics	3	OFFT 1880 Office Practicum**	3
BSAD 1050 Introduction to Business	3	ECON 1040 Personal Finance	3
BSAD 2050 Business Communication.....	3		16
	17	Total Credit Hours	33

*Students who will continue into the Associate of Applied Science Degree can take ACCT 1060 Basic Accounting Procedures OR ACCT 1200 Principles of Accounting I. Students who will continue into the Associate of Arts Degree are required to take ACCT 1200 Principles of Accounting I.

** Must be taken during this semester or in this sequence.

ADMINISTRATIVE PROFESSIONAL

As technology continues to expand in businesses and offices, the role of office personnel has evolved to include a wide range of responsibilities. Graduates of this program are prepared for jobs in a variety of office occupations. The administrative professional program prepares individuals in software and system applications and develops the administrative interpersonal skills necessary to perform the duties of administrative support personnel. With additional education and/or work experience, there is opportunity for advancement into supervisory or managerial positions.

The associate of applied science degree builds on the certificate and diploma programs, providing students with an in-depth knowledge of administrative professional functions in addition to expert skills in software applications. Students will also gain a deeper understanding of management functions within a business as they prepare for a challenging, high-impact career in business environments. An internship is required for the associate of applied science degree.

Required Program of Study for Associate of Applied Science Degree (2 years)*

FRESHMAN YEAR

Successful completion of the diploma program.

REQUIRED SUMMER COOP

BSAD 1320 Cooperative Internship3

SOPHOMORE YEAR

First Semester

Course	Credits
BSAD 2250 International Business	3
BSAD 2540 Principles of Management.....	3
INFO 2110 Access Database Applications.....	3
MATH 1100 Topics and Ideas in Mathematics.....	3
Elective.....	3
	15

Second Semester

Course	Credits
OFFT 2090 Advanced Word Certification.....	2
OFFT 2500 Advanced Office Integration**	3
OFFT 2600 Administrative Professional Capstone**	2
BSAD 2520 Principles of Marketing.....	3
Electives	3
	13

Total Credit Hours 64

*The associate of applied science degree is suggested for those seeking employment upon graduation and feel quite sure that they will not continue their education toward a four-year degree.

** Must be taken during this semester or in this sequence.

Approved electives: ACCT 1210 Principles of Accounting II; ACCT 2020 Accounting with Quickbooks; BSAD 1200 Introduction to E-Commerce; BSAD 1600 Real Estate Principles and Practices; BSAD 1620 Real Estate Finance; BSAD 2010 Personal Insurance; BSAD 2020 Commercial Insurance; BSAD 2130 Salesmanship ; BSAD 2240 Principles of Insurance; BSAD 1070 Business Math; BSAD 2140 Principles of Banking; BSAD 2550 Advanced Management; BSAD 2700 Business Law I; GCAD 1450 Graphic Arts I; HIMS 1000 Introduction to HIM; HIMS 1010 Electronic Health Records; HIMS 1020 Healthcare Delivery Systems; HLTH 1060 Comprehensive Medical Terminology; INFO 1710 Web Page Development; INFO 1740 Dreamweaver, Flash, Fireworks

Suggested Program of Study for Associate of Arts Degree (2 years)*

FRESHMAN YEAR

Successful completion of the diploma program.

SOPHOMORE YEAR

First Semester

Course	Credits
BSAD 2540 Principles of Management.....	3
HPER 1550 Lifetime Wellness.....	3
Oral Communications***	3
Behavioral Science***	3
Mathematics***	3-5
Elective.....	3
	18-20

Second Semester

Course	Credits
Fine Arts and Language***	3
History***	3
English/Literature***	3
Natural Science***	4-5
Social Science***	3
	16-17

Total Credit Hours 67-70

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*The associate of arts degree is primarily for students interested in a liberal, well-rounded program and suggested for those considering transferring to a four-year institution as some future time.

***See general education requirements.

ADMINISTRATIVE PROFESSIONAL

As technology continues to expand in businesses and offices, the role of office personnel has evolved to include a wide range of responsibilities. Graduates of this program are prepared for jobs in a variety of office occupations. The administrative professional program prepares individuals in software and system applications and develops the administrative interpersonal skills necessary to perform the duties of administrative support personnel. With additional education and/or work experience, there is opportunity for advancement into supervisory or managerial positions.

The Administrative Professional certificate consists of a minimum of 17 hours of selected courses from administrative professional, business, and information technology areas. The certificate is designed for students seeking immediate employment in entry-level, clerical positions with a focus on the basic skills of office support personnel. All of the course work in the certificate will apply to both the diploma and the associate of applied science degree.

Required Program of Study for Administrative Professional Certificate (17 weeks)

Required Courses	
Course	Credits
OFFT 1050 Introduction to Windows Operating System	1
OFFT 1580 Microsoft Outlook	1
OFFT 1090 Microsoft Word I**	3
INFO 2100 Excel Spreadsheet Applications	3
BSAD 1000 Human Relations and Ethics	3
BSAD 1050 Introduction to Business	3
BSAD 2050 Business Communication.....	3
 Total Credit Hours	 17

OFFICE MANAGEMENT

The office management certificate consists of a minimum of 18 hours of selected courses related to business, marketing and management. The certificate is designed to supplement the Administrative Professional associate of applied science degree by offering selected courses that emphasize concepts related to managing an office. Administrative professional students may take required core-elective courses while pursuing the administrative professional degree. Some courses in this certificate have prerequisites that are satisfied within the Administrative Professional associate of applied science degree.

Required Program of Study for Office Management Certificate (17 weeks)

Required Courses	
Course	Credits
ACCT 2020 Accounting with QuickBooks	3
BSAD 2530 Advanced Marketing	3
BSAD 2550 Advanced Management	3
BSAD 2700 Business Law I.....	3
Elective.....	3
Elective.....	3
 Total Credit Hours	 18

Approved electives: ACCT 1210 Principles of Accounting II; BSAD 1600 Real Estate Principles and Practices; BSAD 2140 Principles of Banking; BSAD 2130 Salesmanship; BSAD 2180 Advertising; BSAD 2010 Personal Insurance; BSAD 2020 Commercial Insurance; BSAD 2240 Principles of Insurance; BSAD 2320 Agency Operations; ENTR 1050 Introduction to Entrepreneurship, SOCI 2150 Issues of Unity and Diversity, SPCH 1110 Public Speaking.

COMPUTER APPLICATION SPECIALIST

The computer application specialist certificate is designed to prepare individuals for work in any setting that requires extensive knowledge and skills of computer application software. It is specifically intended for individuals needing to update their skills in various software applications. Intensive study in word processing, spreadsheet, database, and web page development software applications will prepare individuals for today's modern office or work place. Through these courses, students will have the opportunity to complete up to seven Microsoft Office Specialist certifications, which provide industry-leading assessment of skills and knowledge through project-based testing. These certifications give students a commanding competitive edge in today's academic and professional environments.

Required Program of Study for Computer Application Specialist Certificate (34 weeks)

First Semester

Course	Credits
OFFT 1050 Introduction to Windows Operating System	1
OFFT 1090 Microsoft Word I.....	3
OFFT 1580 Microsoft Outlook	1
INFO 1710 Web Page Development.....	1
INFO 2100 Excel Spreadsheet Applications	3
INFO 2110 Access Database Applications.....	3
	12

Second Semester

Course	Credits
OFFT 1540 Microsoft PowerPoint	1
OFFT 2090 Advanced Word Certification.....	2
OFFT 2500 Advanced Office Integration.....	3
	6

Total Credits	18
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AGRICULTURE

Students interested in pursuing a career in agriculture may select a plan of study best suited to their individual goals. Plans of study vary depending on the degree or diploma award students choose to complete. Within each plan of study, students are able to gain knowledge and develop skills that will foster success in their chosen field. Farm communities and agricultural industries provide endless opportunities for graduates to achieve both career and lifestyle goals.

ASSOCIATE OF APPLIED SCIENCE

Upon graduating from any of the following agricultural programs, students are prepared for entry level position in their career fields. The following programs offer AAS degrees:

- Agribusiness
- Agronomy
- Animal Science
- Diversified Agriculture
- Precision Agriculture
- Agriculture: Mechanized concentration
- Agriculture: Urban

ASSOCIATE OF ARTS OR SCIENCE

Students interested in academic transfer to other colleges can obtain either an associate of arts or an associate of science degree from Northeast Community College. These degrees include several general education classes as well as agriculture classes that transfer easily to baccalaureate programs at other colleges and universities.

- Agriculture Transfer
- Natural Resources

DIPLOMA IN AGRICULTURE

A diploma is given upon the completion of a one-year program. A minimum of 30 credit hours in a prescribed course of study with a grade average of 'C' or better is required for completion.

- Dairy Technician

GOALS PROGRAM

GLOBAL OPPORTUNITIES IN AGRICULTURE LEADERSHIP STUDIES

Students interested in international travel have the opportunity to apply for the GOALS program. Selected applicants will enroll in an honors section of AGRI 1115 Issues in Agriculture II for the spring semester and focus their study on the designated country for which travel is being planned. Upon completion of the honors course in the spring, students will enroll in a summer course that includes the travel experience to the designated country. The combination of AGRI 1115 and AGRI 2115 courses will fulfill the summer experience requirement for the Associate of Applied Science degree. Normally, students have two options to complete their summer experience requirement:

- Paid internship where the student works for an agriculture business for 360 hours. The student receives college credit and pays for six credit hours of tuition. OR
- Summer course (Crops & Irrigation OR Livestock Production). The student pays four credit hours of tuition.

AGRI 1115 Issues in Agriculture II and AGRI 2115 Global Opportunities in Agricultural Leadership Studies will take the place of the usual summer class requirement for the eight students who successfully complete the course and the travel experience.

AGRIBUSINESS

Agribusiness is the study of the business and economics of agribusiness firms. Aspects unique to agribusiness include: the risk and uncertainties of agricultural production; the heavy reliance on natural resources; the uniqueness of the institutions that govern food and agriculture; the competitive structures within the agribusiness sector; the technology of commercial agriculture and food processing; and the global dimensions of food and agriculture.

Opportunities for students pursuing a career in agribusiness continue to be plentiful. Northeast Community College graduates have taken positions in the areas of cooperative management, feedlot management, crop insurance sales and adjusting, agronomic and machinery sales, and agricultural loan officers. Graduates have also gone on to continue their education at the 4-year level with a number of institutions across the country. The demand for graduates with a background of study in agribusiness continues to be extremely strong with notices of job openings coming on a daily basis.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
AGRI 1105 Issues in Agriculture I.....	1
AGRI 1500 Microcomputer Applications in Agriculture*	3
AGRI 1410 Introduction to the Economics of Agriculture*	3
MATH 1020 Technical Mathematics I*	3
ENGL 1050 Workplace Communications*	3
Select one of the following options:	4
AGRI 1010 & AGRI 1340 Animal Science & Lab	
AGRI 1131 & AGRI 1132 Plant Science & Lab	
AGRI 1030 & AGRI 1040 Introduction to Soil Science & Lab	
HORT 1010 Horticulture Science	
	17

Second Semester	
Course	Credits
AGRI 1420 Interpersonal Skills*.....	3
AGRI 1310 Agricultural Marketing System	3
AGRI 1005 Precision Agriculture Systems.....	3
AGRI 2870 Agricultural Law.....	3
ACCT 1100 Survey of Accounting or	
ACCT 1200 Principles of Accounting I	3
	15

Summer	
Course	Credits
Select one of the following options:	6
AGRI 1300 Cooperative Internship I.....	6
OR	
AGRI 2020 Crops and Irrigation	3
AGRI 2030 Crops and Irrigation Lab	1
OR	
AGRI 2040 Livestock Production Management	3
AGRI 2050 Livestock Production Management Lab	1
OR	
AGRI 1115 Issues in Agriculture II (<i>taken in preceding semester</i>) and AGRI 2115 Global Opportunities in Agricultural Leadership (<i>International Travel usually scheduled in Summer</i>)....	4
	4-6

SOPHOMORE YEAR

First Semester	
Course	Credits
AGRI 2015 Farm and Ranch Management	4
AGRI 1290 International Agriculture and Agribusiness	3
Approved Electives: please meet with advisor to select appropriate AGRI, HORT, or Science course to meet this requirement, based on our career goals.	6-8
	13-15

Second Semester	
Course	Credits
AGRI 2290 Agricultural Commodities Marketing	3
AGRI 2880 Principles of Agricultural Selling.....	2
AGRI 2885 Agricultural Finance.....	3
AGRI 2890 Agriculture Capstone Experience.....	1
Approved Electives: please meet with advisor to select appropriate AGRI, HORT, or Science course to meet this requirement, based on our career goals.	6-8
	15-19

Additional Requirement:

AGRI 1025 Farm Experience Lab.....	0.5
See your advisor to identify which semester is best to complete the lab.	

Total Credit Hours 64.5-72.5

* Course fulfills a general education requirement for Northeast Community College. See General Education Requirements.

Agriculture students are encouraged to consult their advisor in the agriculture department to identify the best courses to fulfill agriculture, science, or horticulture, elective requirements. The Northeast Community College agriculture program has articulation agreements with the University of Nebraska-Lincoln, Wayne State College, South Dakota State University, and Northwest Missouri State, if interested in more information, consult your advisor.

AGRONOMY

Scientific advances are changing the way America and the rest of the world raise field crops and manage soil, in turn affecting the trading and marketing of these commodities. Today's agronomist needs specialized training in advanced agricultural technologies as well as the expertise in processes related to chemical application, seed conditioning, production, quality, and value-added processing. Industry demand for agronomists is much greater than the supply, and a degree from Northeast carries a strong, positive reputation among potential employers in agronomy. The internship experience will allow students to continue to develop job related skills as agronomists. Agronomy students at Northeast take courses in areas of soils science, crop science, entomology, forages, chemicals, marketing, sales, computers, and precision farming (GPS/GIS) to form a strong foundation in the field.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
AGRI 1005 Precision Agriculture Systems	3
AGRI 1030 Introduction to Soil Science.....	3
AGRI 1040 Introduction to Soil Science Lab.....	1
AGRI 1105 Issues in Agriculture I**	1
AGRI 1290 International Agriculture and Agribusiness.....	3
AGRI 1400 Farm and Environmental Safety.....	2
AGRI 1410 Introduction to the Economics of Agriculture*	3
MATH 1020 Technical Mathematics I *	3
	19

Second Semester	
Course	Credits
AGRI 1131 Plant Science	3
AGRI 1132 Plant Science Lab	1
AGRI 1150 Introduction to Entomology.....	3
AGRI 1280 Crop Chemicals.....	2
AGRI 1300 Cooperative Internship I***	2
AGRI 1500 Microcomputer Applications in Agriculture*	3
ENGL 1050 Workplace Communication*	3
	17

Summer	
Course	Credits
AGRI 2020 Crops and Irrigation	3
AGRI 2030 Crops and Irrigation Lab	1
OR	
AGRI 2300 Cooperative Internship II.....	4
	4

SOPHOMORE YEAR

First Semester	
Course	Credits
AGRI 2015 Farm and Ranch Management	4
AGRI 2200 Advanced Fertilizers	2
AGRI 2250 Grain Harvesting and Handling Systems	3
AGRI 2400 Forage, Pasture and Grassland Production	3
AGRI 2410 Forage, Pasture and Grassland Production Lab	1
Agriculture Electives	3-4
	16-17

Second Semester	
Course	Credits
AGRI 1310 Agricultural Marketing System.....	3
AGRI 1350 Tillage, Planting and Spraying Equipment.....	1
AGRI 1360 Tillage, Planting and Spraying Equipment Lab.....	1
AGRI 1420 Interpersonal Skills*	3
AGRI 2290 Agricultural Commodities Marketing	3
AGRI 2460 Resource-Efficient Crop Management	3
AGRI 2890 Agriculture Capstone Experience.....	1
Agriculture Electives or Science Course	2-4
	17-19

Additional Requirement:

AGRI 1025 Farm Experience Lab.....0.5
See your advisor to identify which semester is best for your individualized interests.

Total Credit Hours 73.5-76.5

* Course fulfills a general education requirement for Northeast Community College. See General Education Requirements.

**AGRI 1120 Food Agriculture Natural Resources Systems can be substituted for AGRI 1105 Issues in Agriculture I.

Agriculture students are encouraged to consult their advisor in the agriculture department to identify the best courses to fulfill agriculture or science elective requirements. The Northeast Community College agriculture program has articulation agreements with the University of Nebraska-Lincoln, Wayne State College, South Dakota State University, and Northwest Missouri State. If interested in more information, consult your advisor.

***NOTE: Students may select to take summer classes AGRI 2020 and 2030 in place of Cooperative Internship I and II (AGRI 1300 and 2300).

ANIMAL SCIENCE

Many graduates with an animal science degree enter livestock production as owners, partners, or managers. Graduates may consider using their skills in family livestock operations or managing production for someone else. Other career opportunities are available in the livestock and meat industry including: feedlots, hog and cattle confinements, livestock buying, banking and finance, the feed industry, marketing, livestock pharmaceuticals promotion, and sales. The animal science degree combines the latest in production technologies and animal management with computer, business, and analysis skills. The emphasis is on the selection, breeding, feeding, and marketing of livestock for a profitable return. Beef, swine, and sheep maintained on the Northeast farm provide students with opportunities for practical experience in all aspects of livestock management. In addition, students may join the Northeast Livestock Judging Team, which travels to several states each year representing Northeast in judging contests.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
AGRI 1005 Precision Agriculture Systems	3
AGRI 1010 Animal Science	3
AGRI 1030 Introduction to Soil Science.....	3
AGRI 1040 Introduction to Soil Science Lab	1
AGRI 1105 Issues in Agriculture I**	1
AGRI 1290 International Agriculture and Agribusiness.....	3
AGRI 1340 Animal Science Lab	1
MATH 1020 Technical Mathematics I *	3
	18

Second Semester	
Course	Credits
AGRI 1131 Plant Science	3
AGRI 1132 Plant Science Lab	1
AGRI 1230 Feeds and Feeding.....	3
AGRI 1320 Animal Reproduction Physiology	3
AGRI 1410 Introduction to the Economics of Agriculture*	3
AGRI 1500 Microcomputer Applications in Agriculture*	3
	16

Summer	
Course	Credits
AGRI 2040 Livestock Production Management	3
AGRI 2050 Livestock Production Management Lab	1
OR	
AGRI 1300 Cooperative Internship I.....	6
	4-6

SOPHOMORE YEAR

First Semester	
Course	Credits
AGRI 2015 Farm and Ranch Management	4
AGRI 2400 Forage, Pasture and Grassland Production	3
AGRI 2410 Forage, Pasture and Grassland Production Lab	1
AGRI 2830 Advanced Animal Nutrition.....	2
ENGL 1050 Workplace Communication*	3
Select two of the following three courses:	
AGRI 2285 Swine Production Management	2
AGRI 2810 Horsemanship and Horse Care.....	2
AGRI 2840 Cow Calf Production Management	2
	17

Second Semester	
Course	Credits
AGRI 1310 Agricultural Marketing System.....	3
AGRI 1400 Farm and Environmental Safety	2
AGRI 1420 Interpersonal Skills *	3
AGRI 2210 Animal Health.....	3
AGRI 2260 Beef Feedlot Production Management.....	2
AGRI 2290 Agricultural or Commodities Marketing.....	3
AGRI 2890 Agriculture Capstone Experience.....	1
	17

Additional Requirement:

AGRI 1025 Farm Experience Lab.....0.5
See your advisor to identify which semester is best for your individualized interests.

Total Credit Hours **72.5-74.5**

* Course fulfills a general education requirement for Northeast Community College. General Education Requirements.

**AGRI 1120 Food Agriculture Natural Resource Systems can be substituted for AGRI 1105 Issues in Agriculture I.

Agriculture students are encouraged to consult their advisor in the agriculture department to identify the best courses to fulfill agriculture elective requirements. The Northeast Community College agriculture program has articulation agreements with the University of Nebraska-Lincoln, Wayne State College, South Dakota State University, and Northwest Missouri State. If interested in more information, consult your advisor.

PRECISION AGRICULTURE

Students in the Precision Agriculture program will develop technical skills and learn to interpret, analyze, and utilize data gathered from precision agriculture technologies to improve production. Graduates will be skilled and competent to work as technicians and producers in a rapidly changing industry that is concerned with maximizing yield potential through resource efficient practices. A key component of this program is to deepen students' understanding of the intricacies that exist between agriculture and our natural resources, especially water. Upon completion of this program, students will be able to:

- Demonstrate fundamental knowledge of agronomic principles that guide effective decision-making in soil, plant and water management.
- Discuss and utilize multiple agriculture GIS programs in a precision agriculture environment.
- Apply principles of data-based decision making to improve agricultural operations and outcomes.
- Demonstrate knowledge and skills in the proper collection of data with careful attention to ensuring data accuracy.
- Identify and explain guidance systems, data collection tools, and variable rate application systems and how they work with each other.
- Demonstrate proper calibration methods and discuss the theory behind calibrations.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
AGRI 1030 Introduction to Soil Science.....	3
AGRI 1040 Introduction to Soil Science Lab	1
ENGL 1050 Workplace Communication.....	3
AGRI 1520 Introduction to Ag Electronics & Hydraulics.....	3
AGRI 1525 Introduction to Ag Electronics & Hydraulics Lab..	1
AGRI 1530 Introduction to Water Resources.....	3
AGRI 1105 Issues in Agriculture I**	1
	15

Second Semester	
Course	Credits
AGRI 1005 Precision Agriculture Systems	3
AGRI 1500 Microcomputer Applications in Agriculture	3
AGRI 1131 Plant Science	3
AGRI 1132 Plant Science Lab	1
AGRI 1410 Introduction to the Economics of Agriculture*	3
MATH 2170 Applied Statistics.....	3
	16

Summer	
Course	Credits
AGRI 2020 Crops and Irrigation	3
AGRI 2030 Crops and Irrigation Lab	1
or AGRI 2040 Livestock Production I.....	3
AGRI 2050 Livestock Production I Lab.....	1
or AGRI 1300 Cooperative Internship I	6
	4-6

SOPHOMORE YEAR

First Semester	
Course	Credits
AGRI 1540 Precision Irrigation Management	3
AGRI 2200 Advanced Fertilizers	2
AGRI 2500 Data Collection Methodologies	3
AGRI 2510 Ag GIS Fundamentals	3
AGRI 2015 Farm and Ranch Management	4
Agriculture Elective or Science Course.....	2-3
	17-18

Second Semester	
Course	Credits
AGRI 2005 Precision Agriculture Theory.....	3
AGRI 2520 Ag GPS Applications	3
AGRI 2525 Ag GPS Applications Lab.....	1
AGRI 2530 Precision Hardware.....	3
AGRI 2535 Precision Hardware Lab.....	1
AGRI 1420 Interpersonal Skills*	3
Agriculture Elective or Science Course.....	2-3
AGRI 2890 Agriculture Capstone Experience	1
	17-18

Additional Requirement:
 AGRI 1025 Farm Experience Lab.....0.5
 See your advisor to identify which semester is best for your individualized interests.

Total Credit Hours **69.5-73.5**

* Course fulfills a general education requirement for Northeast Community College. See General Education Requirements.

Agriculture students are encouraged to consult their advisor in the agriculture department to identify the best courses to fulfill agriculture or science elective requirements. The Northeast Community College agriculture program has articulation agreements with the University of Nebraska-Lincoln, Wayne State College, South Dakota State University, and Northwest Missouri State. If interested in more information, consult your advisor.

**AGRI 1120 Food Agriculture Natural Resource Systems can be substituted for AGRI 1105 Issues in Agriculture I and AGRI 1115 Issues in Agriculture II.

DIVERSIFIED AGRICULTURE

A degree in diversified agriculture prepares students for a wide variety of employment possibilities. Graduates may choose to return to a family farm operation, or work for a large diversified farm, or private and commercial cattle feedlots and swine farrowing operations. Opportunities also exist in the animal health field, feed, seed, and fertilizer industries in sales or management positions. The diversified agriculture program of study gives students a well-rounded background for a wide variety of career opportunities in the agriculture industry.

Students benefit from a broad curriculum ranging from livestock and crop production to marketing skills. Students study the latest advancements in agriculture production technology, agriculture record keeping, and computer analysis, thus preparing to make sound business decisions for a profitable farming operation. Courses in computers, agribusiness management, marketing, agricultural records, agricultural sales, agricultural law, and precision farming (GPS/GIS) form a framework for specific courses in animal science and agronomy.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
AGRI 1005 Precision Agriculture Systems	3
AGRI 1010 Animal Science	3
AGRI 1030 Introduction to Soil Science.....	3
AGRI 1040 Introduction to Soil Science Lab	1
AGRI 1105 Issues in Agriculture I**	1
AGRI 1290 International Agriculture and Agribusiness.....	3
AGRI 1340 Animal Science Lab	1
MATH 1020 Technical Mathematics I*	3
	<hr/> 18

Second Semester	
Course	Credits
AGRI 1131 Plant Science	3
AGRI 1132 Plant Science Lab	1
AGRI 1280 Crop Chemicals.....	2
AGRI 1410 Introduction to the Economics of Agriculture*	3
AGRI 1420 Interpersonal Skills*.....	3
AGRI 1500 Microcomputer Applications in Agriculture*	3
	<hr/> 15

Summer	
Course	Credits
AGRI 2020 Crops and Irrigation	3
AGRI 2030 Crops and Irrigation Lab	1
OR	
AGRI 2040 Livestock Production I.....	3
AGRI 2050 Livestock Production I Lab.....	1
OR	
AGRI 1300 Cooperative Internship I.....	6
	<hr/> 4-6

SOPHOMORE YEAR

First Semester	
Course	Credits
AGRI 2015 Farm and Ranch Management	4
AGRI 2200 Advanced Fertilizers	2
AGRI 2250 Grain Harvesting and Handling Systems	3
Agriculture Electives	2-4
ENGL 1050 Workplace Communication*	3
	<hr/> 14-16

Second Semester	
Course	Credits
AGRI 1230 Feeds and Feeding.....	3
AGRI 1400 Farm and Environmental Safety.....	2
AGRI 2210 Animal Health.....	3
AGRI 2290 Agricultural Commodities Marketing	3
AGRI 2890 Agriculture Capstone Experience.....	1
Agriculture Electives or Science Course	3-5
	<hr/> 15-17

Additional Requirement:

AGRI 1025 Farm Experience Lab.....0.5
See your advisor to identify which semester is best for your individualized interests.

Total Credit Hours 66.5-72.5

* Course fulfills a general education requirement for Northeast Community College. See General Education Requirements.

**AGRI 1120 Food Agriculture Natural Resource Systems can be substituted for AGRI 1105 Issues in Agriculture I.

Agriculture students are encouraged to consult their advisor in the agriculture department to identify the best courses to fulfill agriculture or science elective requirements. The Northeast Community College agriculture program has articulation agreements with the University of Nebraska-Lincoln, Wayne State College, South Dakota State University, and Northwest Missouri State. If interested in more information, consult your advisor.

Agriculture

AGRICULTURE

The Associate of Applied Science degree in Agriculture provides students with options to earn a degree in Agriculture, while selecting classes which focus on their areas of interest. Core classes and general education requirements are common to both options. Students then select from recommended electives to complete their degree in Agriculture. This degree is commonly sought by students planning to return to their family or home operations with skills that will help them to add value, diversity, or become entrepreneurs. Many students also secure employment in local agricultural businesses.

Agriculture Core Courses

Course	Credits
AGRI 1005 Precision Agriculture Systems	3
AGRI 1030 Introduction to Soil Science.....	3
AGRI 1040 Introduction to Soil Science Lab or HORT 1040 Intro to Soil Science Lab	1
AGRI 1400 Farm and Environmental Safety.....	2
AGRI 1025 Farm Experience Lab.....	5
Internship or course options*	4-6
AGRI/HORT 2890 Capstone Course	1
	14.5 - 16.5

General Education Courses

Course	Credits
MATH 1020 Technical Mathematics I.....	3
AGRI 1500 Microcomputer Applications in Agriculture.....	3
ENGL 1050 Workplace Communication.....	3
AGRI 1410 Introduction to the Economics of Agriculture	3
AGRI 1420 Interpersonal Skills.....	3
	15
Approved Electives	
Select course from Approved Electives below	40-44

Total Credit Hours 70.5 - 74.5

Select one of the following: AGRI or HORT 1300; AGRI 2020 & 2030; AGRI 2040 & AGRI 2050; AGRI 1115 & AGRI 2150

Approved Electives

Mechanized Agriculture

Course	Credits
AGRI 1050 Farm Welding.....	1
AGRI 1060 Farm Welding Lab.....	2
AGRI 1130 Large Engine Maintenance.....	1
AGRI 1140 Large Engine Maintenance Lab.....	2
AGRI 1210 Crop Production	3
AGRI 1220 Crop Production Lab	1
AGRI 1240 Advanced Farm Welding.....	1
AGRI 1250 Advanced Farm Welding Lab.....	2
AGRI 1280 Crop Chemicals.....	2
AGRI 1350 Tillage, Planting and Spraying Equipment.....	1
AGRI 1360 Tillage, Planting and Spraying Equipment Lab.....	1
AGRI 1290 International Agriculture and Agribusiness.....	3
AGRI 2015 Farm and Ranch Management	4
AGRI 2100 Farm Electricity and Wiring.....	1
AGRI 2105 Farm Electricity and Wiring Lab.....	2
AGRI 2200 Advanced Fertilizers.....	2
AGRI 2250 Grain Harvesting and Handling Systems	3
AGRI 1150 Introduction to Entomology.....	3
AGRI 2010 Irrigation and Equipment.....	3
AGRI 2140 Farm Welding Repair and Projects	1
AGRI 2150 Farm Welding Repair and Projects Lab	2
AGRI 1131 Plant Science	3
AGRI 1132 Plant Science Lab	1
AGRI 2290 Agricultural Commodities Marketing	3

Select an Agriculture, Horticulture, or Science course 3-4

Urban Agriculture First Semester

Course	Credits
HORT 1010 Horticulture Science	3
HORT 1090 Integrated Pest Management.....	2
HORT 1070 Plant Propagation	2
HORT 1080 Plant Propagation Lab	1
HORT 2020 Nursery Greenhouse Management.....	4
HORT 2080 Woody Perennial Identification.....	3
HORT 2090 Herbaceous Perennial Identification	3
HORT 2140 Hydroponic Growing System Herbaceous.....	2
HORT 2120 Horticulture Irrigation & Equipment.....	3
HORT 2150 Annual Flower Identification	2
HORT 2160 Vegetable Gardening and Farm Production.....	3
HORT 2165 Value Added Diversified Marketing.....	3
HORT 2170 Alternative Horticulture.....	2
BIOS 1050 General Botany	4
BIOS 2020 Introduction to Environmental Issues	4
AGRI 1145 Introduction to Natural Resources	3
AGRI 1530 Introduction to Water Resources	3
AGRI 2025 Agroecology	3
AGRI 1310 Agricultural Marketing Systems	3
AGRI 1150 Introduction to Entomology.....	3

AGRICULTURE: MECHANIZED

The mechanized agriculture prepares students to maintain machinery and equipment for agricultural use. The curriculum trains students to repair and maintain all types of agricultural equipment, and includes farm welding, engine repair and tune-ups, and the proper calibration of planting, irrigation, harvesting equipment, and precision farming (GPS/GIS). Additionally, courses in business management, agricultural records, marketing, and the use of computers are included in the program of study.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
AGRI 1005 Precision Agriculture Systems	3
AGRI 1030 Introduction to Soil Science.....	3
AGRI 1040 Introduction to Soil Science Lab	1
AGRI 1105 Issues in Agriculture I**	1
AGRI 1130 Large Engine Maintenance.....	1
AGRI 1140 Large Engine Maintenance Lab.....	2
AGRI 1400 Farm and Environmental Safety.....	2
MATH 1020 Technical Mathematics I*	3
	<u>16</u>

Second Semester	
Course	Credits
AGRI 1050 Farm Welding.....	1
AGRI 1060 Farm Welding Lab.....	2
AGRI 1131 Plant Science	3
AGRI 1132 Plant Science Lab	1
AGRI 1280 Crop Chemicals.....	2
AGRI 1350 Tillage, Planting and Spraying Equipment.....	1
AGRI 1360 Tillage, Planting and Spraying Equipment Lab.....	1
AGRI 1410 Introduction to the Economics of Agriculture*	3
AGRI 1500 Microcomputer Applications in Agriculture*	3
	<u>17</u>

Summer	
Course	Credits
AGRI 2020 Crops and Irrigation	3
AGRI 2030 Crops and Irrigation Lab	1
OR	
AGRI 2040 Livestock Production I.....	3
AGRI 2050 Livestock Production I Lab.....	1
OR	
AGRI 1300 Cooperative Internship I.....	6
	<u>4-6</u>

SOPHOMORE YEAR

First Semester	
Course	Credits
AGRI 1290 International Agriculture and Agribusiness.....	3
AGRI 2015 Farm and Ranch Management	4
AGRI 2100 Farm Electricity and Wiring.....	1
AGRI 2105 Farm Electricity and Wiring Lab.....	2
AGRI 2200 Advanced Fertilizers	2
AGRI 2250 Grain Harvesting and Handling Systems	3
ENGL 1050 Workplace Communication*	3
	<u>18</u>

Second Semester	
Course	Credits
AGRI 1420 Interpersonal Skills*	3
AGRI 2010 Irrigation and Equipment	3
AGRI 2140 Farm Welding Repair and Projects	1
AGRI 2150 Farm Welding Repair and Projects Lab	2
AGRI 2290 Agricultural Commodities Marketing	3
AGRI 2890 Agriculture Capstone Experience.....	1
Agriculture Elective	3
	<u>16</u>

Additional Requirement:

AGRI 1025 Farm Experience Lab.....0.5
See your advisor to identify which semester is best for your individualized interests.

Total Credit Hours 71.5-73.5

* Course fulfills a general education requirement for Northeast Community College. See General Education Requirements.

**AGRI 1120 Food Agriculture Natural Resource Systems can be substituted for AGRI 1105 Issues in Agriculture I.

Agriculture students are encouraged to consult their advisor in the agriculture department to identify the best courses to fulfill agriculture elective requirements. The Northeast Community College agriculture program has articulation agreements with the University of Nebraska-Lincoln, Wayne State College, South Dakota State University, and Northwest Missouri State. If interested in more information, consult your advisor.

AGRICULTURE - URBAN

Urban Agriculture is the practice of growing food in cities, towns, and municipal areas. As a global trend, urban agriculture increases access to locally produced food while providing cultural and economic solutions within communities. Regenerative agriculture concepts are taught within the courses of this program as well as best practices for production. Students are well prepared to launch or enhance an urban agriculture business of their own, or to become employed in Horticulture or Agricultural industries upon graduation.

Suggested Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
AGRI 1105 Issues in Agriculture I	1
AGRI 1030 Introduction to Soil Science.....	3
HORT 1040 Introduction to Soil Science Lab.....	1
AGRI 1410 Introduction to the Economics of Agriculture*.....	3
ENGL 1050 Workplace Communications*	3
HORT 2080 Woody Perennial Identification.....	3
HORT 1010 Horticulture Science	4
	18

Second Semester	
Course	Credits
AGRI 1500 Microcomputer Applications in Agriculture*	3
AGRI 1005 Precision Agriculture Systems	3
HORT 1070 Plant Propagation	2
HORT 1080 Plant Propagation Lab	1
HORT 1090 Integrated Pest Management.....	2
MATH 1020 Technical Mathematics I*	3
	14

Summer	
Course	Credits
Select one of the following options:	6
AGRI or HORT 1300 Cooperative Internship I.....	6
OR	
AGRI 2020 Crops and Irrigation	3
AGRI 2030 Crops and Irrigation Lab	1
OR	
AGRI 2040 Livestock Production Management	3
AGRI 2050 Livestock Production Management Lab	1
OR	
AGRI 1115 Issues in Agriculture II (<i>taken in proceeding semester</i>) and AGRI 2115 Global Opportunities in Agricultural Leadership (<i>International Travel usually scheduled in Summer</i>)....	4
	4-6

SOPHOMORE YEAR

First Semester	
Course	Credits
HORT 2090 Herbaceous Perennial Identification	3
HORT 2120 Horticulture Irrigation & Equipment.....	3
HORT 2165 Value Added Diversified Marketing.....	3
BIOS 2020 Introduction to Environmental Issues	4
AGRI 1150 Introduction to Entomology	3
	16

Second Semester	
Course	Credits
HORT 2020 Nursery Greenhouse Management.....	4
AGRI 1420 Interpersonal Skills*	3
HORT 2890 Agriculture Capstone Experience	1
AGRI 1310 Agricultural Marketing Systems.....	3
HORT 2160 Vegetable Gardening and Farm Production.....	3
Approved Electives	1-4
	15-17

Total Credit Hours 69.5-72.5

Additional Requirement AGRI 1025 Farm Experience Lab..... .5
See your advisor to select the best semester to complete this lab.

* Course fulfills a general education requirement for Northeast Community College. See General Education Requirements.

AGRICULTURE - COLLEGE TRANSFER

Students interested in pursuing academic transfer in agriculture to other colleges can obtain an associate of science degree from Northeast Community College. This degree includes several general education classes as well as agriculture classes that transfer easily to baccalaureate programs at other colleges and universities.

Northeast has articulated agreements with Northwest Missouri State, South Dakota State University, the University of Nebraska-Lincoln, and Wayne State College. Individual program plans to transfer to other four-year institutions can be developed with the help of an agriculture advisor. Students can obtain specific plans of study for these colleges from the Agriculture, Math & Science Division Dean's office.

The A.S. Ag Transfer is recommended for transfer to the University of Nebraska-Lincoln.

Ag Transfer students are strongly encouraged to meet with an agriculture advisor regularly to ensure transferability of elective courses to student identified transfer institution.

Suggested Program of Study for Associate of Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
Written Communication*	3
ENGL 1010 English Composition I	
Mathematics*	3-5
MATH 1100 or Higher	
Natural Science*	4-5
Agriculture Electives**	6
	16-19

Second Semester	
Course	Credits
Natural Science*	4-5
-Recommended AGRI 1131 & 1132	
English/Literature*	3
Mathematics*	3-5
MATH 1600 or Higher	
Agriculture Electives**	6
	16-19

SOPHOMORE YEAR

First Semester	
Course	Credits
Natural Science or Mathematics*	4-5
Fine Arts and Language*	3
Behavioral & Social Sciences	3
Agriculture Electives**	6
	16-17

Second Semester	
Course	Credits
Oral Communication*	3
SPCH 1010 or SPCH 1110	
Technology*	3
General Electives**	6
Agriculture Electives**	3
	15

Total Credit Hours 63-70

Recommended Agriculture Electives:

AGRI 1010 Animal Science & AGRI 1340 Animal Science Lab
 AGRI 1030 Introduction to Soil Science & AGRI 1040 Introduction to Soil Science Lab
 AGRI 1131 Plant Science & AGRI 1132 Plant Science Lab
 AGRI 1150 Introduction to Entomology
 AGRI 1230 Feeds and Feeding & Species Course
 AGRI 1290 International Agriculture and Agribusiness
 AGRI 1310 Agriculture Marketing System
 AGRI 1410 Introduction to the Economics of Agriculture
 AGRI 1420 Interpersonal Skills
 AGRI 2015 Farm and Ranch Management
 AGRI 2200 Advanced Fertilizers
 AGRI 2400 Forage, Pasture and Grassland Production & AGRI 2410 Forage, Pasture and Grassland Production Lab
 AGRI 2460 Resource Efficient Crop Management
 AGRI 2870 Agriculture Law

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements. **Upon advisement of college transfer advisor.

AGRICULTURE - COLLEGE TRANSFER

Students interested in pursuing academic transfer in agriculture to other colleges can obtain an associate of arts degree from Northeast Community College. This degree includes several general education classes as well as agriculture classes that transfer easily to baccalaureate programs at other colleges and universities.

Northeast has articulated agreements with Northwest Missouri State, South Dakota State University, the University of Nebraska-Lincoln, and Wayne State College. Individual program plans to transfer to other four-year institutions can be developed with the help of an agriculture advisor. Students can obtain specific plans of study for these colleges from the Agriculture, Math & Science Division Dean's office.

Ag Transfer students are strongly encouraged to meet with an agriculture advisor regularly to ensure transferability of elective courses to student identified transfer institution.

Suggested Program of Study for Associate of Arts (AA) Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
Written Communication*	3
ENGL 1010 English Composition I	
History*	3
Mathematics*	3-5
Natural Science*	4-5
Agriculture Electives**	3
	16-19

Second Semester	
Course	Credits
Behavioral Science*	3
English/Literature*	3
General Electives**	3
Agriculture Electives**	6-8
	15-17

SOPHOMORE YEAR

First Semester	
Course	Credits
Oral Communication*	3
SPCH 1010 or SPCH 1110	
Social Science*	3
General Electives**	3
Agriculture Electives**	6-8
	15-17

Second Semester	
Course	Credits
HPER 1550 Lifetime Wellness	3
Fine Arts and Language*	3
General Electives**	6
Agriculture Electives**	3
	15-17

Total Credit Hours 61-70

Recommended Agriculture Electives:

- AGRI 1010 Animal Science & AGRI 1340 Animal Science Lab
- AGRI 1030 Introduction to Soil Science & AGRI 1040 Introduction to Soil Science Lab
- AGRI 1131 Plant Science & AGRI 1132 Plant Science Lab
- AGRI 1150 Introduction to Entomology
- AGRI 1230 Feeds and Feeding & Species Course
- AGRI 1290 International Agriculture and Agribusiness
- AGRI 1310 Agriculture Marketing System
- AGRI 1410 Introduction to the Economics of Agriculture
- AGRI 1420 Interpersonal Skills
- AGRI 2015 Farm and Ranch Management
- AGRI 2200 Advanced Fertilizers
- AGRI 2400 Forage, Pasture and Grassland Production & AGRI 2410 Forage, Pasture and Grassland Production Lab
- AGRI 2460 Resource Efficient Crop Management
- AGRI 2870 Agriculture Law

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.**Upon advisement of college transfer advisor.

NATURAL RESOURCES

Students pursuing a degree in natural resources will study the interdependence of resource concerns, conservation, and the management practices involved in production agriculture. To gain an understanding of the characteristics and importance of our natural resources, sustainability, regulations, and best practices will be addressed. The program of study prepares students to work as technicians in natural resources, environmental stewardship, and agricultural production. Students will also be prepared to transfer into related baccalaureate programs of study.

Suggested Program of Study for Associate of Science Degree

FRESHMAN YEAR

First Semester	
Course	Credits
AGRI 1030 Soil Science.....	3
AGRI 1040 Soil Science Lab.....	1
*BIOS 1010 General Biology.....	4
*MATH.....	3
AGRI 1145 Introduction to Natural Resources.....	3
**Agriculture or Science Electives.....	2-4
	16-18

Second Semester	
Course	Credits
AGRI 1131 Plant Science.....	3
AGRI 1132 Plant Science Lab.....	1
*CHEM 1090 General Chemistry I.....	4
*Fine Arts & Language.....	3
*ENGL 1010 English Composition I.....	3
*AGRI 1500 Microcomputer Applications in AG.....	3
	17

SOPHOMORE YEAR

First Semester	
Course	Credits
BIOS 2020 Introduction to Environmental Issues.....	4
AGRI 2400 Forage Pasture and Grassland Production.....	3
*SPCH 1110 Public Speaking.....	3
*MATH 2170 Applied Statistics.....	3
**Agriculture or Science Electives.....	2-4
	15-17

Second Semester	
Course	Credits
AGRI 1530 Introduction to Water Resources.....	3
BIOS 1050 Botany.....	4
*Behavioral Science course.....	3
*English/Literature.....	3
**Agriculture or Science Electives.....	2-4
	15-17

Total Credit Hours 63-69

*See General Education Requirements

**Agriculture/Science Suggested Electives (please work with an advisor to select the most appropriate electives for your goals)

AGRI 1150 Introduction to Entomology
 AGRI 1010 Animal Science
 AGRI 1310 Agriculture Marketing System
 AGRI 1340 Animal Science Lab
 AGRI 2035 Agroecology
 AGRI 2200 Advanced Fertilizers
 AGRI 2290 Agriculture Commodities Marketing
 AGRI 2410 Forage Pasture & Grassland Production Lab
 AGRI 2460 Resource Efficient Management
 AGRI 2510 AG GIS Fundamentals
 AGRI 2870 Agricultural Law
 PHYS 1410 Elementary General Physics I with Algebra and Trigonometry

DAIRY TECHNICIAN

The purpose of the dairy technician program is to train students to work in the expanding dairy industry in Nebraska. The dairy technician diploma is a “stepping stone” for students interested in involvement in the dairy industry. Career opportunities exist on an increasing number of large dairy farms in Nebraska. Opportunities also exist for developing working partnerships with family dairy farm operations. In addition, this program enables graduates to return to their own dairy farms with a focus on grass-based systems. With the increasing amount of milk being produced, career opportunities also exist in the milk and cheese processing industries.

Required Program of Study for Diploma (34 weeks)

First Semester		Second Semester	
Course	Credits	Course	Credits
AGRI 1010 Animal Science	3	AGRI 1230 Feeds and Feeding.....	3
AGRI 1340 Animal Science Lab	1	AGRI 1310 Agricultural Marketing System.....	3
AGRI 1420 Interpersonal Skills	3	AGRI 1320 Animal Reproduction Physiology	3
AGRI 2830 Advanced Animal Nutrition.....	2	AGRI 1500 Microcomputer Applications in Agriculture	3
MATH 1020 Technical Mathematics I.....	3	AGRI 2210 Animal Health.....	3
AGRI 1410 Introduction to the Economics of Agriculture.....	3	AGRI 2860 Dairy Production Management.....	2
	15		17
		Total Credit Hours	32

ART

The art concentration at Northeast Community College allows students to experiment in many phases of art, including line, form, color, and perspective, as well as study the history of art. Students apply these basics to a variety of artistic skills such as painting, design, photography, and drawing.

After earning an associate of arts degree, students may choose to enter the labor force or transfer to a four-year college for a bachelor's degree in art. Career opportunities that value artistic skills may be found in fine arts, commercial art, photography, museums/galleries, media, fashion design, textile design, interior design, art sales, art therapy, or retail.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

Course	First Semester	Credits
ARTS 1300 Design I		3
ARTS 1250 Drawing Logic I.....		3
ARTS 1050 Introduction to Art History & Criticism I.....		3
ENGL 1010 English Composition I.....		3
Social Sciences*		3
		15

Course	Second Semester	Credits
ARTS 1750 Painting I.....		3
ARTS 1600 Design II.....		3
ARTS 1060 Introduction to Art History & Criticism II.....		3
HPER 1550 Lifetime Wellness		3
History*		3
		15

SOPHOMORE YEAR

Course	First Semester	Credits
ARTS 1350 Watercolor		3
ARTS Elective**		3
English/Literature*		3
Oral Communication*		3
Mathematics*		3-5
		15-17

Course	Second Semester	Credits
ARTS 1400 Ceramics		3
ARTS 1500 Drawing Logic II		3
ARTS 2750 Painting II		3
Behavioral Science*		3
Natural Science*		4-5
		16-17

Total Credit Hours 61-64

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

**Recommended electives: ARTS 1450 Graphic Arts I, ARTS 1700 Digital Photography, ARTS 2450 Graphic Arts II

ATHLETIC TRAINING

Students pursuing this career are able to complete an Associate of Science degree with a concentration in Athletic Training. The curriculum is designed to integrate the educational and practical training skills needed to be a professional in the field of athletic training. Students continue their education at a transfer institution to obtain a bachelor’s degree in Athletic Training or a related allied health field.

Suggested Program of Study for Associate of Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BIOS 1010 General Biology.....	4
HPER 1510 Introduction to Physical Education.....	3
ENGL 1010 English Composition I.....	3
HPER 1360 Body Conditioning.....	1
HPER 1240 Circuit Training.....	1
MATH 1150 College Algebra.....	3
	15

Second Semester	
Course	Credits
BIOS 2250 Intro to Human Anatomy and Physiology I.....	4
HPER 1520 Nutrition for Fitness and Sport or HOEC 1050 Nutrition.....	3
HLTH 1060 Comprehensive Medical Terminology.....	3
HPER 1700 Intro to Athletic Training.....	3
HPER 2200 First Aid and CPR for Health Care Provider.....	3
	16

SOPHOMORE YEAR

First Semester	
Course	Credits
HPER 1245 Weight Management.....	1
HPER 2400 Care & Prevention of Athletic Injuries.....	3
Oral Communication.....	3
HPER 2060 Weight Training.....	1
Behavioral & Social Sciences.....	3
BIOS 2260 Intro to Human Anatomy & Physiology II.....	4
	15

Second Semester	
Course	Credits
HPER 2310 Community Health.....	3
INFO 1100 Microcomputer Applications.....	3
MATH 2170 Applied Statistics.....	3
Humanities (English Literature).....	3
Behavioral & Social Sciences.....	3
	15

Total Credit Hours 61

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

AUTO BODY REPAIR TECHNOLOGY

The auto body repair technology program teaches students the basic elements of metal finish repair, frame alignment, panel replacement, major body damage, and unibody technologies for today's automobiles using the very latest equipment and training materials available. Students develop skills in welding, metalworking, refinishing, straightening and alignment, installation of glass, hardware, and trim, as well as estimating and shop management skills. Graduates are prepared for jobs in independent body shops or new and used car dealerships. With additional education, opportunities also exist for careers in insurance adjusting and teaching. (Enrollment in this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
AUTB 1015 Glass, Trim, and Welding Theory.....	2.5
AUTB 1035 Glass, Trim, and Welding Lab.....	4.5
AUTB 1050 Panel Adjustment and Metalworking Theory	2.5
AUTB 1060 Panel Adjustment and Metalworking Lab.....	4.5
PSYC 1000 Human Relations.....	2
	16

Second Semester	
Course	Credits
AUTB 1210 Major Body Damage Repair Theory	5
AUTB 1245 Major Damage and Metalworking Lab	9
CAPL 1290 Introduction to Job Search and Employment	1
INFO 1000 Basic Computer Applications.....	2
MATH 1020 Technical Mathematics I.....	3
	20

Required Summer: 12 weeks

Course	Credits
AUTB 1300 Cooperative Internship I.....	6

SOPHOMORE YEAR

First Semester	
Course	Credits
AUTB 2015 Paint Care and Refinishing Theory.....	5
AUTB 2025 Paint Care and Refinishing Lab.....	9
ENGL 1050 Workplace Communication.....	3
INDT 1040 Industrial Process Dynamics or HVAC 2230 Physics of Building Science or LEAD 1010 Introduction to Community Leadership	2-3 19-20

Second Semester	
Course	Credits
AUTB 2215 Frame and Heavy Collision Theory.....	5
AUTB 2225 Frame and Heavy Collision Lab	4.5
AUTB 2250 Applied Body Repair Lab	4.5
ECON 1010 Personal and Business Finance	2
	16

Total Credit Hours 77-78

AUTOMOTIVE TECHNOLOGY

The automotive technology program provides the necessary training to diagnose, test, and repair the complicated workings of modern automobiles. Specific systems are covered in the classroom and then applied on automobiles in the lab and during the summer internship program. This training includes the latest electronic computer control ignition and fuel systems and front wheel drive automobiles. Graduates are ready for entry level positions as line technicians, service writers, and with experience, service managers and auto repair business owners. (Enrollment into this program is limited and is based on the date of application.)



The Automotive Technology program is accredited through the National Automotive Technicians Education Foundation.

ASE Education Foundation

1503 Edwards Ferry Rd., NE Suite 401 | Leesburg, VA 20176

Phone: (703) 669-6650 | <https://aseeducationfoundation.org/program-accreditation>

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

Course	Credits
First Semester	
AUTT 1010 Suspension, Steering and Brake Systems Theory	2.5
AUTT 1020 Suspension, Steering, and Brake Systems Lab	4.5
AUTT 1110 Electrical System Theory	2.5
AUTT 1120 Electrical System Lab	4.5
CAPL 1290 Introduction to Job Search and Employment	1
MATH 1020 Technical Mathematics I.....	3
	18

Course	Credits
Second Semester	
AUTT 1210 Electrical Tune-up and Fuel Systems Theory	2.5
AUTT 1220 Electrical Tune-up and Fuel Systems Lab	4.5
AUTT 1310 Automotive Electronics Theory	2.5
AUTT 1320 Automotive Electronics Lab	4.5
ECON 1010 Personal and Business Finance	2
INDT 1040 Industrial Process Dynamics or HVAC 2230 Physics of Building Science or LEAD 1010 Intro to Community Leadership	2-3
	18-19

Required Summer: 12 weeks

Course	Credits
AUTT 1300 Cooperative Internship I.....	6

SOPHOMORE YEAR

Course	Credits
First Semester	
AUTT 2010 Clutch, Manual Transmission and Transaxle, Drive Shaft and Differential Theory	2.5
AUTT 2020 Clutch, Manual Transmission and Transaxle, Drive Shaft and Differential Lab	4.5
AUTT 2110 Automatic Transmission and Transaxle Theory ..	2.5
AUTT 2120 Automatic Transmission and Transaxle Lab.....	4.5
INFO 1000 Basic Computer Applications	2
PSYC 1000 Human Relations.....	2
	18

Course	Credits
Second Semester	
AUTT 2210 Major Engine Theory	2.5
AUTT 2220 Major Engine Lab.....	4.5
AUTT 2310 Automotive Environmental Systems Theory	2.5
AUTT 2320 Automotive Environmental Systems Lab.....	4.5
ENGL 1050 Workplace Communication.....	3
	17

Total Credit Hours 77-78

Required Program of Study for Diploma (1 year)

Successful completion of the freshman year of the automotive technology associate of applied science degree program and the Summer Cooperative Internship I.

Total Credit Hours 42-43

AUTOMOTIVE LIGHT SERVICE TECHNICIAN CERTIFICATE

Automotive light service technicians conduct basic repairs and maintenance on automobiles and light truck systems. They employ high-tech skills and use computerized equipment and traditional tools to complete routine service work and diagnostic tests. Students in this certificate program of study are prepared for jobs such as lube technicians, brake and alignment technicians, and tire technicians by gaining the knowledge and skills needed to perform work on a variety of systems such as brakes, tires, electrical systems, steering and suspensions, and drive trains. Credits earned in the Automotive Light Service Technician certificate program can be applied to the Automotive Technology diploma program and the Automotive Technology Associate of Applied Science degree program. (Enrollment into this program is limited to and is based on the date of application.)

Required Program of Study for Certificate (17 weeks)

FRESHMAN YEAR

Course	Fall Semester	Credits
AUTT 1010 Suspension, Steering and Brake Systems Theory		2.5
AUTT 1020 Suspension, Steering and Brake Systems Lab		4.5
AUTT 1110 Electrical Systems Theory		2.5
AUTT 1120 Electrical Systems Lab		4.5
PSYC 1000 Human Relations		2
MATH 1020 Technical Mathematics I		3
		<hr/> 19

BASIC NURSE AIDE and MEDICATION AIDE

The basic nurse aide and medication aide programs train students in the knowledge and skills necessary to administer responsible health care to the ill and aged in nursing facilities, long-term care facilities, and assisted care facilities under qualified supervision.

Course Descriptions

Nurse Aide (NURA 1110 - 3.0 credit hours)— This course is designed to meet the Nebraska Health and Human Services System training requirements for nurse aide certification and employment in long-term care facilities. This course combines classroom lecture and laboratory application for the development of basic skills needed to provide safe, effective, and caring services to the elderly or chronically ill patient of any age, in a long-term care facility. Upon completion of this course, the student is eligible to take the state written and practical skills exam. After successfully passing this examination and completing the application procedure, the students name will be placed on the basic nurse aide registry at the Nebraska Health and Human Services Regulation and Licensure, Credentialing Division. (30/45/0/0)

Medication Aide (HLTH 1120 - 3.0 credit hours) — This course is designed to prepare the student to assume the role and responsibilities of a Medication Aide working in a nursing facility. This course includes information regarding medication administration, pharmacology rules and regulations, classification of drugs, orders, storage, abbreviations, and an overview of commonly used drugs and documentation. (45/0/0/0)

BEHAVIORAL SCIENCE

The successful completion of introductory courses in the behavioral sciences paves the way for students to continue a study of psychology or sociology with a fundamental awareness of their basic principles, concepts, theories, and understanding of how a psychology or sociology major can prepare them for their futures. These courses will also provide students with an understanding of how psychological and sociological principles can be applied to personal, social, and organizational issues; help students develop insight into the workings of society, their own and others' behaviors and mental processes; and provide students with strategies for self-management.

Occupations in behavioral sciences can be obtained with associate's, bachelor's, masters, or PhD degrees. For those who wish to pursue higher degrees, a student can complete the first two years of education at Northeast and then transfer to a four-year college. A degree with a concentration in behavioral science can prepare students for career opportunities in teaching, human services, human resources, psychology, counseling, sociology, social work, and a variety of other professional careers.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ENGL 1010 English Composition I	3
PSYC 1810 Introduction to Psychology.....	3
Fine Arts and Language*	3
Mathematics*	3-5
Elective**	3
	15-17

Second Semester	
Course	Credits
History*	3
English/Literature*	3
SOCI 1010 Introduction to Sociology	3
PSYC 2200 Lifespan Psychology***	3
Elective**	3
	15

SOPHOMORE YEAR

First Semester	
Course	Credits
Oral Communication*	3
History Elective*	3
Natural Science*	4-5
SOCI 2300 Sociology of Deviant Behavior***	3
PSYC 2500 Social Psychology***	3
	16-17

Second Semester	
Course	Credits
Social Science*	3
SOCI 2320 Social Problems***	3
PSYC 2800 Abnormal Psychology***	3
HPER 1550 Lifetime Wellness	3
SOCI 2150 Issues of Unity and Diversity***	3
	15

Total Credit Hours 61-64

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

**Suggested electives: LIBR 1310 Library Orientation and Usage, HUSR 1010 Introduction to Human Services and Counseling, OFFT 1500 Microsoft Office or other computer skills course, foreign language, CRIM 2100 Juvenile Justice, SOCI 2200 Criminology, SOWK 2000 Introduction to Social Work, PSYC 2110 Child and Adolescent Psychology.

***Recommended courses dependent on desired professional goal.

BIOLOGY

Students planning a concentration in biological sciences may complete a two-year liberal arts program at Northeast. Upon completion of the two years, students may choose to transfer and continue to work toward a four-year degree. A biological science concentration is appropriate for students considering careers in the health field, agriculture, teaching, research and plant and wildlife biology. Either the associate of science or the associate of arts degree would be appropriate.

Suggested Program of Study for Associate of Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BIOS 1010 General Biology	4
CHEM 1140 General Chemistry I for majors or	4-5
CHEM 1090 General Chemistry I	
ENGL 1010 English Composition I	3
MATH 1150 College Algebra	3
MATH 1220 Trigonometry.....	3
	17-18

Second Semester	
Course	Credits
BIOS 1090 General Zoology and/or	
BIOS 1050 General Botany	4
CHEM 1160 General Chemistry II for majors or.....	4-5
CHEM 1100 General Chemistry II	
MATH 1600 Analytic Geometry and Calculus I	5
English Literature*	3
	16-17

SOPHOMORE YEAR

First Semester	
Course	Credits
BIOS 2460 Microbiology.....	4
INFO 1100 Microcomputer Applications.....	3
PHYS 1410 Elementary General Physics I with Algebra and	
Trigonometry.....	5
Behavioral & Social Sciences*	3
	15

Second Semester	
Course	Credits
PHYS 1420 Elementary Physics II with Algebra and	
Trigonometry.....	5
Behavioral & Social Sciences*	3
Oral Communication*	3
Elective	3
	14

Total Credit Hours 62-64

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BIOS 1010 General Biology	4
CHEM 1140 General Chemistry I for majors or	4-5
CHEM 1090 General Chemistry I	
ENGL 1010 English Composition I	3
History*	3
	14-15

Second Semester	
Course	Credits
BIOS 1090 General Zoology and/or	
BIOS 1050 General Botany	4
CHEM 1160 General Chemistry II for majors or.....	4-5
CHEM 1100 General Chemistry II	
MATH 1140 Intermediate Algebra or higher	3-5
Humanities*	3
	14-17

SOPHOMORE YEAR

First Semester	
Course	Credits
BIOS 2460 Microbiology.....	4
Oral Communication*	3
Behavioral Science*	3
Fine Arts and Language*	3
Social Science*	3
	16

Second Semester	
Course	Credits
HPER 1550 Lifetime Wellness	3
Electives	12-13
	15-16

Total Credit Hours 60-63

BUILDING CONSTRUCTION

The building construction program gives students a basic knowledge of carpentry and related fields. By learning classroom theory and applying skills with on-the-job construction projects, students become familiar with tools of the trade, subcontracting, estimating, record keeping, and other building trade competencies. Upon completion of the program, students are prepared to begin careers working in construction. (Enrollment into this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
CNST 1000 Building Construction Fundamentals	1.5
CNST 1005 Building Construction Fundamentals Lab	2.5
CNST 1030 Construction Drafting.....	2
CNST 1040 Construction Drafting Lab.....	1
CNST 1050 Residential Blueprint Reading.....	3
CNST 1065 Principles of Light-Frame Structure Technology	1.5
CNST 1075 Principles of Light-Frame Structure Tech Lab.....	2.5
MATH 1020 Technical Mathematics I.....	3
CNST 1035 Construction Safety or INDT 1025 Introduction to Industrial Safety or HLTH 1710 First Aid.....	1-2 18-19

Second Semester	
Course	Credits
CNST 1210 Building Construction II	3
CNST 1220 Building Construction II Lab	5
CNST 1230 Construction and Architectural Drafting.....	2
CNST 1240 Construction and Architectural Drafting Lab.....	1
CNST 1250 Materials Estimating.....	2
CAPL 1290 Introduction to Job Search and Employment	1
ECON 1010 Personal and Business Finance	2
PSYC 1000 Human Relations.....	2
	18

Required Summer: 12 weeks

CNST 1300 Cooperative Internship I.....	6
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SOPHOMORE YEAR

First Semester	
Course	Credits
CNST 2010 Concrete Construction	2
CNST 2020 Concrete Construction Lab	1
CNST 2030 Cabinet and Finish Construction I.....	3
CNST 2040 Cabinet and Finish Construction I Lab.....	4
CNST 2050 Blueprint Reading and Estimating I	2
CNST 2060 Blueprint Reading and Estimating I Lab	1
ENGL 1050 Workplace Communication.....	3
INFO 1000 Basic Computer Applications.....	2
	18

Second Semester	
Course	Credits
CNST 2230 Millwork and Finish Construction II.....	4
CNST 2240 Millwork and Finish Construction II Lab.....	5
CNST 2250 Blueprint Reading and Estimating II.....	2
CNST 2260 Blueprint Reading and Estimating II Lab.....	1
CNST 2270 Construction Management.....	1
HVAC 2230 Physics of Building Science or INDT 1040 Industrial Process of Dynamics or LEAD 1010 Introduction to Community Leadership	2-3 15-16

Total Credit Hours	75-77
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BUSINESS

Associate of Applied Science in Business

Required Program of Study

The business degree offers comprehensive instruction covering basic skills for management, marketing, customer service and sales occupations. Students must successfully complete the general education requirements, the business core requirements, and approved electives. In addition to classroom work, students participate in a cooperative internship program, which incorporates on-the-job work experience. Students may add on specialized certificates to expand their business knowledge in Insurance Services, Entrepreneurship, Banking Services, Technology Services and Real Estate.

FRESHMAN YEAR

Course	First Semester	Credits
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology		3
BSAD 2540 Principles of Management		3
INFO 1100 Microcomputer Applications or OFFT 1500 Microsoft Office		3
ENGL 1010 English C		
MATH 1100 Topics a		

SOPHOMORE YEAR

Course	First Semester	Credits
ACCT 1200 Principles of Accounting I or ACCT 1100 Survey of Accounting		3
BSAD 2530 Advanced Marketing		3
BSAD 2250 International Business		3
SPCH 1010 Fundamentals of Communication or		3
		3
		15

PLEASE REFERENCE ADDENDUM

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EFFECTIVE IMMEDIATELY

ADDED TO ADDENDUM 9/20/2021

Course	Second Semester	Credits
BSAD 2050 Business		3
BSAD 2160 Customer		3
BSAD 2520 Principle		3
BSAD 2550 Advance		3
ECON 1040 Personal		3
ECON 2110 Macro		3
		15
		63

Approved Electives: ACCT 1210 Principles of Accounting II, ACCT 2020 Accounting with QuickBooks, BSAD 1200 Introduction to Electronic Commerce, BSAD1600 Real Estate Principles and Practices, BSAD 1620 Real Estate Finance, BSAD 2170 Applied Statistics, BSAD 2140 Principles of Banking, BSAD 2230 Retail Management, BSAD 2240 Principles of Insurance, BSAD 2350 Security and Loss Prevention, BSAD 2620 Fundamentals of Real Estate Appraisal, BSAD 2710 Business Law II, ECON/BSAD 1040 Personal Finance, ECON 2110 Macroeconomics, ECON 2120 Microeconomics, ENTR 1050 Introduction to Entrepreneurship, ENTR 2040 Entrepreneurship Feasibility Study, ENTR 2090 Entrepreneurship Business Plan, INFO 2100 Excel Spreadsheet Applications, LEAD 1010 Introduction to Community Leadership, SOCI 2150 Issues of Unity and Diversity.

BANKING CERTIFICATE

The banking certificate will prepare students for an entry-level career in the banking industry. Students will be introduced to banking and lending topics and general business topics, including customer service, sales, and communication skills.

Required Program of Study for Certificate (34 weeks)

First Semester	
Course	Credits
BSAD 2050 Business Communications	3
BSAD 2140 Principles of Banking.....	3
BSAD 2160 Customer Service and Business Etiquette	3
BSAD 2520 Principles of Marketing.....	3
	12

Second Semester	
Course	Credits
INFO 2100 Excel Spreadsheet Applications	3
BSAD 2130 Salesmanship.....	3
BSAD 2190 Principles of Lending.....	4
	10

Total Credit Hours	22
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ENTREPRENEURSHIP CERTIFICATE

Students who choose the Entrepreneurship Certificate will receive instruction pertaining to skills necessary to begin the journey of becoming an entrepreneur. In this program students will explore basic marketing, accounting, sales, and the first step in opening a business—the written business plan.

Required Program of Study for Certificate (51 weeks)

Fall Semester		Fall Semester	
Course	Credits	Course	Credits
ACCT 1200 Principles of Accounting I* or ACCT 1100 Survey of Accounting	3	ENTR 2090 Entrepreneurship Business Plan.....	<u>3</u>
BSAD 2520 Principles of Marketing.....	3		
BSAD 2700 Business Law I.....	3		
ENTR 1050 Introduction to Entrepreneurship	3		
	<u>12</u>	Total Credit Hours	21

Spring Semester	
Course	Credits
ENTR 2040 Entrepreneurship Feasibility Study	3
ACCT 2020 Accounting with QuickBooks	3
	<u>6</u>

*Students with no accounting experience are encouraged to take ACCT 1060 Basic Accounting Procedures prior to Principles of Accounting I.

INSURANCE SERVICES CERTIFICATE

The insurance services certificate provides interactive training in insurance and risk management in order to gain the entry-level skills necessary to begin a career in the insurance industry. With these skills, graduates can begin employment as an agency producer, claims adjuster, or customer service representative. Specific insurance courses are taught by a certified insurance agent and will prepare the student to sit for their Nebraska Producers Exam at program conclusion.

Required Program of Study for Certificate (34 weeks)

First Semester

Course	Credits
BSAD 2010 Personal Insurance*	3
BSAD 2240 Principles of Insurance*	3
BSAD 2320 Agency Operations*	3
BSAD 2340 Introduction to Underwriting*	3
	12

Second Semester

Course	Credits
BSAD 2020 Commercial Insurance*	3
BSAD 2130 Salesmanship	3
BSAD 2260 Introduction to Claims*	3
	9

Total Credit Hours	21
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*These courses are only offered through our online platform.

REAL ESTATE CERTIFICATE

Students who choose the Real Estate Certificate will receive instruction in basic business skills along with the necessary classes for application to write the Nebraska State Real Estate Sales Examination. Upon completion of the state licensing, students will be prepared to enter a real estate sales career. The Nebraska State Real Estate Commission requires a criminal background check for all applicants for the Nebraska sales agent test.

Required Program of Study for Certificate (51 weeks)

Fall Semester		Fall Semester	
Course	Credits	Course	Credits
BSAD 1600 Real Estate Principles and Practices*	3	BSAD 1620 Real Estate Finance*	3
BSAD 2050 Business Communications	3	BSAD 2530 Advanced Marketing	3
BSAD 2520 Principles of Marketing.....	3		<u>6</u>
	<u>9</u>		
		Total Credit Hours	21
Spring Semester			
Course	Credits		
BSAD 2130 Salesmanship	3		
BSAD 2620 Real Estate Appraisal*	3		
	<u>6</u>		

*Two of these classes are required for the Nebraska State Real Estate Sales Examination. (Classes could be offered every other semester, during the assigned spring or fall semester.)

BUSINESS DIPLOMA

The business diploma is best suited for working adults seeking to improve their understanding of basic business concepts. The business diploma program allows students to explore topics related to marketing, advertising, salesmanship, and management.

Required Program of Study for Business Diploma (34 weeks)

First Semester		Second Semester	
Course	Credits	Course	Credits
ACCT 1200 Principles of Accounting I* or ACCT 1100 Survey of Accounting	3	BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
BSAD 2250 International Business	3	BSAD 1070 Business Math	3
BSAD 2520 Principles of Marketing.....	3	BSAD 2050 Business Communications	3
BSAD 2540 Principles of Management.....	3	BSAD 2130 Sales.....	3
OFFT 1500 Microsoft Office	3	BSAD 2160 Customer Service and Business Etiquette.....	3
	15	BSAD 1040 Personal Finance or ECON 2110 Macroeconomics.....	3
			18
		Total Credit Hours	33

*Students with no accounting experience are encouraged to take ACCT 1060 Basic Accounting Procedures or ACCT 1100 Survey of Accounting prior to ACCT 1200 Principles of Accounting I.

BUSINESS DIPLOMA - PART TIME

The Business Diploma – Part Time hybrid course format allows you to meet face-to-face once a week for an evening session, while the rest of the coursework is completed online. Completing one course every 4, 6, or 8 weeks provides you the opportunity to focus your attention on one subject at a time.

Required Program of Study for Business Diploma - Part Time (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
OFFT 1500 Microsoft Office	3
BSAD 1040 Personal Finance	3
	6

Second Semester	
Course	Credits
BSAD 2160 Customer Service and Business Etiquette.....	3
BSAD 1000 Human Relations and Ethics	3
	6

Summer	
Course	Credits
BSAD 2520 Principles of Marketing**	3
BSAD 2050 Business Communications**	3
	6

SOPHOMORE YEAR

First Semester	
Course	Credits
BSAD 2250 International Business	3
BSAD 2130 Salesmanship.....	3
	6

Second Semester	
Course	Credits
ACCT 1100 Survey of Accounting	3
BSAD 2540 Principles of Management.....	3
	6

Summer	
Course	Credits
BSAD 1070 Business Math*	3
	3

Total Credit Hours **33**

**Class is delivered completely online and for a term of 4 or 6 weeks

CHEMISTRY

The two-year liberal arts curriculum is designed for students who want to include chemistry in their general education and for students who plan to concentrate in a STEM field for professional careers after transferring to a four-year college or university.

Suggested Program of Study for Associate of Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
MATH 1600 Analytic Geometry and Calculus I.....	5
CHEM 1140 General Chemistry I for majors with Lab or	4-5
CHEM 1090 General Chemistry I	
ENGL 2070 Technical Communications I.....	3
Behavioral & Social Sciences*	3
	15-16

Second Semester	
Course	Credits
MATH 2010 Analytic Geometry and Calculus II.....	5
ENGL 2080 Technical Communications II.....	3
CHEM 1160 General Chemistry II for majors with Lab or	4-5
CHEM 1100 General Chemistry II	
PHYS 2110 General Physics I with Calculus.....	5
	17-18

SOPHOMORE YEAR

First Semester	
Course	Credits
Elective.....	4
PHYS 2120 General Physics II with Calculus	5
English/Literature*.....	3
Behavioral & Social Sciences*	3
	15

Second Semester	
Course	Credits
Math/Natural Science Electives	10
Technology*	3
	13

Total Credit Hours	60-62
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* See general education requirements.

Note: Selection of courses for general education requirements should take into consideration the intended transfer institution. Please see your advisor to help you make the best selection.

COMMUNICATION

Effective communication skills are essential to success in any career. Students enrolled in the communication concentration will study theory and application of effective communication behaviors. Credits earned may be transferred to a four-year college and applied toward a bachelor’s degree in communication. Career opportunities include mass media, teaching, consulting, business, non-profit organization, public relations, advertising, and other professions requiring interpersonal, small group, or public speaking skills.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
SPCH 2010 Interpersonal Communication	3
ENGL 1010 English Composition I	3
Natural Science*	4-5
History*	3
Elective**	2-3
	15-17

Second Semester	
Course	Credits
SPCH 1110 Public Speaking	3
HPER 1550 Lifetime Wellness	3
Mathematics	3-5
SPCH 2300 Intercultural Communications	3
Elective**	3
	15-17

SOPHOMORE YEAR

First Semester	
Course	Credits
SPCH 1100 Small Group Communication	3
SOCI 2150 Issues of Unity and Diversity	3
Behavioral Science*	3
English/Literature*	3
Elective**	3
	15

Second Semester	
Course	Credits
SPCH 2200 Public Relations	3
BRDC 1240 Voice and Diction	3
Fine Arts and Language*	3
Social Science*	3
Elective**	3
	15

Total Credit Hours **60-64**

*See general education requirements.

**Recommended electives: SPCH 1010 Fundamentals of Communication, SPCH 1990 Special Topics in Speech, or BRDC 1010/JOUR 1010 Introduction to Mass Media. Recommended electives depend on desired professional goal and/or requirements of transfer institution.

COMMUNITY HEALTH WORKER CERTIFICATE

Community Health Workers (CHW) provide frontline health services to the public as case coordinators, community liaisons, family advocates, home health care providers and intake specialists giving guidance on health behaviors. The CHW serves as a liaison/link/intermediary between health/social services and the community to facilitate access to services and improve health knowledge and self-efficiency through a range of activities such as outreach, community education, informal counseling, social support, and advocacy. The CHW certificate program of study prepares individuals with the necessary skills to perform the duties of a community health worker. With additional education and/or work experience, there is opportunity for advancement into supervisory or managerial positions within the field of community and or public health. All of the course work in the certificate will apply towards the Associate of Science Degree with emphasis in Public Health.

Required Program of Study for Certificate (17 weeks)

Fall Semester		
Course		Credits
HLTH 1060 Comprehensive Medical Terminology		3
HLTH 1210 Community Health Worker		3
HPER 2310 Community Health		3
HUSR 1010 Introduction to Human Services & Counseling		3
NURA 1110 Nurse Aide		3
SPCH 1110 Public Speaking		<u>3</u>
Total Credit Hours		18

CRIMINAL JUSTICE

An associate of arts degree with a concentration in criminal justice can be the first step to an exciting and rewarding career in public safety. Students may choose the corrections or law enforcement concentration. These concentrations take an interdisciplinary approach that provides a knowledge base and encourages initiative and integrity. After completing an associate of arts degree, students may choose to transfer to a four-year college. Career fields include law enforcement, probation and parole, education, social services, security, and counseling.

Individuals considering employment in the criminal justice profession must be aware of strict admission qualifications. Factors that usually disqualify candidates from employment in the profession include a criminal record (i.e., theft, assault, murder), history of drug/alcohol abuse, significant psychological/personal disorders, physiological disorders, neuromuscular dysfunction, dishonesty, etc. Law enforcement agencies hire only the best qualified individuals available in order to obtain and maintain public trust and confidence at all times.

Suggested Program of Study for Associate of Arts Degree (2 years) Corrections Concentration

FRESHMAN YEAR

First Semester		Credits
Course		
CRIM 1010 Introduction to Criminal Justice		3
CRIM 1020 Introduction to Corrections.....		3
ENGL 1010 English Composition I		3
Fine Arts and Language*		3
History*.....		3
		15

Second Semester		Credits
Course		
CRIM 2250 Community Based Corrections		3
CRIM 2100 Juvenile Justice.....		3
HPER 1550 Lifetime Wellness		3
SOCI 1010 Introduction to Sociology		3
Oral Communication*		3
		15

SOPHOMORE YEAR

First Semester		Credits
Course		
CRIM 2200 Criminology.....		3
CRIM 2300 Sociology of Deviant Behavior.....		3
English/Literature*.....		3
Mathematics*.....		3-5
Electives**.....		3
		15-17

Second Semester		Credits
Course		
CRIM 2000 Criminal Law.....		3
CRIM 2580 Communication Skills in Criminal Justice.....		3
Natural Science*		4-5
Social Science*.....		3
Elective**.....		3
		16-17

Total Credit Hours 61-64

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

** Recommended electives: CRIM 2030 Police and Society, CRIM 2400 Jail Management Certification Training, CRIM 2700 Issues in Criminal Justice (to enroll in CRIM 2700, student must have earned a minimum of 18 credit hours of criminal justice coursework), SOCI 2320 Social Problems, SOCI 2150 Issues of Unity and Diversity, SPAN 1200 Elementary Spanish I, PSYC 1810 Introduction to Psychology, and PSYC 2800 Abnormal Psychology (Prerequisite: PSYC 1810).

Suggested Program of Study for Associate of Arts Degree (2 years) Law Enforcement Concentration

FRESHMAN YEAR

First Semester		Credits
Course		
CRIM 1010 Introduction to Criminal Justice		3
CRIM 1270 Intro to Forensic Crime Scene Investigation.....		3
ENGL 1010 English Composition I		3
Mathematics*.....		3-5
Social Science*.....		3
		15-17

Second Semester		Credits
Course		
CRIM 2000 Criminal Law.....		3
CRIM 2260 Criminal Investigation.....		3
HPER 1550 Lifetime Wellness		3
Oral Communication*.....		3
Natural Science*.....		4-5
		16-17

SOPHOMORE YEAR

First Semester		Credits
Course		
CRIM 2030 Police and Society.....		3
CRIM 2080 Criminal Procedures.....		3
Behavioral Science*.....		3
English/Literature*.....		3
Elective**.....		3
		15

Second Semester		Credits
Course		
CRIM 2350 Security and Loss Prevention		3
CRIM 2580 Communication Skills in Criminal Justice.....		3
Fine Arts and Language*.....		3
History*.....		3
Elective**.....		3
		15

Total Credit Hours 61-64

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements listed.

* See general education requirements.

** Recommended electives: CRIM 1800 Criminal Justice Practicum, CRIM 2100 Juvenile Justice, CRIM 2400 Jail Management Certification Training, CRIM 2700 Issues in Criminal Justice (to enroll in CRIM 2700, student must have earned a minimum of 18 credit hours of criminal justice coursework), SOCI 2320 Social Problems, SOCI 2150 Issues of Unity and Diversity, SPAN 1200 Elementary Spanish I, PSYC 1810 Introduction to Psychology, and PSYC 2800 Abnormal Psychology (Prerequisite: PSYC 1810).

CRIMINAL JUSTICE

The Associate of Applied Science degree in Criminal Justice consists of a sequence of courses that provides practical knowledge and prepares the criminal justice student to directly enter the workforce. It also helps current practicing professionals enhance their education as they continue on their career path. This degree takes an interdisciplinary approach that provides a broad knowledge base and encourages initiative and integrity. This study enables students to develop rational decisions and informed responses to challenges facing law enforcement, corrections, court operations, and human services fields.

The AAS Degree in Criminal Justice includes specified general education courses, elective options, and courses in all facets of criminal justice. Students may also receive course credit for successful completion of the Nebraska Law Enforcement Training Center and Jail Management Certification, as well as other specialized courses through Northeast's credit for prior learning program.

Students who intend to continue their education at a four-year college should pursue an Associate of Arts degree option. However, many courses from the AAS degree will transfer to four-year institutions.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
CRIM 1010 Introduction to Criminal Justice	3
CRIM 1020 Introduction to Corrections.....	3
CRIM 1270 Intro to Forensic Crime Scene Investigation.....	3
MATH 1100 Topics and Ideas in Mathematics.....	3
ENGL 1050 Workplace Communication.....	3
	15

Second Semester	
Course	Credits
CRIM 2260 Criminal Investigation.....	3
CRIM 2350 Security and Loss Prevention	3
CRIM 2250 Community-Based Corrections	3
CRIM 2100 Juvenile Justice.....	3
SOCI 1010 Introduction to Sociology	3
	15

SOPHOMORE YEAR

First Semester	
Course	Credits
CRIM 2030 Police and Society	3
CRIM 2080 Criminal Procedures.....	3
CRIM 2200 Criminology	3
CRIM 2300 Sociology of Deviant Behavior	3
SPCH 1110 Public Speaking	3
	15

Second Semester	
Course	Credits
CRIM 2000 Criminal Law.....	3
CRIM 2580 Communication Skills in Criminal Justice.....	3
Exploratory Studies	3
Technology* (Select one from below).....	3
Electives** (Select from list below).....	3-5.5
	15-17.5

Total Credit Hours 60-62.5

*Technology options:

INFO 1010 Fundamentals of Information Technology
 INFO 1100 Microcomputer Applications

**Recommended Electives:

CRIM 1800 Criminal Justice Practicum

CRIM 2400 Jail Management Certification

SOCI 2150 Issues of Unity and Diversity.....

SPAN 1200 Elementary Spanish I.....

HPER 1550 Lifetime Wellness.....

DIESEL TECHNOLOGY

Associate of Applied Science Degree

Required Program of Study

The diesel technology program will teach students the basic knowledge and skills needed to service and repair diesel and gas-powered equipment. As a student in the diesel technology program, you will learn the latest diesel repair and diagnostic techniques using up-to-date equipment. Instruction is provided in state of the industry facilities using actual components and equipment.

Core Requirements

Course	Credits
DESL 1095 Shop Processes and Safety.....	2
DESL 1300 Cooperative Internship I.....	6
WELD 1010 Related Welding	0.5
WELD 1020 Related Welding Lab	1
	9.5

General Education Requirements

Course	Credits
CAPL 1290 Introduction to Job Search and Employment	1
INFO 1000 Basic Computer Applications.....	2
MATH 1020 Technical Mathematics I.....	3
ECON 1010 Personal and Business Finance	2
PSYC 1000 Human Relations.....	2
ENGL 1050 Workplace Communication.....	3
INDT 1040 Industrial Process Dynamics or HVAC 2230 Physics of Building Science or LEAD 1010 Introduction to Community Leadership	2-3
	15-16

Core Requirements.....	9.5
General Education Requirements	15-16
Approved Electives	56
Total Credits Required	80.5-81.5

Approved Electives for Agriculture Concentration

Course	Credits
DESL 1010 Ag Electrical Systems Theory	2.5
DESL 1020 Ag Electrical Systems Lab.....	4.5
DESL 1065 Ag Air Conditioning Theory.....	2.5
DESL 1075 Ag Air Conditioning Lab	4.5
DESL 1055 Ag Power Trains and Farm Machines Theory	5
DESL 1085 Ag Power Trains and Farm Machines Lab	9
DESL 2015 Ag Electronics Theory.....	2.5
DESL 2025 Ag Electronics Lab	4.5
DESL 2070 Hydraulics Theory.....	2.5
DESL 2080 Hydraulics Lab.....	4.5
DESL 2030 Ag Engines and Fuel Systems Theory	5
DESL 2040 Ag Engines and Fuel Systems Lab	9
	56

(See required program of study)

Approved Electives for Truck Concentration

Course	Credits
DESL 1155 Truck Power Trains, Brakes and Suspension Systems Theory.....	5
DESL 1185 Truck Power Trains, Brakes and Suspension Systems Lab	9
DESL 1110 Truck Electrical Systems Theory.....	2.5
DESL 1120 Truck Electrical Systems Lab	4.5
DESL 1165 Truck Air Conditioning Theory	2.5
DESL 1175 Truck Air Conditioning Lab	4.5
DESL 2130 Truck Engines and Fuel Systems Theory.....	5
DESL 2140 Truck Engines and Fuel Systems Lab.....	9
DESL 2110 Diesel Truck Electronics Theory.....	2.5
DESL 2120 Diesel Truck Electronics Lab	4.5
DESL 2170 Transportation Refrigeration Theory.....	2.5
DESL 2180 Transportation Refrigeration Lab	4.5
	56

(See required program of study)

DIESEL TECHNOLOGY AGRICULTURE CONCENTRATION

The diesel technology agriculture concentration will teach students the basic knowledge and skills needed to service and repair diesel and gas-powered equipment. In addition to classroom study, students receive over 1,000 hours of lab training and 360 hours of actual experience through the summer cooperative internship program. Students learn to repair and test diesel fuel systems, engines, hydraulic systems, electronic control systems, power trains, brakes, electrical systems, and air conditioning systems, as well as gaining experience with various hand tools and test equipment. Related courses in math, computers, communications, human relations, welding, and personal and business finance are included to prepare students for the world of work and to enhance technical skills. (Enrollment in this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 Years)

FRESHMAN YEAR

First Semester	
Course	Credits
DESL 1010 Ag Electrical Systems Theory	2.5
DESL 1020 Ag Electrical Systems Lab.....	4.5
DESL 1065 Ag Air Conditioning Theory.....	2.5
DESL 1075 Ag Air Conditioning Lab	4.5
DESL 1095 Shop Processes and Safety.....	2
MATH 1020 Technical Mathematics I.....	3
	19

Second Semester	
Course	Credits
DESL 1055 Ag Power Trains and Farm Machines Theory	5
DESL 1085 Ag Power Trains and Farm Machines Lab	9
CAPL 1290 Introduction to Job Search and Employment	1
INDT 1040 Industrial Process Dynamics or HVAC 2230 Physics of Building Science or LEAD 1010 Introduction to Community Leadership	2-3
WELD 1010 Related Welding.....	0.5
WELD 1020 Related Welding Lab	1
	18.5-19.5

Required Summer: 12 weeks

DESL 1300 Cooperative Internship I.....	6
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SOPHOMORE YEAR

First Semester	
Course	Credits
DESL 2015 Ag Electronics Theory.....	2.5
DESL 2025 Ag Electronics Lab	4.5
DESL 2070 Hydraulics Theory.....	2.5
DESL 2080 Hydraulics Lab.....	4.5
PSYC 1000 Human Relations	2
ECON 1010 Personal and Business Finance	2
	18

Second Semester	
Course	Credits
DESL 2030 Ag Engines and Fuel Systems Theory	5
DESL 2040 Ag Engines and Fuel Systems Lab	9
ENGL 1050 Workplace Communication.....	3
INFO 1000 Basic Computer Applications	2
	19

Total Credit Hours 80.5-81.5

DIESEL TECHNOLOGY TRUCK CONCENTRATION

The diesel technology truck concentration will teach students the basic knowledge and skills needed to service and repair diesel and gas-powered equipment. In addition to classroom study, students receive over 1,000 hours of lab training and 360 hours of actual experience through the summer cooperative internship program. Students learn to repair and test diesel fuel systems, engines, transport refrigeration, electronic control systems, power trains, brakes, electrical systems, and air conditioning systems, as well as gaining experience with various hand tools and test equipment. Related courses in math, computers, communications, human relations, welding, and personal and business finance are included to prepare students for the world of work and to enhance technical skills. (Enrollment in this program is limited and is based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 Years)

FRESHMAN YEAR

First Semester		Credits
Course		
DESL 1095 Shop Processes and Safety.....		2
MATH 1020 Technical Mathematics I.....		3
DESL 1155 Truck Power Trains, Brakes, and Suspension Systems Theory.....		5
DESL 1185 Truck Power Trains, Brakes, and Suspension Systems Lab.....		9
		<u>19</u>

Second Semester		Credits
Course		
DESL 1110 Truck Electrical Systems Theory.....		2.5
DESL 1120 Truck Electrical Systems Lab.....		4.5
DESL 1165 Truck Air Conditioning Theory.....		2.5
DESL 1175 Truck Air Conditioning Lab.....		4.5
CAPL 1290 Introduction to Job Search and Employment.....		1
INDT 1040 Industrial Process Dynamics or HVAC 2230 Physics of Building Science or LEAD 1010 Introduction to Community Leadership.....		2-3
WELD 1010 Related Welding.....		0.5
WELD 1020 Related Welding Lab.....		1
		<u>18.5-19.5</u>

Required Summer: 12 weeks

DESL 1300 Cooperative Internship I.....	6
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SOPHOMORE YEAR

First Semester		Credits
Course		
DESL 2130 Truck Engines and Fuel Systems Theory.....		5
DESL 2140 Truck Engines and Fuel Systems Lab.....		9
ECON 1010 Personal and Business Finance.....		2
PSYC 1000 Human Relations.....		2
		<u>18</u>

Second Semester		Credits
Course		
DESL 2110 Diesel Truck Electronics Theory.....		2.5
DESL 2120 Diesel Truck Electronics Lab.....		4.5
DESL 2170 Transportation Refrigeration Theory.....		2.5
DESL 2180 Transportation Refrigeration Lab.....		4.5
ENGL 1050 Workplace Communication.....		3
INFO 1000 Basic Computer Applications.....		2
		<u>19</u>

Total Credit Hours	80.5-81.5
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DRAFTING

Associate of Applied Science Degree

Required Program of Study

To earn an associate of applied science degree in either architectural, structural, industrial facility, or mechanical drafting, a student must successfully complete the following general education and core requirements in addition to one of the specific concentrations listed.

Core Requirements

Course	Credits
ARCH 1160 Fundamentals of Drafting	3
ARCH 1270 Computer Assisted Drafting I	4
ARCH 1300 Cooperative Internship I	3
ARCH 2260 Introduction to Inventor	3
PHYS 2150 Structural Analysis	3
	16

General Education Requirements

Course	Credits
BSAD 2050 Business Communications	3
ECON1010 Personal and Business Finance	2
MATH 1020 Technical Mathematics I	3
MATH 1060 Technical Mathematics II	3
OFFT 1500 Microsoft Office	3
PSYC 1000 Human Relations	2
	16

Core Requirements	16
General Education Requirements	16
Approved Electives	30-35
Total Credits Required	62-67

Approved Electives for Drafting-Architectural Concentration

Course	Credits
ARCH 1120 Materials of Construction	3
ARCH 1130 Introduction to Construction Documents	3
ARCH 1170 Introduction to Construction	3
ARCH 1220 Estimating for Construction	3
ARCH 1230 Introduction to Revit	4
ARCH 2020 Computer Assisted Drafting III	4
ARCH 2100 Survey and Site Planning	3
ARCH 2110 Architectural CAD I	4
ARCH 2150 Civil Drafting	2
ARCH 2210 Architectural CAD II	6
	35

Approved Electives for Drafting-Structural Concentration

Course	Credits
ARCH 1120 Materials of Construction	3
ARCH 1130 Introduction to Construction Documents	3
ARCH 1220 Estimating for Construction	3
ARCH 1230 Introduction to Revit	4
ARCH 2010 Structural CAD Drafting I	6
ARCH 2020 Computer Assisted Drafting III	4
ARCH 2200 Structural CAD Drafting II	6
ARCH 2220 Computer Assisted Drafting IV	4
	33

Approved Electives for Drafting-Mechanical Concentration

Course	Credits
ARCH 1280 Introduction to SolidWorks	4
ARCH 1285 Geometric Dimensioning and Tolerancing	2
ARCH 1295 Engineering Materials & Processes	2
ARCH 2130 Mechanical Drafting I	4
ARCH 2230 Mechanical Drafting II	6
ENGR 1010 Introduction to Engineering Design	3
INDT 1015 Introduction to Manufacturing	2
INDT 1065 Manufacturing Technologies & Measurement	2
INDT 1170 Introduction to TQM	2
ELMC 1050 Introduction to Machining and Welding	1
ELMC 1060 Introduction to Machining and Welding Lab	2
	30

DRAFTING - ARCHITECTURAL CONCENTRATION

The architectural drafting concentration trains students to develop detailed working drawings for use in the construction of residential and commercial buildings. The program centers on the basic techniques of drafting — linework, lettering, and problem solving—and freehand sketching and calculations for measurements, volumes, site preparation, energy needs, and cost analysis. Successful graduates may find employment with architectural and engineering firms, general contractors, material suppliers, structural fabricators, or modular and component manufacturers of residential buildings. Enrollment into this program is limited and is based on the date of application.

Before admission to this concentration, students will need to attain the following minimum entrance scores: ACT: Math 16, Reading 14, English 14, or MAP: Reading 216+, Language 216+, Math 212+.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ARCH 1160 Fundamentals of Drafting	3
ARCH 1130 Introduction to Construction Documents	3
ARCH 1270 Computer Assisted Drafting I	4
OFFT 1500 Microsoft Office	3
MATH 1020 Technical Mathematics I.....	3
	16

Second Semester	
Course	Credits
ARCH 1120 Materials of Construction	3
ARCH 1220 Estimating for Construction	3
ARCH 1230 Introduction to REVIT	4
MATH 1060 Technical Mathematics II.....	3
BSAD 2050 Business Communications.....	3
	16

Required Summer Coop	
Course	Credits
ARCH 1300 Cooperative Internship I	3

SOPHOMORE YEAR

First Semester	
Course	Credits
ARCH 2110 Architectural CAD I	4
ARCH 1170 Introduction to Construction.....	3
ARCH 2100 Surveying and Site Planning.....	3
ARCH 2150 Civil Drafting	2
ARCH 2020 Computer Assisted Drafting III	4
	16

Second Semester	
Course	Credits
ARCH 2210 Architectural CAD II.....	6
ARCH 2260 Introduction to Inventor.....	3
ECON 1010 Personal and Business Finance	2
PSYC 1000 Human Relations.....	2
PHYS 2150 Structural Analysis	3
	16

Total Credit Hours	67
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DRAFTING - MECHANICAL CONCENTRATION

The mechanical drafting concentration trains students in 3D solid modeling, simulation, prototype, and documentation creation for the production of parts and assemblies in multiple industries including: machinery, manufacturing, heavy equipment, consumer products, and medical devices. Students will take classes covering the fundamentals of engineering drawings, theory of the design process, rapid prototyping, and learn multiple CAD software applications. Students will take courses offered by the "Machining and Manufacturing Automation" program and work side-by-side with manufacturing students participating in hands-on exercises and today's manufacturing technologies. Successful graduates may find employment in a variety of industries. Job titles may include: CAD Drafter, Mechanical Drafter, Design Drafter, Design Specialist, Engineering Technician, Design Technician, CAD Designer, CAD Technician, and CAD Operator.

Before admission to the program, students will need to attain the following minimum entrance scores: ACT: Math 16, Reading 14, English 14, or MAP: Reading 216+, Language 216+, Math 212+.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ARCH 1160 Fundamentals of Drafting	3
ARCH 1270 Computer Assisted Drafting I	4
ENGR 1010 Intro to Engineering Design	3
OFFT 1500 Microsoft Office	3
MATH 1020 Technical Mathematics I	3
	16

Second Semester	
Course	Credits
ARCH 1280 Introduction to SolidWorks	4
ARCH 1285 Geometric Dimensioning and Tolerancing	2
ARCH 1295 Engineering Materials & Processes	2
BSAD 2050 Business Communications	3
MATH 1060 Technical Mathematics II	3
	14

Required Summer Coop	
Course	Credits
ARCH 1300 Cooperative Internship I	3

SOPHOMORE YEAR

First Semester	
Course	Credits
ARCH 2130 Mechanical Drafting I	4
INDT 1015 Introduction to Manufacturing	2
INDT 1065 Manufacturing Technologies & Measurement	2
INDT 1170 Introduction to TQM	2
INDT 1090 Intro to Machining .....	.5
INDT 1095 Intro to Machining Lab	1
WELD 1010 Related Welding .....	.5
WELD 1015 Related Welding Lab	1
	13

Second Semester	
Course	Credits
ARCH 2230 Mechanical Drafting II	6
ARCH 2260 Introduction to Inventor	3
ECON 1010 Personal and Business Finance	2
PSYC 1000 Human Relations	2
PHYS 2150 Structural Analysis	3
	16

Total Credit Hours 62

DRAFTING - STRUCTURAL CONCENTRATION

The structural drafting concentration prepares students to create technical drawings and construction documents used in the construction, maintenance, and modernization of industrial and commercial facilities. Students will be introduced to the principles of Building Information Management (BIM) utilizing computer-aided design processes to produce detailed architectural and structural drawings. Successful graduates may find employment with architectural and engineering firms, general contractors, material suppliers, manufacturers and structural fabricators. Enrollment into this program is limited and is based on the date of application.

Before admission to this concentration, students will need to attain the following minimum entrance scores: ACT: Math 16, Reading 14, English 14, or MAP: Reading 216+, Language 216+, Math 212+.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ARCH 1160 Fundamentals of Drafting	3
ARCH 1130 Introduction to Construction Documents	3
ARCH 1270 Computer Assisted Drafting I	4
OFFT 1500 Microsoft Office	3
MATH 1020 Technical Mathematics I.....	3
	16

Second Semester	
Course	Credits
ARCH 1120 Materials of Construction	3
ARCH 1220 Estimating for Construction	3
ARCH 1230 Introduction to REVIT.....	4
MATH 1060 Technical Mathematics II	3
BSAD 2050 Business Communications.....	3
	16

Required Summer Coop	
Course	Credits
ARCH 1300 Cooperative Internship I	3

SOPHOMORE YEAR

First Semester	
Course	Credits
ARCH 2010 Structural CAD Drafting I.....	6
ARCH 2260 Introduction to Inventor.....	3
ARCH 2020 Computer Assisted Drafting III	4
ECON 1010 Personal and Business Finance	2
	15

Second Semester	
Course	Credits
ARCH 2200 Structural CAD Drafting II.....	6
ARCH 2220 Computer Assisted Drafting IV	4
PSYC 1000 Human Relations	2
PHYS 2150 Structural Analysis	3
	15

Total Credit Hours	65
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DRAFTING DIPLOMA

The drafting diploma develops an understanding of materials used in construction, estimating for construction and an increased proficiency in CAD. Graduates of the program are prepared for entry level employment with architectural and engineering firms, general contractors, material suppliers, structural fabricators, or modular and component manufactures of buildings. All of the course work will apply to the associate of applied science degrees.

Required Program of Study for Diploma (34 weeks)

FRESHMAN YEAR

First Semester		Second Semester	
Course	Credits	Course	Credits
ARCH 1160 Fundamentals of Drafting	3	ARCH 1120 Materials of Construction	3
ARCH 1130 Introduction to Construction Documents	3	ARCH 1220 Estimating for Construction	3
ARCH 1270 Computer Assisted Drafting I	4	ARCH 1230 Introduction to REVIT	4
OFFT 1500 Microsoft Office	3	MATH 1060 Technical Mathematics II	3
MATH 1020 Technical Mathematics I	3	BSAD 2050 Business Communications	3
	16		16
		Total Credit Hours	32

DRAFTING DIPLOMA - MECHANICAL

The mechanical drafting diploma develops a basic understanding of the design drafting process, materials, and theory of the manufacturing processes used in industry. Graduates of the program are prepared for entry level employment in the mechanical drafting fields. Students will take the "CSWA" exam and become a Certified SolidWorks Associate upon completion of the Diploma. All of the course work will apply to associate of applied science degree.

Required Program of Study for Diploma (34 weeks)

FRESHMAN YEAR

First Semester		Second Semester	
Course	Credits	Course	Credits
ARCH 1160 Fundamentals of Drafting	3	ARCH 1280 Introduction to SolidWorks	4
ARCH 1270 Computer Assisted Drafting I	4	ARCH 1285 Geometric Dimensioning and Tolerancing	2
ENGR 1010 Intro to Engineering Design	3	ARCH 1295 Engineering Materials & Processes	2
OFFT 1500 Microsoft Office	3	BSAD 2050 Business Communications	3
MATH 1020 Technical Mathematics I	3	MATH 1060 Technical Mathematics II	3
	16		14
		Total Credit Hours	30

DRAFTING CERTIFICATE

The drafting certificate provides interactive training in basic drafting technique, plan reading and CAD in order to gain the entry-level skills necessary to begin a career in the drafting field - with these skills, they will be able to begin employment as a drafting clerk or as a junior drafter. All of the course work will apply to both the diploma and the associate of applied science degrees.

Required Program of Study for Certificate (17 weeks)

FRESHMAN YEAR

First Semester		
Course		Credits
ARCH 1160 Fundamentals of Drafting		3
ARCH 1130 Introduction to Construction Documents		3
ARCH 1270 Computer Assisted Drafting I		4
OFFT 1500 Microsoft Office		3
MATH 1020 Technical Mathematics I.....		3
		16
Total Credit Hours		16

DRAFTING CERTIFICATE - MECHANICAL

The mechanical drafting certificate provides a basic understanding of print reading and the design process as well as an introduction to CAD using 2D AutoCAD. Graduates with a certificate will be able to begin employment as a drafting clerk or junior drafter. All of the course work will apply to both the diploma and the associate of applied science.

Required Program of Study for Certificate (17 weeks)

FRESHMAN YEAR

First Semester		
Course		Credits
ARCH 1160 Fundamentals of Drafting		3
ARCH 1270 Computer Assisted Drafting I		4
ENGR 1010 Intro to Engineering Design.....		3
OFFT 1500 Microsoft Office		3
MATH 1020 Technical Mathematics I.....		3
		16
Total Credit Hours		16

EARLY CHILDHOOD EDUCATION

Students who intend to pursue a career working with children and wish to continue their education at a four-year college will pursue the Associate of Arts degree, which includes early childhood courses as well as general education classes that meet bachelor's degree requirements for careers in early childhood, early childhood inclusive education, or elementary education with an endorsement in early childhood.

In addition to lecture classes, students may gain experience by working in child care centers and schools. Child care providers require a criminal background check prior to employment. Students will be required to submit to a background check prior to enrolling in early childhood education practicum courses. Individuals with a criminal record may not be eligible for employment. Please check with your advisor.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester		Credits
Course		
ECED 1050 Expressive Arts.....		3
ECED 1150 Introduction to Early Childhood Education.....		3
ECED 1110 Infant/Toddler Development.....		3
ECED 1220 Pre-Practicum.....		1
ENGL 1010 English Composition I.....		3
PSYC 1810 Introduction to Psychology.....		3
		16

Second Semester		Credits
Course		
ECED 1060 Observation, Assessment, and Guidance.....		3
ECED 1120 Preschool Child Development.....		2
ECED 1230 School Age Child Development and Programming....		2
ECED 1610 Infant Practicum.....		1
ECED 1620 Toddler Practicum.....		1
MATH 1010 Math for Elementary Teachers.....		3
English/Literature*.....		3
		15

SOPHOMORE YEAR

First Semester		Credits
Course		
ECED 1630 Preschool Practicum.....		1
ECED 1640 School Age Practicum.....		1
ECED 2060 Early Childhood Education Curriculum Planning		3
HPER 1550 Lifetime Wellness.....		3
History*.....		3
Natural Science*.....		4-5
		15-16

Second Semester		Credits
Course		
ECED 2050 Children with Exceptionalities.....		3
ECED 2070 Family and Community Relationships.....		3
ECED 2500 Early Childhood Administration.....		2.5
Fine Arts and Language*.....		3
Oral Communication*.....		3
Social Science*.....		3
		17.5

Total Credit Hours **63.5-64.5**

Approved Electives: ECED 1260 Health, Safety, and Nutrition; EDUC 1110 Introduction to Professional Education.; PSYC 2300 Psychology of Learning.

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

NOTE: Sixty credit hours (which must include at least one professional education course that deals with children, schools or education) and evidence of Human Relations training (verified through documentation of relevant work experience, successful completion of SOCI 2150 Issues of Unity and Diversity, or Human Relations coursework taken from a four-year institution) will meet the requirements to apply for local substitute teaching certification from the Nebraska Department of Education. Check online at www.nde.state.ne.us for more information.

* See general education requirements.

EARLY CHILDHOOD EDUCATION

The Early Childhood Education Certificate prepares students for entry-level positions in childcare and satisfies the 120 clock hours of professional early childhood education required for CDA® credentialing awarded by the Council for Professional Recognition. These courses may also be applied toward either an Associate of Arts Degree or an Associate of Applied Science Degree at Northeast Community College.

To earn a CDA® in Infant and Toddler (Birth-36 months), Preschool (3-5 years), or Family Child Care candidates must also obtain 480 hours of experience working with young children and prepare a CDA® professional portfolio. See <https://www.cdacouncil.org/> for additional information about CDA® credential requirements.



Required Program of Study for Certificate (16 weeks)

FRESHMAN YEAR

First Semester

Course	Credits
ECED 1110 Infant and Toddler Development.....	3
ECED 1120 Preschool Child Development.....	2
ECED 1150 Introduction to Early Childhood Education	3
ECED 1260 Health, Safety & Nutrition.....	3
EDUC 2250 Children's Literature	
or ECED 2070 Family and Community Relationships.....	3
ENGL 1050 Workplace Communications	
or BSAD 2050 Business Communications	3
HLTH 1730 Pediatric Basic Life Support & First Aid .....	.5
	17.5

EARLY CHILDHOOD EDUCATION

An Associate of Applied Science degree with concentration in Early Childhood Education will prepare students to directly enter the workforce as a nanny, paraprofessional, or child care provider in a child care center or home. The Associate of Applied Science degree will prepare graduates for employment opportunities that allow for advancement to leadership positions in child care centers or start their own child care business.

In addition to lecture classes, students gain experience by working in child care centers and schools. Child care providers require a criminal background check prior to employment. Students will be required to submit to a background check prior to enrolling in early childhood education practicum courses. Individuals with a criminal record may not be eligible for employment. Please check with your advisor.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ECED 1050 Expressive Arts	3
ECED 1150 Introduction to Early Childhood Education	3
ECED 1110 Infant/Toddler Development	3
ECED 1220 Pre-Practicum	1
BSAD 2050 Business Communication	3
BSAD 1000 Human Relations and Ethics	3
	16

Second Semester	
Course	Credits
ECED 1060 Observation, Assessment and Guidance	3
ECED 1120 Preschool Child Development.....	2
ECED 1230 School Age Child Development and Programming	2
ECED 1260 Health, Safety, and Nutrition.....	3
ECED 1610 Infant Practicum	1
ECED 1620 Toddler Practicum	1
MATH 1010 Math for Elementary Teachers	3
	15

SOPHOMORE YEAR

First Semester	
Course	Credits
ECED 1160 Early Language and Literacy	3
ECED 1630 Preschool Practicum	1
ECED 1640 School Age Practicum.....	1
ECED 2060 Early Childhood Educ Curriculum Planning	3
EDUC 2250 Children's Literature	3
BSAD 1040 Personal Finance	3
	14

Second Semester	
Course	Credits
ECED 2050 Children with Exceptionalities	3
ECED 2070 Family and Community Relationships	3
ECED 2500 Early Childhood Administration.....	2.5
HLTH 1730 Pediatric Basic Life Support & First Aid	0.5
OFFT 1500 Microsoft Office	3
Approved Electives*	3-4
	15-16

Total Credit Hours 60-61

NOTE: All Practicum courses require a minimum grade of "C".

*Approved electives: LEAD 1010 Introduction to Community Leadership; SIGN 1000 Conversational Sign Language; SPAN 1000 Essential Conversational Spanish; SPAN 1200 Elementary Spanish I; SPAN 1210 Elementary Spanish II; SOCI 2150 Issues of Unity and Diversity; INFO 1710 Web Page Development.

EDUCATION - ELEMENTARY

Teacher education students take three types of courses at Northeast Community College. General courses are required of all associate of arts degree candidates and promote general knowledge. Subject courses help students learn the subjects they will be teaching. For an understanding of the teaching profession, students take professional education courses that instruct students how to teach. Teacher education students have opportunities for practical experience in elementary classrooms while completing course work. To become an elementary teacher, students may complete a two-year liberal arts program at Northeast and then transfer credits to a four-year college offering the bachelor's degree in teacher education. Employers include K-6, and in some cases K-8, school systems, correctional institutions, hospitals, vocational services, and community organizations.

Students should work closely with Northeast advisors and transfer colleges in planning specific course schedules because requirements vary, depending on the choice of transfer.

Schools require a background check prior to employment. Students will be required to submit to a background check prior to completing any classroom field experience. Individuals with a criminal record may not be eligible for employment as an educator. Please check with your advisor.

Suggested Program of Study for Associate of Arts Degree (2 years) Elementary Education

FRESHMAN YEAR

First Semester

Course	Credits
BIOS 1010 General Biology.....	4
EDUC 1110 Introduction to Professional Education	3
ENGL 1010 English Composition I.....	3
MUSC 1010 Introduction to Music	3
PSYC 1810 Introduction to Psychology.....	3
	16

Second Semester

Course	Credits
ARTS 2250 Elementary School Art.....	3
HIST 1050 World History I, or HIST 1060 World History II.....	3
HPER 2510 Physical Education in Elementary School with Practicum.....	3
PHYS 1100 Physical Science.....	4
Oral Communication*.....	3
	16

SOPHOMORE YEAR

First Semester

Course	Credits
ARTS 1050 Introduction to Art History & Criticism I or ARTS 1060 Introduction to Art History & Criticism II.....	3
HPER 1550 Lifetime Wellness	3
EDUC 2070 Family and Community Relationships.....	3
MATH 1010 Math for Elementary Teachers.....	3
MUSC 2350 Elementary School Music.....	3
Elective.....	3
	18

Second Semester

Course	Credits
EDUC 1700 Professional Practicum-Elementary School.....	1-2
HIST 2010 American History I or HIST 2020 American History II.....	3
EDUC 2250 Children's Literature	3
English/Literature	3
PSYC 2300 Psychology of Learning	3
Social Science*.....	3
	16-17

Total Credit Hours 66-67

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

** See advisor. Recommended elective depends on transfer institution requirements: ECED 2050 Children with Exceptionalities; FREN 1200 or 1210 Elementary French I or II; MATH 1015 Geometry for Elementary Teachers; OFFT 1500 Microsoft Office; SOCI 2150 Issues of Unity and Diversity; SPAN 1200 or SPAN 1210 Elementary Spanish I or II.

Sixty credit hours (which must include at least one professional education course that deals with children, schools or education) and evidence of Human Relations training (verified through documentation of relevant work experience, successful completion of SOCI 2150 Issues of Unity and Diversity, or Human Relations coursework taken from a four-year institution) will meet the requirements to apply for local substitute teaching certification from the Nebraska Department of Education. Check online at www.education.ne.gov/tcert/ for more information.

EDUCATION - SECONDARY

To become a secondary teacher, students may complete a two-year liberal arts program at Northeast and then transfer credits to a four-year college offering the bachelor's degree in teacher education. Teacher education students take three types of courses at Northeast Community College. General courses are required of all associate of arts degree candidates and promote general knowledge. Subject courses help students learn the subjects they will be teaching. For an understanding of the teaching profession, students take professional education courses that instruct students how to teach. Teacher education students have opportunities for practical experience in secondary classrooms while completing course work. Employers include 7-12 school systems, correctional institutions, hospitals, vocational services, and community organizations.

Students should work closely with Northeast advisors and transfer colleges in planning specific course schedules because requirements vary, depending on the choice of transfer.

Schools require a background check prior to employment. Students will be required to submit to a background check prior to completing any classroom field experience. Individuals with a criminal record may not be eligible for employment as an educator. Please check with your advisor.

Suggested Program of Study for Associate of Arts Degree (2 years) Secondary Education

FRESHMAN YEAR

First Semester	
Course	Credits
ENGL 1010 English Composition I	3
PSYC 1810 Introduction to Psychology.....	3
Social Science*.....	3
Natural Science*.....	4-5
Subject Course.....	3
	16-17

Second Semester	
Course	Credits
EDUC 1110 Introduction to Professional Education.....	3
Oral Communication*	3
Mathematics*.....	3-5
Social Science Elective**	3
Subject Course.....	3
	15-17

SOPHOMORE YEAR

First Semester	
Course	Credits
HIST 1050 World History I or HIST 2010 American History I	3
PSYC 2110 Child and Adolescence Psychology or PSYC 2300 Psychology of Learning	3
Fine Arts and Language*	3
English/Literature*.....	3
Subject Course.....	3
	15

Second Semester	
Course	Credits
EDUC 1710 Professional Practicum - Secondary School.....	1-2
HPER 1550 Lifetime Wellness	3
Subject Courses or electives**	10
	14-15

Total Credit Hours 60-64

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

**Recommended electives: SOCI 2150 Issues of Unity and Diversity and others dependency on educational goals and transfer requirements.

Sixty credit hours (which must include at least one professional education course that deals with children, schools or education) and evidence of Human Relations training (verified through documentation of relevant work experience, successful completion of SOCI 2150 Issues of Unity and Diversity, or Human Relations coursework taken from a four-year institution) will meet the requirements to apply for local substitute teaching certification from the Nebraska Department of Education. Check online at www.education.ne.gov/tcert/ for more information.

EDUCATION - PARAPROFESSIONALS

Education paraprofessionals perform duties that are instructional in nature or that deliver direct services to students or parents. Paraprofessionals serve in positions for which a teacher or another professional has ultimate responsibility for the design and implementation of educational programs and services. Substitute teaching opportunities may also be available.

A combination of general education requirements, selected education-related courses, and suggested electives will lead to an associate of arts degree with a concentration in paraprofessional education. Sixty credit hours (which must include at least one professional education course that deals with children, schools, or education) and evidence of Human Relations training (verified through documentation of relevant work experience, successful completion of SOCI 2150 Issues of Unity and Diversity, or Human Relations coursework taken from a four-year institution) will meet the requirements to apply for local substitute teaching certification from the Nebraska Department of Education. Check online at www.education.ne.gov/tcert/ for more information.

Schools require a criminal background check prior to employment. Students will be required to submit to a background check prior to completing any classroom field experience. Individuals with a criminal record may not be eligible for employment as an educator. Please check with your advisor.

Suggested Program of Study for Associate of Arts Degree (2 years) Education Paraprofessionals

FRESHMAN YEAR

First Semester

Course	Credits
EDUC 1110 Introduction to Professional Education	3
ENGL 1010 English Composition I	3
Social Science*	3
Fine Arts and Language*	3
History*	3
	15

Second Semester

Course	Credits
ECED 2050 Children with Exceptionalities	3
OFFT 1500 Microsoft Office	3
BIOS 1010 General Biology	4
PSYC 1810 Introduction to Psychology	3
English/Literature*	3
	16

SOPHOMORE YEAR

First Semester

Course	Credits
SPAN 1200 Elementary Spanish I or SPAN 1210 Elementary Spanish II	4
MATH 1010 Math for Elementary Teachers	3
PSYC 2300 Psychology of Learning	3
EDUC 2070 Family and Community Relationships	3
Electives***	2
	15

Second Semester

Course	Credits
HPER 1550 Lifetime Wellness	3
LIBR 1310 Library Orientation and Usage	1
PSYC 2110 Child and Adolescent Psychology** or ECED 1120 Preschool Child Development** and ECED 1230 School Age Child Development and Program ming**	3-4
SOCI 2150 Issues of Unity and Diversity**	3
Oral Communication*	3
Elective***	3
	16-17

Total Credit Hours 62-63

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

**Discuss with advisor prior to enrollment.

***Suggested elective: ECED 1150 Introduction to Early Childhood Education, EDUC 2250 Children's Literature, HLTH 1710 First Aid, MATH 1015 Geometry for Elementary Teachers, or a second history, science, or fine arts course of a different focus than first taken.

ELECTRICAL CONSTRUCTION AND CONTROL

Students in the electrical construction and control program learn the basics of electrical wiring used in the installation and maintenance of lighting, appliances, motors, heating, and air conditioning. Training includes the operation, testing, and maintenance of electrical equipment and electronics for skills in electrical controls and solid state devices, as well as computer experience using a programmable controller. Power distribution, industrial maintenance, electrical and service work, installation and service of irrigation equipment, and new construction are some of the areas with employment opportunities for graduates of the two-year electrical program. (Enrollment into this program is limited and based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ELTR 1010 Basic Electricity	3
ELTR 1020 Basic Electricity Lab	2
ELTR 1030 Electrical Wiring I	3
ELTR 1040 Electrical Wiring I Lab	3
ELTR 1050 National Electrical Code I	3
ECON 1010 Personal and Business Finance.....	2
MATH 1020 Technical Mathematics I.....	3
	19

Second Semester	
Course	Credits
ELTR 1200 National Electrical Code II.....	3
ELTR 1210 Electrical Wiring II.....	3
ELTR 1220 Electrical Wiring II Lab.....	2
ELTR 1230 Motor Control	2
ELTR 1240 Motor Control Lab	2
ELTR 1250 Blueprint and Cost Estimating	3
MATH 1060 Technical Mathematics II.....	3
	18

Required Summer: 12 weeks

ELTR 1300 Cooperative Internship I.....	8
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SOPHOMORE YEAR

First Semester	
Course	Credits
ELTR 2000 Motor Theory and Application	2
ELTR 2010 Motor Theory and Application Lab	1
ELTR 2020 Automation Fundamentals	2
ELTR 2030 Automation Fundamentals Lab	2
ELTR 2045 Electrical Energy Conservation I.....	3
ELTR 2055 Electrical Troubleshooting.....	2
ELTR 2065 Electrical Troubleshooting Lab.....	2
ENGL 1050 Workplace Communication.....	3
	17

Second Semester	
Course	Credits
ELTR 2210 Control Wiring.....	3
ELTR 2215 Control Wiring and Solid State Lab	2.5
ELTR 2235 Electrical Energy Systems.....	3
ELTR 2245 Electrical Energy Systems Lab.....	2
ELTR 2260 Solid State Fundamentals	2
PSYC 1000 Human Relations.....	2
HLTH 1710 First Aid.....	2
	16.5

Total Credit Hours	78.5
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ELECTROMECHANICAL TECHNOLOGY

The electromechanical technology program will allow students to learn the skills and knowledge to install, maintain, and repair complex industrial equipment. The students will focus on electrical principles, circuitry, electrical controls, robotics, print reading, programming, computer-aided drafting, mechanical systems, and other components related to electromechanical repair. Students will acquire the knowledge and skills through concentrated classroom and hands-on learning. Successful graduates are placed in industrial plants, hospitals, schools, apartment complexes, office buildings, and other building maintenance positions. (Enrollment into this program is limited and is based on the date of application.)

Before admission to this concentration, students will need to attain the following minimum entrance scores or equivalent. MAP: Math 212; Reading/Language 216+; ACT: Math 16, Reading 14, English 14.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ELMC 1010 Fundamentals of Electricity.....	3
ELMC 1020 Fundamentals of Electricity Lab.....	2
ELMC 1030 Orientation and Safety.....	2
INDT 1090 Introduction to Machining.....	.5
INDT 1095 Introduction to Machining Lab.....	1
WELD 1010 Related Welding.....	.5
WELD 1020 Related Welding Lab.....	1
ELMC 1070 Automation Fundamentals.....	3
ELMC 1090 Mechanical Matter and Energy.....	3
MATH 1020 Technical Mathematics I.....	3
	<u>19</u>

Second Semester	
Course	Credits
ELMC 1110 Motor Control.....	2
ELMC 1120 Motor Control Lab.....	2
ELMC 1150 Introduction to Mechanics.....	3
ELMC 1160 Introduction to Mechanics Lab.....	3
ELMC 1170 Total Quality Management.....	2
CAPL 1290 Introduction to Job Search and Employment.....	1
ECON 1010 Personal and Business Finance.....	2
MATH 1060 Technical Mathematics II.....	3
	<u>18</u>

Summer: 12 weeks

ELMC 1300 Cooperative Internship I.....	8
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SOPHOMORE YEAR

First Semester	
Course	Credits
ELMC 2010 Introduction to Automated Controls.....	2
ELMC 2020 Introduction to Automated Controls Lab.....	2
ELMC 2030 Motor Repair.....	2
ELMC 2040 Motor Repair Lab.....	1
ELMC 2052 Fluid Fundamentals.....	3
ELMC 2062 Fluid Fundamentals Lab.....	1
ELMC 2070 Machine Repair.....	2
ELMC 2080 Machine Repair Lab.....	2.5
	<u>15.5</u>

Second Semester	
Course	Credits
ELMC 2110 Control Systems.....	3
ELMC 2120 Control Systems Lab.....	2.5
ELMC 2150 Solid State Fundamentals.....	4
ELMC 2170 Electromechanical Systems.....	1
ELMC 2190 Electromechanical Systems Lab.....	2
PSYC 1000 Human Relations.....	2
ENGL 1050 Workplace Communication.....	3
	<u>17.5</u>

Total Credit Hours	78
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ENGLISH

Students who plan to earn a degree with an English concentration may complete a two-year liberal arts program with special emphasis on composition and literature. Upon completion of the two-year program, students may choose to enter the job market in a variety of occupations that demand effective expression or to transfer credits toward a bachelor's degree in English at a four-year college or university. Career areas that require effective communication include journalism, technical writing, publishing, education, advertising, public relations, and law.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ENGL 1010 English Composition I.....	3
Mathematics*.....	3-5
Behavioral Science*.....	3
HPER 1550 Lifetime Wellness.....	3
	12-14
Second Semester	
Course	Credits
ENGL 2100 Introduction to Literature.....	3
HUMS 1100 Introduction to Humanities or ENGL 1020 Composition II.....	3
ENGL 2050 Creating Stories I.....	3
ENGL 2190 Comparative Mythology.....	3
Natural Science*.....	4-5
	16-17

SOPHOMORE YEAR

First Semester	
Course	Credits
ENGL 2170 Comics and Graphic Novels or ENGL 2730 Novel and the Movie.....	3
GEOG 1020 World Regional Geography.....	3
ENGL 2030 Creating Poetry I.....	3
ENGL 2150 American Literature to 1865 or ENGL 2160 American Literature after 1865.....	3
SPAN 1200 Elementary Spanish I or FREN 1200 Elementary French I.....	4
	16
Second Semester	
Course	Credits
ENGL 2040 Creating Poetry II or ENGL 2060 Creating Stories II.....	3
ENGL 2140 Introduction to Shakespeare or ENGL 2200 British Literature to 1800 or ENGL 2210 British Literature after 1800.....	3
ENGL 2090 Editing and Publishing.....	1
History*.....	3
Fine Arts & Language*.....	3
Oral Communication*.....	3
	16
Total Credit Hours	60-63

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirement.

EXERCISE SCIENCE

Students pursuing a career in the fitness industry are able to complete an Associate of Science degree with a concentration in Exercise Science. Exercise Science has been identified as a rapidly growing industry at both the state and national levels. The curriculum is designed to integrate the educational and practical skills necessary to become an exercise professional. Exercise science professionals work and study in commercial, clinical, and workplace settings increasing awareness of health, fitness, and improved quality of life for the general population. Upon completion of the Associate of Science degree, students will be prepared to take a national certifying exam. They may choose to enter the workforce as a certified personal trainer, or continue their education at a transfer institution to obtain a bachelor's degree in a health-related field.

Suggested Program of Study for Associate of Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
HPER 1510 Introduction to Physical Education.....	3
ENGL 1010 English Composition I	3
MATH 1150 College Algebra	3
HPER 1550 Lifetime Wellness	3
PRTR 2210 Introduction to Personal Training	4
	16

Second Semester	
Course	Credits
BIOS 2250 Intro to Human Anatomy and Physiology I.....	4
HPER 1270 Aerobic Fitness	1
HPER 1520 Nutrition for Fitness and Sport or HOEC 1050 Nutrition.....	3
HPER 2310 Community Health.....	3
PRTR 2410 Advanced Personal Training	4
	15

SOPHOMORE YEAR

First Semester	
Course	Credits
BIOS 2260 Intro to Human Anatomy and Physiology II.....	4
HLTH 1060 Comprehensive Medical Terminology	3
HPER 1245 Weight Management.....	1
HPER 2300 Stress Management	3
Oral Communication	3
Behavioral & Social Sciences	3
	17

Second Semester	
Course	Credits
HPER 2200 First Aid & CPR for the Health Care Provider.....	3
INFO 1100 Microcomputer Applications.....	3
MATH 2170 Applied Statistics.....	3
English/Literature	3
Behavioral & Social Sciences	3
	15

Total Credit Hours 63

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

FOOD SERVICE AND DIETARY MANAGEMENT CERTIFICATE

The Association of Nutrition and Foodservice Professionals (ANFP) approved Dietary Managers Training Program (17 credit hours) - supplies students with the knowledge and skills necessary in non-commercial food service operations. Specific topics covered deal with nutrition, menu planning, food preparation, sanitation and safety, human relations, purchasing, scheduling, training, record keeping, and supervision. Upon the successful completion of the required program courses, graduates are prepared to enter jobs as food service employees, managers, and supervisors.

With the successful completion of program courses, graduates will be eligible to take the nationally recognized Certifying Board for Dietary Managers CDM credentialing exam to obtain the credential of Certified Dietary Manager/Certified Food Protection Professional (CDM/CFPP). Students registering must have the program director's permission and work in the food service department of a health care facility while enrolled in the field experience courses. The student will complete 150 precepted hours as part of the field experience course.



Food Service and Dietary Management program of Northeast Community College is approved by the Association of Nutrition and Foodservice Professionals (ANFP), 406 Surrey Woods Drive, St. Charles, IL 60174, phone (630) 587-6308.

Required Program of Study for Certificate (34 weeks)

First Semester		Second Semester	
Course	Credits	Course	Credits
FSDT 1210 Supervision of Food Service Professionals	3	OFFT 1500 Microsoft Office	3
FSDT 1221 Introduction to Food Service Nutrition	1	FSDT 1231 Sanitation and Food Safety	2
FSDT 1223 Food Service for Medical Nutrition Therapy	1.5	FSDT 1250 Managing Food Service Operations	2.5
FSDT 1225 Field Experience – Nutrition and Diet Therapy	1.5	FSDT 1255 Field Experience – Management of Food Service	
FSDT 1260 Field Experience – Supervision for Food		Operations, Sanitation and Food Safety.....	1.5
Service Professionals	1		<u>9</u>
	<u>8</u>		
		Total Credit Hours	17

Food Service and Dietary Management classes are only offered as online delivered classes.

Note: Students registering for a field experience class must work in the food service area of a health care facility and receive approval from either the program director or program coordinator.

Food Service and Dietary Management program is approved by the Association of Nutrition and Foodservice Professionals (ANFP) 406 Surrey Woods Drive, St. Charles, IL 60174, phone (630)587-6308.

GENERAL STUDIES

The general studies associate of arts degree concentration recognizes those individuals who have completed various courses without a specific major or concentration in mind. In addition, the general studies concentration of 29 credit hours is designed for those students who want a broad-based grouping of courses either in career oriented or other academic areas without the constraints of specialization. Students who choose this degree concentration, will need a total of 60 credit hours: 31 credit hours in general education and, through advisement, 29 credit hours of approved vocational/occupational theory classes and/or other academic electives.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ENGL 1010 English Composition I	3
Behavioral Science*	3
Approved Electives**	9
	15

Second Semester	
Course	Credits
English/Literature*	3
HPER 1550 Lifetime Wellness	3
Social Science*	3
Approved Electives**	6
	15

SOPHOMORE YEAR

First Semester	
Course	Credits
Oral Communication*	3
Mathematics*	3-5
Approved Electives**	9
	15-17

Second Semester	
Course	Credits
Natural Science*	4-5
History*	3
Fine Arts and Language*	3
Approved Electives**	5
	15-16

Total Credit Hours 60-63

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

**All courses at the 1000 level and above are accepted for an AA degree with an emphasis in general studies.

GLOBAL STUDIES

A Global Studies concentration provides students with the knowledge, critical thinking, communication, and analytical skills necessary to be successful in an increasingly complex and inter-connected world. This is an interdisciplinary program of study designed to give students a framework that can lead them into various and diverse career fields that require a global perspective, such as government, international trade, international banking and economics, diplomacy, non-profits, international security, travel and tourism, and the like.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ENGL 1010 English Composition I	3
GEOG 1020 World Regional Geography	3
SPCH 1010 Fundamentals of Communication or SPCH 1110 Public Speaking.....	3
Foreign Language.....	4
Mathematics*	3
	16

Second Semester	
Course	Credits
English/Literature*	3
Foreign Language.....	4
HPER 1550 Lifetime Wellness	3
POLS 1600 International Relations	3
SOCI 2150 Issues of Unity and Diversity.....	3
	16

SOPHOMORE YEAR

First Semester	
Course	Credits
AGRI 1290 International Agriculture and Agribusiness or BSAD 2250 International Business	3
HIST 1050 World History I.....	3
SOCI 1010 Introduction to Sociology	3
HUMS 1100 Introduction to Humanities	3
Natural Science*	4
	16

Second Semester	
Course	Credits
GLBS 2900 Global Capstone Project.....	3
HIST 1060 World History II.....	3
SOCI 2320 Social Problems	3
SPCH 2300 Intercultural Communications	3
	12

Total Credit Hours	60
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To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirement.

GRAPHIC DESIGN

The graphic design program is a two-year liberal arts curriculum for those students planning to transfer to a four-year college for the completion of a bachelor degree in graphic design, graphic communication, media arts, or related areas. This program of study emphasizes conceptual skill development, image production, elements of design and graphic design related software proficiency. This program prepares the student to be successful at the transfer institution.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
GCAD 1300 Design I	3
GCAD 1450 Graphic Arts I.....	3
ENGL 1010 English Composition I.....	3
ARTS 1050 Introduction to Art History & Criticism I.....	3
GCAD 1700 Digital Photography.....	3
	15

Second Semester	
Course	Credits
GCAD 1600 Design II.....	3
ARTS 1060 Introduction to Art History & Criticism II.....	3
GCAD 1100 Typography	3
INFO 1710 Web Page Development	1
English/Literature*.....	3
Mathematics*.....	3
	16

SOPHOMORE YEAR

First Semester	
Course	Credits
GCAD 2450 Graphic Arts II.....	3
GCAD 1250 Drawing Logic I.....	3
HPER 1550 Lifetime Wellness	3
History*.....	3
Natural Science*	4
	16

Second Semester	
Course	Credits
Electives (ARTS or GCAD Courses)*.....	3
Oral Communication*	3
ECON 2110 Principle of Macroeconomics.....	3
INFO 2250 Web Development Using HTML and CSS.....	3
PSYC 1810 Introduction to Psychology.....	3
	15

Total Credit Hours **62**

Recommended electives: GCAD 2100 Digital Prepress, GCAD 1000 Layout and Design I, GCAD 2450 Graphic Arts II, GCAD 2500 Layout and Design II, GCAD 2300 Package Design.

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirement.

GRAPHIC DESIGN

This program prepares students for a variety of job opportunities in the exciting field of graphic design. The program emphasizes technical skill development using industry standard design software, as well as developing knowledge in the principles of design and artistic expression. (Enrollment into this program is limited and based on the date of application.)

The associate of applied science degree is suggested for those seeking employment upon graduation and feel quite certain that they will not continue their education toward a bachelors degree. Students interested in continuing their education at a four-year college or university should enroll in the associate of art degree graphic design program.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
GCAD 1250 Drawing Logic I.....	3
GCAD 1300 Design I.....	3
GCAD 1700 Digital Photography.....	3
ARTS 1050 Introduction to Art History & Criticism I or ARTS 1060 Introduction to Art History & Criticism II.....	3
GCAD 1450 Graphic Arts I.....	3
	15

Second Semester	
Course	Credits
GCAD 1100 Typography.....	3
GCAD 1600 Design II.....	3
GCAD 1500 Layout and Design I.....	3
GCAD2100 Digital Pre-Press.....	3
MATH 1100 Topics and Ideas in Mathematics.....	3
INFO 1710 Web Page Development.....	1
	16

Summer	
GCAD1310 Cooperative Internship I.....	1-3

SOPHOMORE YEAR

First Semester	
Course	Credits
BSAD 2520 Principles of Marketing.....	3
GCAD 2450 Graphic Arts II.....	3
GCAD 2500 Layout and Design II.....	3
INFO 2230 Web Page Development II.....	3
BSAD 2050 Business Communications.....	3
	15

Second Semester	
Course	Credits
INFO 2250 Web Development Using HTML and CSS.....	3
ECON 1040 Personal Finance.....	3
PSYC 1810 Introduction to Psychology.....	3
GCAD 2300 Package Design.....	3
GCAD 2610 Graphic Design Capstone.....	1
GCAD 2200 Typography II.....	3
	16

Total Credit Hours	63-65
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HEALTH INFORMATION MANAGEMENT SYSTEMS

Health Information Management (HIM) professionals play a critical role in maintaining, collecting and analyzing the data that physicians, nurses and other health care providers rely on to deliver quality health care. As the experts in patient health data management, they work in a variety of health care settings including hospitals, outpatient clinics, government agencies and private industry. As emerging technologies work towards a fully electronic future, HIM professionals are needed to fill the growing work force. They will be called on to improve efficiency in health care facilities by optimizing efficiency in billing and improving electronic data integrity through quality management. With estimated projections in employment expected to grow faster than average, this is a rapidly expanding profession in an exciting area of health care.

As an HIM professional, you will bring unique skills to the health care industry such as managing health records and health information systems, summarizing data into useful information, protecting the privacy and security of patient health information and assisting providers in understanding data flow and reporting requirements within the context of dynamic rules, regulations and guidelines. At Northeast Community College, our Health Information Management program provides you with the fundamental skills necessary to begin a career in Health Information Management.



The Health Information Management Systems Associate of Applied Science Degree at Northeast Community College is accredited by the Commission on Accreditation for Health Informatics and Information Management Education (CAHIIM).

CAHIIM | 200 East Randolph Street, Suite 5100 | Chicago, IL 60601
 telephone: 312-233-3255 | info@cahiim.org | www.cahiim.org

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BSAD 2050 Business Communications.....	3
HIMS 1000 Introduction to HIM.....	2
HIMS 1020 Health Care Delivery Systems.....	3
HLTH 1060 Comprehensive Medical Terminology.....	3
HIMS 1220 Structure & Function of Human Body.....	3
OFFT 1500 Microsoft Office.....	3
	17

Second Semester	
Course	Credits
ECON 2110 Principles of Macroeconomics.....	3
HIMS 1010 Electronic Health Records.....	2
HIMS 1110 Coding I.....	3
HIMS 1120 Legal and Compliance Issues.....	3
HIMS 1130 Disease Processes.....	3
MATH 2170 Applied Statistics.....	3
	17

SOPHOMORE YEAR

First Semester	
Course	Credits
HIMS 2000 Medical Billing and Reimbursement.....	3
HIMS 2010 Pharmacology and Drug Administration.....	3
HIMS 2020 Coding II.....	3
HIMS 2030 Health Information Management Applications.....	3
HIMS 2040 Health Care Information Systems.....	3
	15

Second Semester	
Course	Credits
BSAD 1000 Human Relations and Ethics.....	3
BSAD 2540 Principles of Management.....	3
HIMS 2100 Quality Management & Process Improvement.....	3
HIMS 2110 Health Information Technology Assessment.....	1
HIMS 2120 Professional Practice Experience.....	3
HIMS 2130 Coding III.....	3
	16

Total Credit Hours 65

HEALTH, PHYSICAL EDUCATION, and RECREATION

The health, physical education, and recreation program is designed to provide students with the basic knowledge, skills, and strategies for opportunities in health, human performance and wellness, physical education, athletic training, recreation, coaching, and athletics. Successful graduates may choose to complete a bachelor's degree at a four-year college or university.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
HPER 1550 Lifetime Wellness	3
HPER 1510 Introduction to Physical Education	3
ENGL 1010 English Composition I	3
MATH 1140 Intermediate Algebra	4
HPER Elective**	3
	16

SOPHOMORE YEAR

First Semester	
Course	Credits
HPER 2110 Individual and Dual Sports	3
HPER 2400 Care and Prevention of Athletic Injuries	3
HPER 1520 Nutrition for Fitness and Sport	3
Humanities*	3
Social Science*	3
	15

Second Semester	
Course	Credits
HPER Basic Sports Series***	1
BIOS 1010 General Biology	4
EDUC 1110 Introduction to Professional Education	3
HPER 2200 First Aid & CPR for Health Care Provider	3
Oral Communication*	3
History*	3
	17

Second Semester	
Course	Credits
HPER 2510 Physical Education in the Elementary School	3
HPER 2160 Team Sports	3
HPER Elective**	2
PSYC 1810 Introduction to Psychology	3
Fine Arts and Language*	3
Elective	1
	15

Total Credit Hours 63

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

** Recommended HPER electives: HPER 2300 Stress Management, PRTR 2210 Introduction to Personal Training, and BIOS 2250 Introduction to Human Anatomy and Physiology I.

*** Recommended Basic Sports Series Classes: HPER 1150 Sports Officiating, HPER 1200 Basketball, HPER 1240 Circuit Training, HPER 1245 Weight Management, HPER 1260 Golf, HPER 1270 Aerobic Fitness, HPER 1325 Introduction to Yoga, HPER 1326 Introduction to Pilates, HPER 1350 Recreational Games.

HEATING, VENTILATION, and AIR CONDITIONING

In the heating, ventilation, and air conditioning program students study the physical, mechanical, and chemical principles of refrigeration and air conditioning with emphasis on electrical controls and motors. Students gain proficiency in blueprint reading, sheet metal construction, proper ventilation installation, heating and cooling diagnosis, and installation of residential and commercial equipment. The program prepares students for skilled positions installing and servicing electrical, heating, and cooling systems. (Enrollment into this program is limited and is based on the date of application.)



The Heating, Ventilation, and Air Conditioning (HVAC) program is accredited through HVAC Excellence.

HVAC Excellence

PO Box 491 | Mount Prospect, IL 60056

Phone: (800) 394-5268 | <https://www.escogroup.org/accreditation/default.aspx>

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester

Course	Credits
HVAC 1010 Electricity for HVAC	2.5
HVAC 1020 Electricity for HVAC Lab	4
HVAC 1110 Basic Refrigeration Principles.....	2.5
HVAC 1120 Basic Refrigeration Principles Lab.....	4
HVAC 1130 Sheet Metal.....	3
INFO 1000 Basic Computer Applications.....	2
	<hr/> 18

Second Semester

Course	Credits
HVAC 1210 HVAC Controls.....	3
HVAC 1220 HVAC Controls Lab.....	4
HVAC 1250 Residential Air Conditioning	3
HVAC 1260 Residential Air Conditioning Lab.....	4
MATH 1020 Technical Mathematics I.....	3
CAPL 1290 Introduction to Job Search and Employment	1
	<hr/> 18

Required Summer: 12 weeks

HVAC 1300 Cooperative Internship I.....	6
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SOPHOMORE YEAR

First Semester

Course	Credits
HVAC 2010 Heating Technology	2.5
HVAC 2020 Heating Technology Lab	4
HVAC 2210 Heat Pump Technology	2.5
HVAC 2220 Heat Pump Technology Lab	4
ECON 1010 Personal and Business Finance	2
HVAC 2230 Physics of Building Science or INDT 1040 Industrial Process Dynamics or LEAD 1010 Introduction to Community Leadership	2-3
	<hr/> 17-18

Second Semester

Course	Credits
HVAC 2110 Commercial Refrigeration.....	3
HVAC 2120 Commercial Refrigeration Lab.....	4
HVAC 2310 Commercial Air Conditioning and Refrigeration ..	3
HVAC 2320 Commercial Air Conditioning and Refrigeration Lab	4
ENGL 1050 Workplace Communication.....	3
PSYC 1000 Human Relations.....	2
	<hr/> 19

Total Credit Hours

78-79

HORTICULTURE and GOLF COURSE MANAGEMENT

The curriculum for the horticulture and golf course management program will develop skills in various areas of horticulture to help students gain a broad understanding of the skills needed to succeed in several horticulture industries. Many courses have content to explore business management and personnel development. A consistent focus on environmentally ethical and regenerative practices supplements the horticulture content. Students have many hands-on learning opportunities such as the campus greenhouse, the college farm, and a local 18-hole golf course. A cooperative internship provides valuable supplementation to the classroom by allowing students to gain valuable work experience in a horticulture industry of their choice.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
HORT 1010 Horticulture Science	4
HORT 1025 Residential Turf Management	3
AGRI 1030 Introduction to Soil Science.....	3
HORT 1040 Introduction to Soil Science Lab.....	1
ENGL 1050 Workplace Communication.....	3
HORT 2080 Woody Perennial Identification.....	3
	17

Second Semester	
Course	Credits
HORT 1050 Commercial Turf Management	3
HORT 1060 Commercial Turf Management Lab	1
HORT 1070 Plant Propagation	2
HORT 1080 Plant Propagation Lab	1
HORT 1090 Integrated Pest Management.....	2
MATH 1020 Technical Mathematics I.....	3
BIOS 1050 General Botany	4
	16

Summer: 12 weeks

HORT 1300 Cooperative Internship.....	6
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*Suggested HORT Electives:

- HORT 2000 Landscape History and Use
- HORT 2105 Golf Course Management
- HORT 2140 Hydroponic Growing Systems
- HORT 2150 Annual Flower Identification, Production, and Care
- HORT 2160 Vegetable Garden and Farm Production
- HORT 2165 Value-Added Diversified Marketing
- HORT 2170 Alternative Horticulture

SOPHOMORE YEAR

First Semester	
Course	Credits
HORT 2060 Sports Turf Management	3
HORT 2070 Sports Turf Management Lab.....	1
HORT 2090 Herbaceous Perennial Identification.....	3
HORT 2180 Irrigation and Equipment	3
AGRI 1410 Intro to the Economics of Agriculture.....	3
AGRI 1020 Interpersonal Skills.....	3
	16

Second Semester	
Course	Credits
HORT 2020 Nursery and Greenhouse Management.....	4
HORT 2045 Landscape Management	3
HORT 2055 Landscape Design.....	3
HORT 2890 Horticulture Capstone Experience	1
HORT Electives*	3
	14

Total Credit Hours	69
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HORTICULTURE - GENERAL

The general horticulture diploma is intended to train students to work in portions of the horticulture industry that do not require a full degree. This diploma can be used as a "stepping stone" for students who need to take a non-traditional approach to their career goals. The general horticulture courses help students develop a basic understanding of the science surrounding plants and their environment.

Required Program of Study for Diploma (1 year)

First Semester		Second Semester	
Course	Credits	Course	Credits
HORT 1010 Horticulture Science	4	HORT 1050 Commercial Turf Management	3
HORT 1025 Residential Turf Management	3	HORT 1060 Commercial Turf Management Lab	1
AGRI 1030 Introduction to Soil Science.....	3	HORT 1070 Plant Propagation	2
HORT 1040 Introduction Soil Science Lab.....	1	HORT 1080 Plant Propagation Lab	1
ENGL 1050 Workplace Communication.....	3	HORT 1090 Integrated Pest Management.....	2
HORT 2080 Woody Perennial Identification.....	3	MATH 1020 Technical Mathematics I.....	3
	17	HORT Electives*	2-3
			14-15
		Total Credit Hours	31-32

*Suggested HORT Electives:

- HORT 2000 Landscape History and Use
- HORT 2020 Nursery and Greenhouse Management
- HORT 2045 Landscape Management
- HORT 2055 Landscape Design
- HORT 2060 Sports Turf Management
- HORT 2070 Sports Turf Management Lab
- HORT 2105 Golf Course Management
- HORT 2090 Herbaceous Perennial Identification
- HORT 2140 Hydroponic Growing Systems
- HORT 2150 Annual Flower Identification, Production, and Care
- HORT 2160 Vegetable Garden and Farm Production
- HORT 2165 Value-Added Diversified Marketing
- HORT 2170 Alternative Horticulture

HUMAN SERVICES

Completion of the associate of arts degree with a concentration in human services will provide students with a foundation of knowledge and skills to understand and meet human need. Employees in human services occupations facilitate an overall improvement in the quality of life for a diverse population. Entry-level employment opportunities are available with an associate degree, and with appropriate continued education, students are prepared to pursue careers in mental health, developmental disabilities, alcohol/drug counseling, social work, long-term care administration, and many areas related to caring for youth.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ENGL 1010 English Composition I	3
HUSR 1010 Introduction to Human Services and Counseling..	3
PSYC 1810 Introduction to Psychology.....	3
POLS 1000 American Government	3
Natural Science*	4-5
	16-17

Second Semester	
Course	Credits
PSYC 2200 Lifespan Psychology	3
SOCI 1010 Introduction to Sociology	3
English/Literature *	3
History*	3
Mathematics *	3-5
	15-17

SOPHOMORE YEAR

First Semester	
Course	Credits
HUSR 2010 Introduction to Case Management and Professional Ethics	3
HUSR 2020 Medical and Psycho-Social Aspects of Chemical Use	3
SOCI 2150 Issues of Unity and Diversity	3
Fine Arts and Language *	3
Electives**	3-4
	15-16

Second Semester	
Course	Credits
HUSR 2040 Human Services Practicum	1
HPER 1550 Lifetime Wellness	3
SOCI 2320 Social Problems	3
Oral Communication *	3
Electives**	4-6
	14-16

Total Credit Hours **60-66**

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that includes the general education requirements.

* See general education requirements.

**Recommended electives for drug and alcohol counseling: HUSR 1220 Group Therapy and Practice, HUSR 1230 Multicultural Counseling, HUSR 2030 Treatment Issues in Chemical Dependency. Recommended electives for other fields: PSYC 2500 Social Psychology, PSYC 2800 Abnormal Psychology, PSYC 2110 Child and Adolescent Psychology, SPCH 2010 Interpersonal Communication.

DRUG AND ALCOHOL COUNSELING

Northeast Community College offers the following coursework to meet the 270 clock hours of education required for initial licensure of alcohol and drug counselors in Nebraska. The following courses have been approved by the State of Nebraska Division of Public Health. In addition to the coursework, licensure requires a 300-hour practicum (see Statutes Relating to Alcohol and Drug Counseling at dhhs.ne.gov/licensure for more information). These credit courses may also be applied to an Associate of Arts Degree with a concentration in Human Services.

Required Program of Study for Certificate (16 weeks)

Course	Credits
HUSR 1010 Introduction to Human Services and Counseling..	3
HUSR 1220 Group Therapy and Practice*	3
HUSR 1230 Multicultural Counseling*	2
HUSR 2010 Introduction to Case Management and Professional Ethics*	3
HUSR 2020 Medical and Psycho-Social Aspects of Chemical Use.....	3
HUSR 2030 Treatment Issues in Chemical Dependency.....	2
PSYC 2200 Lifespan Psychology**	3
	19

* Prerequisite: HUSR 1010 with minimum grade of C (Waived for those with LMHP or PLMHP).

**Prerequisite: HUSR 1010 with minimum grade of C or PSYC 1810 with minimum grade of C.

INFORMATION TECHNOLOGY

Associate of Applied Science Degree

Required Program of Study

To earn an associate of applied science degree in Information Technology, a student must successfully complete the following general education and core requirements, in addition to one of the specific concentrations listed on the following pages. Students are encouraged to seek advisement to build a program consistent with their career goals.

Core Requirements

Course	Credits
ACCT 1100 Survey of Accounting	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1420 Introduction to Programming in C#	4
INFO 1170 Operating Systems I.....	3
INFO 2330 Database Concepts, Design and Application	4
INFO 1725 HTML, CSS, and JavaScript	3
INFO 2040 Project Management.....	3
	23

General Education Requirements

Course	Credits
BSAD 1000 Human Relations and Ethics	
or PSYC 1810 Introduction to Psychology	3
BSAD 2050 Business Communications	3
ECON 2110 Principles of Macroeconomics.....	3
INFO 1100 Microcomputer Applications.....	3
MATH 1100 Topics and Ideas in Mathematics.....	3
	15

General Education Requirements

Course	Credits
Core Requirements.....	23
General Education Requirements	15
Approved Concentration Electives	25-33
Total Credit Hours	63-71

BUILD YOUR INFORMATION TECHNOLOGY DEGREE

The information technology career field has many areas of specialization. In order to give students the ability to choose their areas of specialization, the information technology department has developed several AAS degree concentrations which focus on a wide variety of topics.

STEP ONE:

Choose any two of the following career concentrations:

- Cisco Networking Academy
- Information Security
- IBMi Application Development
- Web and Visual Application Development
- Technical Services Support

STEP TWO:

Match your two chosen concentrations from each row and column to find the page for your unique AAS degree concentration.

(For example, if you chose Cisco Networking and Technical Services Support, you would find your AAS program of study on page 134.)

	Cisco Networking	Information Security	IBMi Application	Web and Visual	Technical Services
Cisco Networking		pg. 129	pg. 128	pg. 130	pg. 127
Information Security	pg. 129		pg. 125	pg. 126	pg. 124
IBMi Application	pg. 128	pg. 125			pg. 122
Web and Visual	pg. 130	pg. 126			pg. 131
Technical Services	pg. 127	pg. 124	pg. 122	pg. 131	

STEP THREE:

Go to the page with your AAS Concentration.

IBMi APPLICATION DEVELOPMENT AND TECHNICAL SERVICES SUPPORT CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the IBMi application development certificate option and the technical services support option. A student completing this degree will have the necessary skills to be an entry-level application developer in an IBMi environment and provide necessary technical services support within an organization.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BSAD 2050 Business Communications	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
INFO 1420 Introduction to Programming in C#	4
	<u>16</u>

Second Semester	
Course	Credits
INFO 1150 IBMi Control Language	3
INFO 1450 Programming in RPG IV	5
INFO 1725 HTML, CSS, and JavaScript	3
INFO 2330 Database Concepts, Design and Application	4
MATH 1100 Topics and Ideas in Mathematics.....	3
	<u>18</u>

SOPHOMORE YEAR

First Semester	
Course	Credits
ACCT 1100 Survey Accounting.....	3
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
INFO 1500 Interactive RPG and Subfiles	3
INFO 1600 PC System Maintenance and Repair.....	4
INFO 1610 PC System Maintenance and Repair Lab	1
INFO 2040 Project Management.....	3
INFO 2650 Network Servers	3
	<u>20</u>

Second Semester	
Course	Credits
ECON 2110 Principles of Macroeconomics.....	3
INFO 1800 Microcomputer Applications II	3
INFO 1850 Operation Systems II.....	3
INFO 2020 Systems Analysis and Design	5
INFO 2610 Computer Support Technology	3
	<u>17</u>

Total Credit Hours 71

APPLICATION DEVELOPMENT CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the IBMi application development certificate and the web and visual application development certificate. A student completing this degree will have the necessary skills to be an entry-level application developer in multiple environments.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BSAD 2050 Business Communications	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
INFO 1420 Introduction to Programming in C#	4
	16

Second Semester	
Course	Credits
INFO 1150 IBMi Control Language.....	3
INFO 1450 Programming in RPG IV	5
INFO 1725 HTML, CSS, and JavaScript	3
INFO 2330 Database Concepts, Design and Application	4
INFO 2550 Programming in Java.....	4
	19

SOPHOMORE YEAR

First Semester	
Course	Credits
ACCT 1100 Survey of Accounting	3
INFO 1440 Advanced Programming in C#	3
INFO 1500 Interactive RPG and Subfiles	3
INFO 2040 Project Management.....	3
MATH 1100 Topics and Ideas in Mathematics.....	3
	15

Second Semester	
Course	Credits
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
ECON2110 Principles of Macroeconomics	3
INFO 2020 Systems Analysis and Design	5
INFO 2400 Advanced Web Programming	4
	15

Total Credit Hours 65

INFORMATION SECURITY AND TECHNICAL SERVICES SUPPORT CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the information security certificate and the technical services support certificate. A student completing this degree will have the necessary skills to provide technical services support within an organization and have the skills necessary to help the organization ensure continuous operation by safeguarding data from attacks and disasters.



The National Security Agency and Department of Homeland Security has designated Northeast Community College as an institution for CAE-2Y - National Centers of Academic Excellence in Cyber Defense 2-Year Education

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester

Course	Credits
BSAD 2050 Business Communications.....	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
INFO 1420 Introduction to Programming in C#	4
	16

Second Semester

Course	Credits
ACCT 1100 Survey of Accounting	3
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
MATH 1100 Topics and Ideas in Mathematics.....	3
	16

SOPHOMORE YEAR

First Semester

Course	Credits
ECON2110 Principles of Macroeconomics	3
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
INFO 2040 Project Management.....	3
INFO 2650 Network Servers.....	3
INFO 2700 Cisco Networking I.....	4
	17

Second Semester

Course	Credits
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
INFO 1800 Microcomputer Applications II	3
INFO 2610 Computer Support Technology	3
INFO 2720 Principles of Information Security.....	3
INFO 2730 Information Security Lab	1
INFO 2800 CompTIA Security+ Certification.....	1
	14

Total Credit Hours 63

INFORMATION SECURITY AND IBMi APPLICATION DEVELOPMENT CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the information security certificate and the IBMi application development certificate. A student completing this degree will have the necessary skills to be an entry-level application developer in an IBMi environment and have the skills necessary to help the organization ensure continuous operation by safeguarding data from attacks and disasters.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BSAD 2050 Business Communications.....	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
INFO 1420 Introduction to Programming in C#	4
	16

Second Semester	
Course	Credits
INFO 1150 IBMi Control Language.....	3
INFO 1450 Programming in RPG IV	5
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
	18

SOPHOMORE YEAR

First Semester	
Course	Credits
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology.....	3
INFO 1500 Interactive RPG and Subfiles	3
INFO 2040 Project Management.....	3
INFO 2650 Network Servers	3
INFO 2700 Cisco Networking I.....	4
MATH 1100 Topics and Ideas in Mathematics.....	3
	19

Second Semester	
Course	Credits
ACCT 1100 Survey of Accounting	3
ECON2110 Principles of Macroeconomics	3
INFO 2020 Systems Analysis and Design	5
INFO 2720 Principles of Information Security.....	3
INFO 2730 Information Security Lab	1
INFO 2800 CompTIA Security+ Certification.....	1
	16

Total Credit Hours 69

WEB AND VISUAL APPLICATION DEVELOPMENT AND INFORMATION SECURITY CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the information security certificate and the web and visual application development certificate. A student completing this degree will have the necessary skills to be an entry-level application developer in multiple environments and have the skills necessary to help the organization ensure continuous operation by safeguarding data from attacks and disasters.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BSAD 2050 Business Communications.....	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
INFO 1420 Introduction to Programming in C#	4
	16

Second Semester	
Course	Credits
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
INFO 2550 Programming in Java.....	4
MATH 1100 Topics and Ideas in Mathematics.....	3
	17

SOPHOMORE YEAR

First Semester	
Course	Credits
ACCT 1100 Survey of Accounting	3
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology.....	3
INFO 1440 Advanced Programming in C#	3
INFO 2040 Project Management.....	3
INFO 2650 Network Servers.....	3
INFO 2700 Cisco Networking I.....	4
	19

Second Semester	
Course	Credits
ECON2110 Principles of Macroeconomics	3
INFO 2020 Systems Analysis and Design	5
INFO 2720 Principles of Information Security.....	3
INFO 2730 Information Security Lab	1
INFO 2400 Advanced Web Programming.....	4
INFO 2800 CompTIA Security+ Certification.....	1
	17

Total Credit Hours 69

CISCO NETWORKING ACADEMY AND TECHNICAL SERVICES SUPPORT CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the cisco networking academy certificate and the technical services support certificate. A student completing this degree will have the necessary skills to be an entry-level networking engineer and provide necessary technical services support within an organization.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BSAD 2050 Business Communications	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
INFO 1420 Introduction to Programming in C#	4
	16

Second Semester	
Course	Credits
ACCT 1100 Survey of Accounting	3
ECON2110 Principles of Macroeconomics	3
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
MATH 1100 Topics and Ideas in Mathematics.....	3
	19

SOPHOMORE YEAR

First Semester	
Course	Credits
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
INFO 2040 Project Management.....	3
INFO 2650 Network Servers.....	3
INFO 2700 Cisco Networking I.....	4
INFO 2710 Cisco Networking II	4
	18

Second Semester	
Course	Credits
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
INFO 1800 Microcomputer Applications II	3
INFO 2610 Computer Support Technology.....	3
INFO 2750 Cisco Networking III.....	4
INFO 2760 Cisco Networking IV.....	4
	17

Total Credit Hours 70

CISCO NETWORKING ACADEMY AND IBMi APPLICATION DEVELOPMENT CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the cisco networking academy certificate and IBMi application development certificate. A student completing this degree will have the necessary skills to be an entry-level application developer in an IBMi environment and the skills necessary to be an entry-level networking engineer.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BSAD 2050 Business Communications	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
INFO 1420 Introduction to Programming in C#	4
	<u>16</u>

Second Semester	
Course	Credits
INFO 1150 IBMi Control Language.....	3
INFO 1450 Programming in RPG IV	5
INFO 1725 HTML, CSS, and JavaScript	3
INFO 2330 Database Concepts, Design and Application	4
MATH 1100 Topics and Ideas in Mathematics.....	3
	<u>18</u>

SOPHOMORE YEAR

First Semester	
Course	Credits
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
INFO 1500 Interactive RPG and Subfiles	3
INFO 2040 Project Management.....	3
INFO 2700 Cisco Networking I.....	4
INFO 2710 Cisco Networking II	4
	<u>17</u>

Second Semester	
Course	Credits
ECON2110 Principles of Macroeconomics	3
ACCT 1100 Survey of Accounting	3
INFO 2020 Systems Analysis and Design	5
INFO 2750 Cisco Networking III.....	4
INFO 2760 Cisco Networking IV.....	4
	<u>19</u>

Total Credit Hours 70

CISCO NETWORKING ACADEMY AND INFORMATION SECURITY CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the cisco networking academy certificate and the information security certificate. A student completing this degree will have the necessary skills to be an entry-level networking engineer with the skills necessary to help the organization ensure continuous operation by safeguarding data from attacks and disasters.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BSAD 2050 Business Communications.....	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
INFO 1420 Introduction to Programming in C#	4
	16

Second Semester	
Course	Credits
BSAD 1000 Human Relations and Ethics or.....	
PSYC 1810 Introduction to Psychology	3
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
MATH 1100 Topics and Ideas in Mathematics.....	3
	16

SOPHOMORE YEAR

First Semester	
Course	Credits
ACCT 1100 Survey of Accounting.....	3
INFO 2040 Project Management.....	3
INFO 2650 Network Servers	3
INFO 2700 Cisco Networking I.....	4
INFO 2710 Cisco Networking II	4
	17

Second Semester	
Course	Credits
ECON2110 Principles of Macroeconomics	3
INFO 2720 Principles of Information Security.....	3
INFO 2730 Information Security Lab	1
INFO 2750 Cisco Networking III.....	4
INFO 2760 Cisco Networking IV.....	4
INFO 2800 CompTIA Security+ Certification.....	1
	16

Total Credit Hours	65
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WEB AND VISUAL APPLICATION DEVELOPMENT AND CISCO NETWORKING ACADEMY CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the web and visual application development certificate as well as the cisco networking academy certificate. A student completing this degree will have the necessary skills to be an entry-level application developer in multiple environments and the skills necessary to be an entry-level networking engineer.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BSAD 2050 Business Communications	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
INFO 1420 Introduction to Programming in C#	4
	<u>16</u>

Second Semester	
Course	Credits
ECON2110 Principles of Macroeconomics	3
INFO 1725 HTML, CSS, and JavaScript	3
INFO 2330 Database Concepts, Design and Application	4
INFO 2550 Programming in Java.....	3
MATH 1100 Topics and Ideas in Mathematics.....	3
	<u>16</u>

SOPHOMORE YEAR

First Semester	
Course	Credits
ACCT 1100 Survey of Accounting	3
INFO 1440 Advanced Programming in C#	3
INFO 2040 Project Management.....	3
INFO 2700 Cisco Networking I.....	4
INFO 2710 Cisco Networking II.....	4
	<u>17</u>

Second Semester	
Course	Credits
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
INFO 2020 Systems Analysis and Design	5
INFO 2400 Advanced Web Programming.....	4
INFO 2750 Cisco Networking III.....	4
INFO 2760 Cisco Networking IV.....	4
	<u>20</u>

Total Credit Hours 69

WEB AND VISUAL APPLICATION DEVELOPMENT AND TECHNICAL SERVICES SUPPORT CONCENTRATION

This degree concentration combines the information technology core and general education requirements plus the courses from the web and visual application development certificate and the technical services support certificate. A student completing this degree will have the necessary skills to be an entry-level application developer in multiple environments and provide necessary technical services support within an organization.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BSAD 2050 Business Communications.....	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
INFO 1420 Introduction to Programming in C#	4
	16

Second Semester	
Course	Credits
ECON2110 Principles of Macroeconomics.....	3
INFO 1725 HTML, CSS, and JavaScript	3
INFO 1850 Operating Systems II	3
INFO 2330 Database Concepts, Design and Application	4
INFO 2550 Programming in Java.....	4
	17

SOPHOMORE YEAR

First Semester	
Course	Credits
ACCT 1100 Survey of Accounting.....	3
INFO 1440 Advanced Programming in C#.....	3
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
INFO 2040 Project Management.....	3
INFO 2650 Network Servers	3
MATH 1100 Topics and Ideas in Mathematics.....	3
	19

Second Semester	
Course	Credits
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
INFO 1800 Microcomputer Applications II	3
INFO 2020 Systems Analysis and Design	5
INFO 2400 Advanced Web Programming.....	4
INFO 2610 Computer Support Technology.....	3
	18

Total Credit Hours	70
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INFORMATION TECHNOLOGY GENERAL CERTIFICATE

Students who complete the first semester of an Information Technology degree offering will be eligible for the general certificate. The following courses are the primary 16 credits of the information technology program core as described on page 127.

Required Program of Study for Certificate (17 weeks)

Course	Credits
BSAD 2050 Business Communications.....	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
INFO 1420 Introduction to Programming in C#	4
Total Credit Hours	16

CISCO NETWORKING ACADEMY CERTIFICATE

This certificate provides students with a foundation in networking skills using the Cisco Networking curriculum. Instruction includes concepts related to networking terminology and protocols, LANs and WANs, the OSI model layers, network cabling, routers, network topologies, IP addressing, switching, and network management practices. This certificate is designed to prepare students to successfully pass the Cisco Certified Network (CCNA) Certification.

Required Program of Study for Certificate (34 weeks)

FALL SEMESTER		SPRING SEMESTER	
Course	Credits	Course	Credits
BSAD 2050 Business Communications.....	3	INFO 2750 Cisco Networking III.....	4
INFO 2700 Cisco Networking I.....	4	INFO 2760 Cisco Networking IV.....	4
INFO 2710 Cisco Networking II.....	4		<u>8</u>
	<u>11</u>	Total Credit Hours	19

INFORMATION SECURITY CERTIFICATE

This certificate provides students with entry-level skills to assess the security needs of computer and networks systems, recommend safeguard solutions, and manage the implementation and maintenance of security devices, systems, and procedures. This certificate is designed to prepare students to successfully pass the CompTIA Security+ Certification.

Required Program of Study for Certificate (34 weeks)

FALL SEMESTER		SPRING SEMESTER	
Course	Credits	Course	Credits
BSAD 2050 Business Communications	3	INFO 1850 Operating Systems II	3
INFO 2650 Network Servers	3	INFO 2720 Principles of Information Security.....	3
INFO 2700 Cisco Networking I.....	4	INFO 2730 Information Security Lab	1
	10	INFO 2800 CompTIA Security+ Certification.....	1
			8
		Total Credit Hours	18

IBMi APPLICATION DEVELOPMENT CERTIFICATE

This certificate provides students with a foundation in application development and design using the IBMi integrated operating environment which is used in many of today's businesses. Students gain hands-on experience in system design, IBMi Control Language and RPG IV programming.

Required Program of Study for Certificate (51 weeks)

SPRING SEMESTER 1		FALL SEMESTER	
Course	Credits	Course	Credits
INFO 1150 IBMi Control Language	3	BSAD 2050 Business Communications	3
INFO 1450 Programming in RPG IV	5	INFO 1500 Interactive RPG and Subfiles	3
	8		6
		SPRING SEMESTER 2	
		Course	Credits
		INFO 2020 Systems Analysis and Design	5
			5
		Total Credit Hours	19

TECHNICAL SERVICES SUPPORT CERTIFICATE

This certificate provides the fundamentals of computer hardware and operating system support. Graduates have the skills necessary to problem-solve for a variety of end users, and are prepared for entry-level support and help desk positions. This certificate is designed to prepare students to successfully pass the CompTIA A+ Certification.

Required Program of Study for Certificate (34 weeks)

FALL SEMESTER		SPRING SEMESTER	
Course	Credits	Course	Credits
INFO 1170 Operating Systems I.....	3	BSAD 2050 Business Communications.....	3
INFO 1600 PC Systems Maintenance and Repair	3	INFO 1850 Operating Systems II	3
INFO 1610 PC Systems Maintenance and Repair Lab	1	INFO 2610 Computer Support Technology.....	3
INFO 2650 Network Servers.....	3		<u>9</u>
	<u>10</u>	Total Credit Hours	19

WEB AND VISUAL APPLICATION DEVELOPMENT CERTIFICATE

This certificate provides students with a foundation in the latest GUI and web application development and design using programming languages that are needed in today's business world. Students gain hands-on experience in system design, HTML and programming.

Required Program of Study for Certificate (2 years)

FALL SEMESTER 1		FALL SEMESTER 3	
Course	Credits	Course	Credits
BSAD 2050 Business Communications.....	3	INFO 1440 Advanced Programming in C#	3
INFO 1420 Introduction to Programming in C#	4		<u>3</u>
	<u>7</u>		
SPRING SEMESTER 2		SPRING SEMESTER 4	
Course	Credits	Course	Credits
INFO 1725 HTML, CSS and JavaScript	3	INFO 2020 Systems Analysis and Design	5
	<u>3</u>		<u>5</u>
		Total Credit Hours	18

INFORMATION TECHNOLOGY - TRANSFER PROGRAMS

The information technology transfer program is a two-year liberal arts curriculum with emphasis in information technology classes. Through an articulation agreement with Wayne State College, these classes are designed to meet requirements for the first two years of a four-year computer information systems or computer science program. For transfer to other institutions, students should seek advice from the institutions where they will be transferring.

Computer Information Systems

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ENGL 1010 English Composition I	3
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
MATH 1150 College Algebra	3
	15

Second Semester	
Course	Credits
BSAD 2050 Business Communications	3
INFO 1725 HTML, CSS, and Java Script	3
INFO 2500 Programming in C++	3
Natural Science*	4
English/Literature*	3
	16

SOPHOMORE YEAR

First Semester	
Course	Credits
HPER 1550 Lifetime Wellness	3
INFO 2550 Programming in JAVA.....	4
INFO 2700 Cisco Networking I.....	4
ECON 2110 Principles of Macroeconomics	3
Oral Communication*	3
	17

Second Semester	
Course	Credits
ACCT 1100 Survey of Accounting	3
INFO 2330 Database Concepts, Design and Application	4
Behavioral Science*	3
World History*	3
Fine Arts and Language*	3
	16

Total Credit Hours **64**

Computer Science

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
INFO 1020 Introduction to Information Technology.....	3
INFO 1100 Microcomputer Applications.....	3
INFO 1170 Operating Systems I.....	3
ENGL 1010 English Composition I	3
MATH 1150 College Algebra	3
	15

Second Semester	
Course	Credits
HPER 1550 Lifetime Wellness	3
INFO 2500 Programming in C++	3
ENGL 1020 English Composition II.....	3
Natural Science*	4
English/Literature*	3
	16

SOPHOMORE YEAR

First Semester	
Course	Credits
INFO 2550 Programming in JAVA	4
INFO 2700 Cisco Networking I.....	4
INFO 2710 Cisco Networking II	4
ECON2110 Principles of Macroeconomics	3
	15

Second Semester	
Course	Credits
INFO 2330 Database Concepts, Design and Application	4
Behavioral Science*	3
Fine Arts and Language*	3
Oral Communication*	3
World History*	3
	16

Total Credit Hours **62**

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

LIBRARY AND INFORMATION SERVICES

As libraries increasingly use technologies, the duties of library and information services specialists will expand and evolve accordingly. LIS specialists assist with customizing databases and instruct patrons in how to use computer systems to access data. These specialists work in large libraries as well as in rural areas.

The library and information services concentration will provide information about services requiring technical skills in such vital areas as circulation of materials, acquisition, and processing of all types of materials. The program's courses focus particularly on information resources and management of a small library.

This associate of arts degree concentration is offered jointly by Central Community College and Northeast Community College in cooperation with the Nebraska Library Commission and University of Nebraska at Omaha. The library courses in the certificate program are designed to provide the skills necessary for certification as a public librarian in Nebraska, with an emphasis on rural needs. The A.A. degree concentration provides an opportunity for students to transfer to the University of Nebraska at Omaha for completion of a baccalaureate degree if they choose.

Students who complete 18 hours of LIBR courses will possess the following skills and responsibilities and the ability to:

- Develop youth/young adult and senior programming
- Plan and compile budgets
- Develop collection development and management plans
- Lead specialized departmental teams in large libraries
- Purchase and process all types of materials
- Manage a small library
- Supervise library staff

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ENGL 1010 English Composition I.....	3
LIBR 1010 Foundation of Library and Information Services**.....	3
Fine Arts and Language*.....	3
Social Science *.....	3
Elective***.....	3
	15

Second Semester	
Course	Credits
ENGL 1020 English Composition II.....	3
LIBR 2150 Managing Collections in Libraries and Information Agencies**.....	3
LIBR 2210 Cataloging and Classification**.....	3
Mathematics*.....	3-4
SOCI 2150 Issues of Unity and Diversity or SOCI 2320 Social Problems.....	3
	15-16

Summer	
Course	Credits
LIBR 2100 Resources and Services**.....	3
	3

SOPHOMORE YEAR

First Semester	
Course	Credits
ENGL 2100 Introduction to Literature.....	3
LIBR 2250 Leadership and Management in Library and Information Agencies**.....	3
SPCH 1110 Public Speaking.....	3
PSYC 1810 Introduction to Psychology.....	3
	12

Second Semester	
Course	Credits
BIOS 1010 General Biology.....	4
HPER 1550 Lifetime Wellness.....	3
LIBR 2940 Library Services Capstone Practicum**.....	3
History*.....	3
Elective***.....	3-4
	16-17

Total Credit Hours	61-63
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To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

**Class provided online through Central Community College. The rotation of LIBR courses is subject to change based on availability from Central Community College. Students with no work experience in a library or information center are advised to take LIBR 1010 prior to or concurrently with any other LIBR coursework. LIBR 2940 has a prerequisite of 9 hours of LIBR courses.

***Recommended electives depend on educational goals. Discuss with advisor prior to enrollment. Recommended electives: Computer applications coursework, ECED 1160 Early Language and Literacy, FREN 1200 or 1210 Elementary French I or II, LIBR 1310 Library Orientation and Usage, PSYC 1000 Human Relations, SPAN 1200 or 1210 Elementary Spanish I or II.

MACHINING AND MANUFACTURING AUTOMATION

Diploma

The machining and manufacturing automation diploma program provides students the opportunity to acquire highly valued skills in an innovative, hands-on learning environment. In addition to developing basic knowledge, skills, and abilities for successful integration into manufacturing industries, the diploma program features integrating experiences through which students participate in middle skills training in introductory welding and fabrication, precision measurements, basic machining, and the operation and programming of computerized manufacturing technologies including Computer Numerical Control (CNC) and robotics. (Enrollment in this program is limited and is based on the date of application.)

Required Program of Study for Diploma (34 weeks)

First Semester		Second Semester	
Course	Credits	Course	Credits
INDT 1015 Introduction to Manufacturing.....	2	WELD 1010 Related Welding.....	0.5
INDT 1025 Introduction to Industrial Safety.....	2	WELD 1020 Related Welding Lab.....	1
INDT 1170 Introduction to Total Quality Management.....	2	INDT 1085 Industrial Maintenance Fundamentals.....	3
INDT 1055 Print Reading for the Industrial Trades.....	2	INDT 1200 Fabrication Fundamentals Lab.....	1
INDT 1065 Manufacturing Technologies and Measurement.....	2	INDT 1140 Metrology.....	2
INDT 1150 Machining Fundamentals.....	2	INDT 1180 Computerized Manufacturing Technologies.....	1
INDT 1160 Machining Fundamentals Lab.....	2	INDT 1190 Computerized Manufacturing Technologies Lab ..	1
MATH 1020 Technical Mathematics I.....	3	INDT 1040 Industrial Process Dynamics.....	2
	<u>17</u>	INDT 1230 Manufacturing Automation Technology.....	1
		INFO 1000 Basic Computer Applications.....	2
		BSAD 2050 Business Communications.....	3
		or ENGL 1050 Workplace Communications.....	3
			<u>17.5</u>
		Total Credit Hours	34.5

MACHINING AND MANUFACTURING AUTOMATION Certificate

The machining and manufacturing automation certificate program provides students the opportunity to acquire highly valued skills in an innovative, hands-on learning environment. The program features integrating experiences through which students participate in all aspects of a manufacturing organization, from materials and processes to safety, quality, maintenance, to personal relations. Armed with a high level of both technical and nontechnical skills, program graduates are prepared for employment in a rewarding, growth-oriented, and highly competitive career in today's manufacturing. (Enrollment in the program is limited and is based on the date of application.)

Required Program of Study for Certificate (17 weeks)

First Semester		
Course		Credits
INDT 1015 Introduction to Manufacturing		2
INDT 1025 Introduction to Industrial Safety.....		2
INDT 1170 Introduction to Total Quality Management.....		2
INDT 1055 Print Reading for the Industrial Trades		2
INDT 1065 Manufacturing Technologies and Measurement....		2
INDT 1150 Machining Fundamentals.....		2
INDT 1160 Machining Fundamentals Lab.....		2
MATH 1020 Technical Mathematics I.....		3
		17
Total Credit Hours		17

MEDIA ARTS

Using fully-equipped radio, television, sound recording and video production facilities, students in the Media Arts program learn and build hands-on skills for a variety of entry-level jobs in the media broadcasting, journalism, and production industries. Students must successfully complete the general education requirements, the Media Arts core requirements, as well as the approved electives for one concentration.

Required Program of Study for Associate of Applied Science Degree (2 years)

Core Requirements

Course	Credits
AUDR 1600 Audio Principles and Technology I	2
AUDR 1615 Audio and Recording Techniques I Lab	1
BRDC 1010 Introduction to Mass Media	3
BRDC 1210 Television Production and Performance.....	3
CINE 1700 Post Production I.....	1
BRDC 2180 Digital Storytelling I.....	1
CINE 1000 Camera and Lighting I.....	2
CINE 1010 Camera and Lighting I Lab	1
CINE 1020 Camera and Lighting II.....	2
CINE 1030 Camera and Lighting II Lab.....	1
CINE 1200 Media Graphics	3
CINE 1720 Post Production II.....	3
	23

General Education Requirements

Course	Credits
ECON 1040 Personal Finance.....	3
MATH 1100 Topics and Ideas in Mathematics	3
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
ENGL 1050 Workplace Communication.....	3
Science or Technology*	3
	15

Core Requirements.....	23
General Education Requirements	15
Approved Electives**	24-32
Total Credits Required	62-70

*As stated in the AAS requirements, the science and technology requirement is fulfilled through the extensive integration of technology throughout this program.

**See approved electives.

MEDIA ARTS

Associate of Applied Science Degree
Approved Electives for each Concentration

Digital Cinema and Media Concentration

Course	Credits
CINE 2000 Camera and Lighting III	2
CINE 2010 Camera and Lighting III Lab	1
CINE 1100 Script Writing and Analysis.....	3
CINE 2700 Post Production III	3
CINE 2720 Post Production IV	3
CINE 2982 Digital Cinema and Media Capstone.....	4
AUDR 2800 Audio and Recording Projects I.....	2
AUDR 2820 Audio and Recording Projects II.....	2
ENTR 1050 Introduction to Entrepreneurship	3
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
BRDC 1600 Drone Operations	1
BRDC 1610 Drone Operations Lab	1
	29

(See required program of study.)

Audio and Recording Technology Concentration

Course	Credits
AUDR 1800 Electronic Soldering	1
AUDR 1635 Audio and Recording Techniques II Lab	3
AUDR 2000 Advanced Audio Principles I.....	3
AUDR 2020 Advanced Audio Principles II.....	3
AUDR 2610 Audio and Recording Techniques III Lab.....	3
AUDR 2800 Audio and Recording Projects I.....	2
AUDR 2820 Audio and Recording Projects II.....	2
AUDR 2010 Audio Systems and Live Sound Lab	2
MUSC 1077 Individual Music Lessons I – Piano.....	1
MUSC 1117 Individual Music Lessons II – Piano	1
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
ENTR 1050 Introduction to Entrepreneurship	3
BRDC 1600 Drone Operations	1
BRDC 1610 Drone Operations Lab	1
	30

(See required program of study.)

Broadcasting - Radio TV Concentration

Course	Credits
BRDC 1110 Radio Production and Performance.....	3
BRDC 1235 Broadcast Scripts	2
BRDC 1240 Voice and Diction.....	3
BRDC 2160 Broadcast Operations.....	3
BRDC 2170 Applied TV Production I.....	3
BRDC 2270 Applied TV Production II.....	3
BRDC 2260 Broadcast Sales	3
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
BRDC 1600 Drone Operations	1
BRDC 1610 Drone Operations Lab	1
BSAD 2265 Media Sales & Copywriting	3
	29

(See required program of study.)

Digital Journalism and Social Media Management Concentration

Course	Credits
JOUR 1200 Writing for Print and Digital Media	3
JOUR 1150 Applied Journalism I.....	3
JOUR 1160 Applied Journalism II	3
BRDC 1600 Drone Operations	1
BRDC 1610 Drone Operations Lab	1
SPCH 2200 Public Relations.....	3
BSAD 2520 Principles of Marketing.....	3
BSAD 2530 Advanced Marketing	3
BRDC 2170 Applied TV Production I.....	3
BRDC 2270 Applied TV Production II.....	3
	26

(See required program of study.)

AUDIO AND RECORDING TECHNOLOGY CONCENTRATION

The audio and recording technology concentration is designed to prepare students for entry-level positions in the audio engineering field. As a student in this concentration, you will benefit from experience using professional equipment such as Avid, Sony, Apple, MOTU, Yamaha, Toft and Alesis in studio and live sound environments. Professional facilities include two fully-equipped control rooms, four private workstation rooms, a concert stage, and two sound studios. Interest and ability in music, math, science, and physics are brought together in the field of audio and recording. New technologies and the ever-changing music and sound industry have created a diversity of job opportunities for trained audio and recording technicians. Career opportunities in the recording industry include employment with radio and television broadcasting companies, theaters, motion picture companies, recording studios, touring bands and other music companies. Positions include recording engineer, TV sound engineer, concert sound reinforcement, theater sound design and operation, sound equipment sales, movie sound engineer, corporate sound, and sound system installation.

Enrollment into this program is limited and is based on the date of application.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BRDC 1010 Introduction to Mass Media	3
BRDC 1210 Television Production and Performance.....	3
CINE 1000 Camera and Lighting I.....	2
CINE 1010 Camera and Lighting I Lab	1
CINE 1700 Post Production I.....	1
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
MATH 1100 Topics and Ideas in Mathematics.....	1
	<u>16</u>

Second Semester	
Course	Credits
CINE 1020 Camera and Lighting II.....	2
CINE 1030 Camera and Lighting II Lab.....	1
CINE 1200 Media Graphics	3
CINE 1720 Post Production II.....	3
AUDR 1600 Audio Principles and Technology I.....	2
AUDR 1615 Audio and Recording Techniques I Lab.....	1
BRDC 2180 Digital Storytelling I	1
ENGL 1050 Workplace Communication.....	3
	<u>16</u>

SOPHOMORE YEAR

First Semester	
Course	Credits
AUDR 2000 Advanced Audio Principles I.....	3
AUDR 1635 Audio and Recording Techniques II Lab	3
AUDR 2010 Audio Systems and Live Sound Lab	2
AUDR 2800 Audio and Recording Projects I.....	2
MUSC 1077 Individual Music Lessons I – Piano.....	1
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
	<u>15</u>

Second Semester	
Course	Credits
AUDR 2020 Advanced Audio Principles II.....	3
AUDR 2610 Audio and Recording Techniques III Lab.....	3
AUDR 2820 Audio and Recording Projects II.....	2
AUDR 1800 Electronic Soldering	1
MUSC 1117 Individual Music Lessons II – Piano	1
ENTR 1050 Introduction to Entrepreneurship	3
ECON 1040 Personal Finance.....	3
	<u>16</u>

Total Credit Hours 63

Suggested Electives: BRDC 1600 Drone Operations, BRDC 1610 Drone Operations Lab.

DIGITAL CINEMA AND MEDIA CONCENTRATION

The digital cinema concentration is designed to prepare students for entry-level positions in the field of professional cinema, video and multimedia production. Students will participate in comprehensive theory classes, multimedia software and hardware training courses, and hands-on labs designed to provide a thorough production background. Job opportunities include video editor, field videographer, audio/video support, broadcast camera operator, multimedia journalist, movie production assistant or grip, and independent filmmaking.

Enrollment into this program is limited and is based on the date of application.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BRDC 1010 Introduction to Mass Media	3
BRDC 1210 Television Production and Performance I	3
CINE 1000 Camera and Lighting I.....	2
CINE 1010 Camera and Lighting I Lab	1
CINE 1700 Post Production I.....	1
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
MATH 1100 Topics and Ideas in Mathematics.....	3
	16

Second Semester	
Course	Credits
CINE 1020 Camera and Lighting II	2
CINE 1030 Camera and Lighting II Lab	1
CINE 1200 Media Graphics.....	3
CINE 1720 Post Production II.....	3
AUDR 1600 Audio Principles and Technology I.....	2
AUDR 1615 Audio and Recording Techniques I Lab.....	1
BRDC 2180 Digital Storytelling I	1
ENGL 1050 Workplace Communication	3
	16

SOPHOMORE YEAR

First Semester	
Course	Credits
CINE 2000 Camera and Lighting III	2
CINE 2010 Camera and Lighting III Lab	1
CINE 2700 Post Production III	3
AUDR 2800 Audio and Recording Projects I	2
CINE 1100 Script Writing and Analytics	3
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
	15

Second Semester	
Course	Credits
CINE 2720 Post Production IV	3
CINE 2982 Digital Cinema and Media Capstone.....	4
AUDR 2820 Audio and Recording Projects II.....	2
ENTR 1050 Introduction to Entrepreneurship	3
ECON 1040 Personal Finance	3
	15

Total Credit Hours **62**

Suggested Electives: BRDC 1600 Drone Operations, BRDC 1610 Drone Operations Lab.

DIGITAL JOURNALISM AND SOCIAL MEDIA MANAGEMENT CONCENTRATION

The digital journalism and social media management concentration is intended to prepare students for employment in any number of media and communications-related degree areas including, but not limited to, journalism, broadcasting, communications, media studies, social media management, marketing and public relations. Students will learn to write for websites, newspapers, magazines, and social media. In addition, students will gain experience with multimedia editing tools including photography, audio, video and graphic design. This program utilizes a broad-based approach to communications, including theory and practical experience.

Because of the changing nature of the job market and the role mass media plays in contemporary society, the job opportunities in this area are numerous. Career fields include running social media campaigns, print and digital journalism, public relations, media relations, promotions, television broadcasting, radio broadcasting, corporate communications, advertising for print and broadcast, and other occupations that require knowledge of effective communications, traditional media, and online media.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BRDC 1010 Intro to Mass Media.....	3
BRDC 1210 Television Production and Performance.....	3
CINE 1000 Camera and Lighting I.....	2
CINE 1010 Camera and Lighting I Lab	1
CINE 1700 Post Production I.....	1
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology.....	3
MATH 1100 Topics and Ideas in Mathematics.....	3
	<u>16</u>
Second Semester	
Course	Credits
CINE 1020 Camera and Lighting II	2
CINE 1030 Camera and Lighting II Lab	1
CINE 1200 Media Graphics.....	3
CINE 1720 Post Production II.....	3
AUDR 1600 Audio Principles and Technology I.....	2
AUDR 1615 Audio and Recording Techniques I Lab.....	1
BRDC 2180 Digital Storytelling I.....	1
ENGL 1050 Workplace Communication.....	3
	<u>16</u>

SOPHOMORE YEAR

First Semester	
Course	Credits
JOUR 1150 Applied Journalism I.....	3
JOUR 1200 Writing for Print and Digital Media	3
BSAD 2520 Principles of Marketing.....	3
BRDC 2170 Applied TV Production I.....	3
ECON 1040 Personal Finance.....	3
	<u>15</u>
Second Semester	
Course	Credits
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
BRDC 2270 Applied TV Production II.....	3
BSAD 2530 Advanced Marketing	3
SPCH 2200 Public Relations.....	3
JOUR 1160 Applied Journalism II	3
	<u>16</u>
Total Credit Hours	63

Suggested Electives: BRDC 1600 Drone Operations, BRDC 1610 Drone Operations Lab.

BROADCASTING-RADIO AND TV CONCENTRATION

The broadcasting-radio TV concentration is designed to prepare students for entry-level positions in the broadcasting, television and related industries. Graduates' skills include radio production and announcing, television production and announcing, newswriting and gathering, scriptwriting, station operations, and broadcast sales. Broadcasting students build hands-on skills by creating radio and TV programming which is distributed on Northeast Community College's cable TV channel KHWK/Hawk TV. Career opportunities include audio/video operations, control room technician, station manager, radio and TV announcer, journalist, reporter, and broadcast technician.

Enrollment into this program is limited and is based on the date of application.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BRDC 1010 Intro to Mass Media.....	3
BRDC 1210 Television Production and Performance	3
CINE 1000 Camera and Lighting I.....	2
CINE 1010 Camera and Lighting I Lab	1
CINE 1700 Post Production I.....	1
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3
MATH 1100 Topics and Ideas in Mathematics.....	3
	<u>16</u>

Second Semester	
Course	Credits
CINE 1020 Camera and Lighting II	2
CINE 1030 Camera and Lighting II Lab	1
CINE 1200 Media Graphics.....	3
CINE 1720 Post Production II.....	3
AUDR 1600 Audio Principles and Technology I	2
AUDR 1615 Audio and Recording Techniques I Lab.....	1
BRDC 2180 Digital Storytelling I	1
ENGL 1050 Workplace Communication.....	3
	<u>16</u>

SOPHOMORE YEAR

First Semester	
Course	Credits
BRDC 1110 Radio Production and Performance.....	3
BRDC 1120 Broadcast News	3
BRDC 2170 Applied TV Production I.....	3
BRDC 1240 Voice and Diction.....	3
ECON 1040 Personal Finance.....	3
	<u>15</u>

Second Semester	
Course	Credits
BRDC 1250 Applied Radio Production I.....	3
BRDC 2270 Applied TV Production II.....	3
BRDC 2265 Media Sales and Copywriting.....	3
BRDC 2160 Broadcasting Operations	3
INFO 1600 PC Systems Maintenance and Repair	3
INFO 1610 PC Systems Maintenance and Repair Lab	1
	<u>16</u>

Total Credit Hours 63

Suggested Electives: BRDC 1600 Drone Operations, BRDC 1610 Drone Operations Lab.

BROADCAST PRODUCTION CERTIFICATE

Required Program of Study for Certificate (34 weeks)

The broadcast production certificate includes courses related to the practical application of broadcast production techniques. Students who complete this certificate will gain skills necessary for entry-level assistant/support employment in radio, television and on-location broadcasting.

FALL SEMESTER		SPRING SEMESTER	
Course	Credits	Course	Credits
BRDC 1110 Radio Production and Performance.....	3	BRDC 2265 Media Sales and Copywriting.....	3
BRDC 1120 Broadcast News	3	AAS General Education*	3
CINE 1700 Post Production I	1		<u>6</u>
BRDC 1210 Television Production and Performance I	3		
	<u>10</u>	Total Credit Hours	16

*See AAS general education courses.

MEDIA PRODUCTION CERTIFICATE

Required Program of Study for Certificate (34 weeks)

Students who complete the following courses in the first year of a media arts degree offering will be eligible for the media production certificate. This certificate program will provide students with the basic necessary skills for gaining entry-level employment in the areas of assistant audio engineering, broadcast production support and multimedia production.

FALL SEMESTER		SPRING SEMESTER	
Course	Credits	Course	Credits
BRDC 1010 Intro to Mass Media.....	3	AUDR 1600 Audio Principles and Technology I	2
CINE 1000 Camera and Lighting I.....	2	AUDR 1615 Audio and Recording Techniques I Lab.....	1
CINE 1010 Camera and Lighting I Lab	1	CINE 1200 Media Graphics	3
CINE 1700 Post Production I.....	1	AAS General Education*	3
	<u>7</u>		<u>9</u>
		Total Credit Hours	16

*See AAS general education courses.

RECORDING STUDIO PRODUCTION CERTIFICATE

Required Program of Study for Certificate (9 months)

The recording studio production certificate includes courses related to the practical application of recording studio techniques. Students who earn this certificate will have the skills necessary for entry-level audio engineering in both studio and live environments.

SPRING SEMESTER

Course	Credits
AUDR 1600 Audio Principles and Technology I.....	2
AUDR 1615 Audio and Recording Techniques I Lab.....	1
AUDR 1800 Electronic Soldering.....	1
AAS General Education*	3
	7

FALL SEMESTER

Course	Credits
AUDR 2000 Advanced Audio Principles I.....	3
AUDR 1635 Audio and Recording Techniques II Lab	3
BRCD 1010 Intro to Mass Media.....	3
	9

Total Credit Hours 16

*See AAS general education courses.

VIDEO PRODUCTION CERTIFICATE

Required Program of Study for Certificate (18 months)

The video production certificate includes courses related to the practical application of video production techniques. Students who complete this certificate program will gain skills necessary for entry-level work in the field of video production, camera operation, graphics and multimedia production.

FALL SEMESTER 1

Course	Credits
CINE 1000 Camera and Lighting I.....	2
CINE 1010 Camera and Lighting Lab I.....	1
CINE 1700 Post Production I.....	1
	4

FALL SEMESTER 2

Course	Credits
CINE 2700 Post Production III**	3
CINE 2010 Camera and Lighting Lab III	1
AAS General Education*	2-3
	6-7

SPRING SEMESTER 1

Course	Credits
CINE 1720 Post Production II.....	3
CINE 1020 Camera and Lighting II	2
CINE 1030 Camera and Lighting Lab II	1
	6

Total Credit Hours 16-17

*See AAS general education courses.

**May be substituted with CINE 1200 Media Graphics.

MUSIC BUSINESS

After successful completion of the music business concentration, students may choose to seek employment in a variety of music-related occupations or transfer into a bachelor's degree program at a four-year institution. Career opportunities are found in a variety of music-related occupations such as sales, marketing, management, radio and television stations, and the recording industry.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
MUSC 1077 Individual Music Lessons I-Piano and/or MUSC 1070-1082 Individual Music Lessons I (major)* ...	1-2
MUSC 1051-1056 Applied Music Basics I*	1
MUSC 1130 or 1180 (major ensemble)	1
MUSC 1220 Music Theory I	3
MUSC 1250 Ear Training I and Sight Singing	2
ENGL 1010 English Composition I	3
HPER 1550 Lifetime Wellness	3
	14-15

Second Semester	
Course	Credits
MUSC 1117 Individual Music Lessons II-Piano and/or MUSC 1110-1122 Individual Music Lessons II (major)* ...	1-2
MUSC 1051-1056 Applied Music Basics I or MUSC 1061-1066 Applied Music Basics II*	1
MUSC 1130 or 1180 (major ensemble)	1
MUSC 1230 Music Theory II	3
MUSC 1260 Ear Training II and Sight Singing	2
Mathematics	3-5
English/Literature	3
Business Elective	3
	17-20

SOPHOMORE YEAR

First Semester	
Course	Credits
MUSC 1130 or 1180 (major ensemble)	1
MUSC 2077 Individual Music Lessons III-Piano and/or MUSC 2070-2082 Individual Music Lessons III (major)*	1-2
ACCT 1100 Survey of Accounting or ACCT 1200 Principles of Accounting I	3
History	3
Natural Science	4-5
Social Science	3
	15-17

Second Semester	
Course	Credits
MUSC 1010 Introduction to Music	3
MUSC 1130 or 1180 (major ensemble)	1
MUSC 2117 Individual Music Lessons IV-Piano and/or MUSC 2110-2122 Individual Music Lessons IV (major)*	1-2
SPCH 1110 Public Speaking	3
Behavioral Science	3
Business Elective	3
	14-15

Total Credit Hours 60-67

*Depends on student's needs, interests, abilities, and/or college transfer.

**Suggested electives include MUSC 2220 Music Theory III and MUSC 2250 Ear Training III and Sight Singing, MUSC 2230 Music Theory IV and MUSC 2260 Ear Training IV and Sight Singing, BSAD 1050 Introduction to Business, BSAD 2230 Retail Management, BSAD 2520 Principles of Marketing, BSAD 2540 Principles of Management, music ensembles, applied music, applied music basics, or improvisational techniques.

MUSIC EDUCATION

After successful completion of the music education concentration, students may transfer into a bachelor's degree program at a four-year institution. This course of study will help students develop the skills and background needed for teaching with emphasis on public school music teaching.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
MUSC 1077 Individual Music Lessons I-Piano and/or	
MUSC 1070-1082 Individual Music Lessons I (major)* ...	1-2
MUSC 1051-1056 Applied Music Basics I*	1
MUSC 1130 or 1180 (major ensemble)	1
MUSC 1220 Music Theory I	3
MUSC 1250 Ear Training I and Sight Singing	2
MUSC 1010 Introduction to Music	3
ENGL 1010 English Composition I	3
Social Science	3
	17-18

Second Semester	
Course	Credits
MUSC 1117 Individual Music Lessons II-Piano and/or	
MUSC 1110-1122 Individual Music Lessons II (major)* ...	1-2
MUSC 1051-1056 Applied Music Basics I or	
MUSC 1061-1066 Applied Music Basics II*	1
MUSC 1130 or 1180 (major ensemble)	1
MUSC 1230 Music Theory II	3
MUSC 1260 Ear Training II and Sight Singing	2
Mathematics	3-5
English/Literature	3
HPER 1550 Lifetime Wellness	3
	17-20

SOPHOMORE YEAR

First Semester	
Course	Credits
MUSC 1130 or 1180 (major ensemble)	1
MUSC 2077 Individual Music Lessons III-Piano and/or	
MUSC 2070-2082 Individual Music Lessons III (major)*	1-2
MUSC 2220 Music Theory III	3
MUSC 2250 Ear Training III and Sight Singing	2
EDUC 1110 Introduction to Professional Education	3
History	3
Natural Science	4-5
	17-19

Second Semester	
Course	Credits
MUSC 1130 or 1180 (major ensemble)	1
MUSC 2117 Individual Music Lessons IV-Piano and/or	
MUSC 2110-2122 Individual Music Lessons IV (major)*	1-2
MUSC 2230 Music Theory IV	3
MUSC 2260 Ear Training IV and Sight Singing	2
EDUC 1700 Professional Practicum - Elementary School or	
EDUC 1710 Professional Practicum - Secondary School	1-2
SPCH 1110 Public Speaking	3
Behavioral Science	3
	14-16

Total Credit Hours **65-73**

* Depends on student's needs, interests, abilities, and/or college transfer.

MUSIC PERFORMANCE

After successful completion of the music performance concentration, students may choose to seek employment in a variety of music-related occupations or transfer into a bachelor's degree program at a four-year institution. Career opportunities in professional music include the areas of vocal and instrumental performance, arranging, conducting, composition, and many others. Choirs, bands, clubs and restaurants, musical theaters, and the recording industry are among the employment concentrations in this field.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
MUSC 1077 Individual Music Lessons I-Piano and/or MUSC 1070-1082 Individual Music Lessons I (major/ minor)*	1-2
MUSC 1130 or 1180 (major ensemble)*	1
MUSC 1220 Music Theory I.....	3
MUSC 1250 Ear Training I and Sight Singing.....	2
MUSC 1010 Introduction to Music.....	3
ENGL 1010 English Composition I.....	3
HPER 1550 Lifetime Wellness	3
	16-17

Second Semester	
Course	Credits
MUSC 1117 Individual Music Lessons II-Piano and/or MUSC 1110-1122 Individual Music Lessons II (major/ minor)*	1-2
MUSC 1130 or 1180 (major ensemble)*	1
MUSC 1230 Music Theory II.....	3
MUSC 1260 Ear Training II and Sight Singing	2
Mathematics.....	3-5
English/Literature	3
Behavioral Science.....	3
	16-19

SOPHOMORE YEAR

First Semester	
Course	Credits
MUSC 1130 or 1180 (major ensemble)*	1
MUSC 2077 Individual Music Lessons III-Piano and/or MUSC 2070-2082 Individual Music Lessons III (major/ minor)*	1-2
MUSC 2220 Music Theory III.....	3
MUSC 2250 Ear Training III and Sight Singing.....	2
History	3
Natural Science.....	4-5
	14-16

Second Semester	
Course	Credits
MUSC 1130 or 1180 (major ensemble)*	1
MUSC 2117 Individual Music Lessons IV-Piano and/or MUSC 2110-2122 Individual Music Lessons IV (major/ minor)*	1-2
MUSC 2230 Music Theory IV.....	3
MUSC 2260 Ear Training IV and Sight Singing.....	2
SPCH 1110 Public Speaking	3
Social Science.....	3
Electives**	1
	14-15

Total Credit Hours **60-67**

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* Depends on student's needs, interests, abilities, and/or college transfer.

** Suggested electives include music ensembles, applied music, applied music basics, improvisational techniques, other music and education courses, psychology courses and humanities courses.

NURSING

The nursing programs at Northeast Community College are designed to allow the students maximum mobility for either the practical or associate degree nursing education. All students accepted into the program who successfully complete the first two semesters receive a diploma in practical nursing and may opt to take the NCLEX-PN exam for licensure. Upon successful completion of the practical nursing program, a student is eligible to complete the last two semesters of the program to receive an associate degree in nursing and take the NCLEX-RN exam. Students must achieve a grade of 'B' or better in all Nursing (NURS) coursework.

The nursing program may be completed in one, two, or multiple years, based on admission criteria. Part-time and full-time concentrations are available. The program plan of study can be customized to meet the individual student's needs. See nursing program admission requirements for detailed information. Students will be required to submit to a criminal background check and drug testing prior to acceptance into the program.



The nursing program is approved by the Nebraska State Board of Nursing and accredited by The Associate Degree in Nursing Program at Northeast Community College is accredited by: The Accreditation Commission for Education in Nursing (ACEN)
3390 Peachtree Road NE, Suite 1400 | Atlanta, GA 30326 | (404) 975-5000 | www.acenursing.org

Required Program of Study for Practical and Associate Degree in Nursing (2 years)

FRESHMAN YEAR

Summer Session

Course	Credits
BIOS 2250 Introduction to Human Anatomy and Physiology I*..4	

First Semester

Course	Credits
BIOS 2260 Introduction to Human Anatomy and Physiology II* 4	
MATH 1025 Math for Health Care Professionals*.....3	
NURS 1010 Nursing Process and Critical Thinking I.....3	
NURS 1060 Pathophysiology of Disease Processes I .....1.5	
NURS 1100 Nursing Science I .....3	
NURS 1110 Health Assessment and Health Promotion I.....2	
NURS 1120 Pharmacology and Nursing Practice I.....1.5	
NURS 1180 Nursing's Role I .....1	
	19

Second Semester

Course	Credits
BIOS 2460 Microbiology* .....4	
ENGL 1010 English Composition I* .....3	
NURS 1070 Pathophysiology of Disease Processes II.....1.5	
NURS 1125 Pharmacology and Nursing Practice II.....1.5	
NURS 1130 Nursing Process and Critical Thinking II.....3	
NURS 1140 Nursing Science II.....3	
NURS 1150 Intravenous Therapy for Practical Nursing .....1	
NURS 1185 Nursing's Role II.....1	
	18

Total Nursing Hours in Curriculum.....23
Total General Education Hours .....18

Total Hours in Practical Nursing Curriculum 41

Upon successful completion, student may graduate and take NCLEX-PN Exam for licensure as a Practical Nurse.

Note: A total of 18 hours of general education courses are required for the PN program. These courses are marked with an asterisk (*) in the Freshman Year. Twenty-seven to twenty-eight hours of general education courses are required for the ADN program. These are all courses marked with an asterisk (*) including those listed in the Sophomore Year.

*These courses may be taken before admittance to the program or in conjunction with the nursing courses, post-admission.

**Electives: ENGL 1020; MATH 2170; PSYC 2200; SOCI 1010; CHEM 1090; HOEC/NURS 1050; LIBR 1310; NURS 2100.

SOPHOMORE YEAR

First Semester

Course	Credits
NURS 2120 Pharmacology and Nursing Practice III .....1	
NURS 2150 Nursing Process and Critical Thinking III .....4	
NURS 2160 Nursing Science III .....5	
NURS 2165 Nursing's Role III .....1	
PSYC 1810 Introduction to Psychology* .....3	
SPCH 1010 Fundamentals of Communication* .....3	
	17

Second Semester

Course	Credits
NURS 2170 Nursing Process and Critical Thinking IV.....4	
NURS 2180 Nursing Science IV .....4	
NURS 2185 Nursing's Role IV .....3	
Elective*/** .....3	
	14

Total Nursing Hours in Curriculum.....45
Total General Education Hours .....27

Total Hours in ADN Curriculum 72

Upon successful completion, student may graduate and take NCLEX-RN Exam for licensure as a Registered Nurse.

NURSING

The following program of study is designed for licensed practical nurses who are interested in returning to college after a period of years to become a registered nurse.

A Licensed Practical Nurse (LPN) who feels he/she has established a good base of knowledge and nursing experience may wish to take the next step and become a Registered Nurse (RN). LPNs seeking higher salaries, more responsibility, and career advancement should think about a career as an RN. Choosing to become an RN can be a great career move, and becoming a Registered Nurse through an LPN to Associate Degree in Nursing (ADN) program at Northeast Community College can have many benefits. The LPN to ADN program is designed for qualified Licensed Practical Nurses who wish to become Registered Nurses with a minimum amount of time and with little repeat of course content and credits.

The difference between a LPN and a RN may seem small at first glance, but differ greatly in the education required to achieve licensure, and the opportunities afforded to each down the road are what really makes the difference. Many more options become available to an RN as they gain more experience, ones that will not be offered to an LPN regardless of experience or base knowledge.

Required Program of Study for LPN to ADN

General Education Courses		Nursing Courses	
		Summer	
Course	Credits	Course	Credits
BIOS 2250 Introduction to Human Anatomy and Physiology I...4		NURS 1120 Pharmacology and Nursing Practice I.....1.5	
BIOS 2260 Introduction to Human Anatomy and Physiology II..4		NURS 1125 Pharmacology and Nursing Practice II.....1.5	
BIOS 2460 Microbiology.....4		NURS 1150 Intravenous Therapy for Practical Nursing .....1	
ENGL 1010 English Composition I.....3			4
MATH 1025 Math for Health Care Professionals .....3			
PSYC 1810 Introduction to Psychology.....3		First Semester	
SPCH 1010 Fundamentals of Communication.....3		Course	Credits
Electives* .....3-4		NURS 1060 Pathophysiology of Disease Processes I .....1.5	
	27-28	NURS 1110 Health Assessment and Health Promotion I.....2	
		NURS 2120 Pharmacology and Nursing Practice III .....1	
		NURS 2150 Nursing Process and Critical Thinking III .....4	
		NURS 2160 Nursing Science III .....5	
		NURS 2165 Nursing's Role III .....1	
			14.5
		Second Semester	
		Course	Credits
		NURS 1070 Pathophysiology of Disease Processes II.....1.5	
		NURS 2170 Nursing Process and Critical Thinking IV.....4	
		NURS 2180 Nursing Science IV .....4	
		NURS 2185 Nursing's Role IV .....3	
			12.5

Upon successful completion, student may graduate and take NCLEX-RN Exam for licensure as a Registered Nurse.

*Electives: ENGL 1020; MATH 2170; PSYC 2200; SOCI 1010; CHEM 1090; HOEC/NURS 1050; LIBR 1310; NURS 2100.

NURSING: PREPROFESSIONAL

The preprofessional nursing program consists of general education course work required to obtain an Associate of Science Degree or an Associate of Arts Degree from Northeast Community College and prepare students for admission to a nursing program (practical nursing program or associate degree in nursing). Course work may also be transferred to a four-year institution in pursuit of a bachelor of science in nursing. Please see advisor for individual advising.

Suggested Program of Study for Associate of Science Degree (2 years) (Preferred Pathway)

FRESHMAN YEAR

First Semester	
Course	Credits
BIOS 1010 General Biology.....	4
ENGL 1010 English Composition I.....	3
NURA 1110 Nurse Aide.....	3
PSYC 1810 Introduction to Psychology.....	3
Behavioral & Social Sciences*.....	3
	<u>16</u>

Second Semester	
Course	Credits
BIOS 2460 Microbiology.....	4
MATH 1150 College Algebra.....	3
MATH 1220 Trigonometry.....	3
PSYC 2200 Lifespan Psychology.....	3
SPCH 1010 Fundamentals of Communication.....	3
	<u>16</u>

SOPHOMORE YEAR

First Semester	
Course	Credits
BIOS 2250 Introduction to Human Anatomy and Physiology I...4	
CHEM 1090 General Chemistry I.....	4
Behavioral & Social Sciences*.....	3
Technology*.....	3
Electives***.....	3
	<u>17</u>

Second Semester	
Course	Credits
BIOS 2260 Introduction to Human Anatomy and Physiology II..4	
HOEC1050 Nutrition.....	3
Mathematics*.....	5
Humanities*.....	3
	<u>15</u>

Total Credit Hours 64

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements for Associate of Science Degree.

**See general education requirements for Associate of Arts Degree.

***Suggested electives: HLTH 1060 Comprehensive Medical Terminology; NURS 1220 Structure and Function.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BIOS 1010 General Biology.....	4
ENGL 1010 English Composition I.....	3
NURA 1110 Nurse Aide.....	3
Behavioral Science**.....	3
	<u>13</u>

Second Semester	
Course	Credits
BIOS 2460 Microbiology.....	4
SPCH 1010 Fundamentals of Communication.....	3
MATH 1025 Math for Health Care Professionals.....	3
History**.....	3
	<u>13</u>

SOPHOMORE YEAR

First Semester	
Course	Credits
BIOS 2250 Introduction to Human Anatomy and Physiology I...4	
CHEM 1090 General Chemistry I.....	4
HPER 1550 Lifetime Wellness.....	3
English/Literature**.....	3
Electives***.....	3-4
	<u>17-18</u>

Second Semester	
Course	Credits
BIOS 2260 Introduction to Human Anatomy and Physiology II..4	
HOEC1050 Nutrition.....	3
PSYC 1810 Introduction to Psychology.....	3
Fine Arts and Language**.....	3
Social Science**.....	3
	<u>16</u>

Total Credit Hours 59-60

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

NURSING: UNMC TRANSFER

The unique partnership between Northeast Community College and the University Nebraska Medical Center allows students interested in pursuing a bachelor's degree in nursing the opportunity to complete general education requirements at Northeast and continue to attend classes for nursing in Norfolk at UNMC's College of Nursing - Northern Division. Students must earn a grade of "C+" or above in all courses listed below to ensure eligibility of transfer credit. A current CNA certification is also required by UNMC. Admission into the UNMC BSN program is selective and very competitive. A separate application is required for admission to UNMC. While a minimum prerequisite grade point average of 3.0 is required, the average GPA for successful applicants admitted to the BSN program is 3.30 or higher on a 4.0 scale.

Northeast Suggested Program of Study for Associate of Science Degree (2 years)

FRESHMAN YEAR

First Semester*		Credits
Course		
BIOS 1010 General Biology.....		4
CHEM 1090 General Chemistry I.....		4
ENGL 1010 English Composition I.....		3
PSYC 1810 Introduction to Psychology.....		3
		<u>14</u>

*Plan for upcoming math requirement, see advisor.

Second Semester		Credits
Course		
BIOS 2460 Microbiology**.....		4
ENGL 1020 English Composition II.....		3
HOEC 1050 Nutrition**.....		3
MATH 1150 College Algebra**.....		3
SOCI 1010 Introduction to Sociology.....		3
		<u>16</u>

SOPHOMORE YEAR

First Semester		Credits
Course		
BIOS 2250 Intro. to Human Anatomy and Physiology I**.....		4
MATH 2170 Applied Statistics.....		3
PSYC 2200 Lifespan Psychology**.....		3
SPCH 1010 Fundamentals of Communication.....		3
Group III Course.....		3
		<u>16</u>

Second Semester		Credits
Course		
BIOS 2260 Intro. to Human Anatomy and Physiology II**.....		4
INFO 1010 Fundamentals of Information Technology OR		
INFO 1100 Microcomputer Applications.....		3
NURS 2100 Health Care Ethics.....		3
Group II Course.....		3
Group IV Course.....		3
		<u>16</u>

Total Credit Hours 62

**Courses must be completed within 7 years of start at UNMC. (Seven year rule is waived for RN to BSN students.)

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

Group II: GEOG 1020, ECON 2110 or POLS 1000, AGRI 1290, AGRI 1310, AGRI 1410, BRDC 1010, BSAD 2140, BSAD 2250, CRIM 1010, CRIM 1020, CRIM 2000, CRIM 2030, CRIM 2100, CRIM 2200, ECON 2120, ENTR 1050, HIST 1030, HIST 1040, HIST 1050, HIST 1060, HIST 2010, HIST 2020, JOUR 1010, POLS 1200, SOCI 2320

Group III: SOCI 2300, PSYC 2110, PSYC 2500 or PSYC 2800, CRIM 2300, ECED 1110, ECED/EDUC 2070, PSYC 2300, SOCI 1100, SOCI 2200, SPCH 1100, SPCH 2010

GROUP IV: ECED/EDUC 2070, SOCI 2150, SOCI 2320, or Language courses (SPAN, FREN)

PARAMEDIC

The EMS training program offers two different programs of study for the student desiring to become a paramedic. Both programs will develop field/clinical ready paramedics with the required knowledge and skills to care for patients who are injured due to trauma or suffer from medical problems. The degree program is presented in a less intense pace and allow for additional skill time. Students will receive their Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), Prehospital Trauma Life Support (PHTLS) and Advanced Medical Life Support (AMLS) certifications during this program of study and will be eligible to take the National Registry for Emergency Medical Technicians-Paramedic test. Upon successful certification by the National Registry, students will be able to apply for their license to practice as a Paramedic in the State of Nebraska. This program is approved through the State of Nebraska Department of Health and Human Services Regulation and Licensure.

Completion of EMTL 1840 Emergency Medical Technician Part I and EMTL 1845 Emergency Medical Technician Part II or current EMT license or certification by National Registry of EMT are a prerequisite for acceptance into the Northeast Paramedic program.

Many of the field and clinical sites used by Northeast Community College for the paramedic program require that students coming into their facilities have a criminal background check completed. Students will be required to submit to a criminal background check and drug testing each year of the paramedic program. Individuals with a criminal record may not be eligible to complete clinical/field education in some settings based on the results of their criminal background check. Students will also be required to have a physical and show proof of current immunizations at the beginning of each school year.



The Northeast Community College Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP). To contact CAAHEP: Commission on Accreditation of Allied Health Education Programs 9355 113th St. N. #7709 Seminole, FL 33775 | www.caahep.org. To contact CoAEMSP: 8301 Lakeview Parkway, Suite 111-312 | Rowlett TX 75088 | (214) 703-8445 | FAX (214) 703-8992 www.coaemsp.org

Required Program of Study for Associate of Applied Science (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
EMTL 2641 Paramedic I.....	5
EMTL 2651 Paramedic Clinical Practicum I.....	1.5
EMTL 2661 Paramedic Field Practicum I.....	1
EMTL 2760 Paramedic Lab I.....	1
Mathematics*.....	3
HLTH 1060 Comprehensive Medical Terminology.....	3
	14.5

Second Semester	
Course	Credits
EMTL 2642 Paramedic II.....	5
EMTL 2652 Paramedic Clinical Practicum II.....	1.5
EMTL 2662 Paramedic Field Practicum II.....	1
EMTL 2761 Paramedic Lab II.....	1
BSAD 1000 Human Relations and Ethics.....	3
BSAD/ECON 1040 Personal Finance.....	3
	14.5

SOPHOMORE YEAR

First Semester	
Course	Credits
EMTL 2643 Paramedic III.....	5
EMTL 2653 Paramedic Clinical Practicum III.....	2
EMTL 2663 Paramedic Field Practicum III.....	1
EMTL 2860 Paramedic Lab III.....	1
Communication*.....	3
	12

Second Semester	
Course	Credits
EMTL 2644 Paramedic IV.....	5
EMTL 2654 Paramedic Clinical Practicum IV.....	2
EMTL 2664 Paramedic Field Practicum IV.....	1
EMTL 2861 Paramedic Lab IV.....	1
Science or Technology *.....	6
	15

Summer Session I and II	
Course	Credits
EMTL 2852 Paramedic Field Internship.....	4.25
EMTL 1870 Prehospital Trauma Life Support.....	1
EMTL 1880 Advanced Medical Life Support.....	1
	6.25

Total Credit Hours 62.25

*See general education requirements for associate of applied science degree.

PARAMEDIC

The EMS training program offers two different programs of study for the student desiring to become a paramedic. Both programs will develop field/clinical ready paramedics with the required knowledge and skills to care for patients who are injured due to trauma or suffer from medical problems. The diploma program is an intense course of study designed to allow the student to be eligible to take the National Registry for Emergency Medical Technicians-Paramedic test after completing the course of study in one year. Due to the accelerated pace of this program, it is strongly encouraged the student have some real life experience as an EMT prior to the beginning of this program. Students will receive their Advanced Cardiac Life Support (ACLS), Pediatric Advanced Life Support (PALS), Prehospital Trauma Life Support (PHTLS) and Advanced Medical Life Support (AMLS) certifications during this program of study. Upon successful certification by the National Registry, students will be able to apply for their license to practice as a Paramedic in the State of Nebraska. This program is approved through the State of Nebraska Department of Health and Human Services Regulation and Licensure.

Completion of EMTL 1840 Emergency Medical Technician Part I and EMTL 1845 Emergency Medical Technician Part II or current EMT license or certification by National Registry of EMT are a prerequisite for acceptance into the Northeast Paramedic program.

Many of the field and clinical sites used by Northeast Community College for the paramedic program require that students coming into their facilities have a criminal background check completed. Students will be required to submit to a criminal background check and drug testing each year of the paramedic program. Individuals with a criminal record may not be eligible to complete clinical/field education in some settings based on the results of their criminal background check. Students will also be required to have a physical and show proof of current immunizations at the beginning of each school year.



The Northeast Community College Paramedic Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Committee on Accreditation of Educational Programs for the Emergency Medical Services Professions (CoAEMSP). To contact CAAHEP: Commission on Accreditation of Allied Health Education Programs 9355 113th St. N. #7709 Seminole, FL 33775 | www.caahep.org. To contact CoAEMSP: 8301 Lakeview Parkway, Suite 111-312 | Rowlett TX 75088 | (214) 703-8445 | FAX (214) 703-8992 www.coaemsp.org

Required Program of Study for Diploma (1 year)

Fall Semester - First 8 weeks		Spring Semester - First 8 weeks	
Course	Credits	Course	Credits
EMTL 2641 Paramedic I.....	5	EMTL 2643 Paramedic III.....	5
EMTL 2651 Paramedic Clinical Practicum I.....	1.5	EMTL 2653 Paramedic Clinical Practicum III.....	2
EMTL 2661 Paramedic Field Practicum I.....	1	EMTL 2663 Paramedic Field Practicum III.....	1
Mathematics* (16 weeks)	3	Communication* (16 weeks)	3-6
 Fall Semester - Second 8 weeks		 Spring Semester - Second 8 weeks	
Course	Credits	Course	Credits
EMTL 2642 Paramedic II	5	EMTL 2644 Paramedic IV.....	5
EMTL 2652 Paramedic Clinical Practicum II	1.5	EMTL 2654 Paramedic Clinical Practicum IV.....	2
EMTL 2662 Paramedic Field Practicum II	1	EMTL 2664 Paramedic Field Practicum IV	1
	18.0		19
 Summer Session I and II		 Summer Session I and II	
Course	Credits	Course	Credits
EMTL 2852 Paramedic Field Internship	4.25	EMTL 2852 Paramedic Field Internship	4.25
EMTL 1870 Prehospital Trauma Life Support.....	1	EMTL 1870 Prehospital Trauma Life Support.....	1
EMTL 1880 Advanced Medical Life Support.....	1	EMTL 1880 Advanced Medical Life Support.....	1
	6.25		6.25
 Total Credit Hours		 Total Credit Hours	
	43.25-46.25		43.25-46.25

*See general education requirements for associate of applied science degree.

PERSONAL TRAINING

Students pursuing a career in the fitness industry are able to complete an Associate of Arts degree with a concentration in Personal Training. Personal Training has been identified as a rapidly growing industry at both the state and national levels. The curriculum is designed to integrate the educational and practical skills necessary to become an exercise professional. Upon completion of this Associate of Arts degree, students will be prepared to take a national certifying exam. They may choose to enter the workforce as a certified personal trainer, or continue their education at a transfer institution to obtain a bachelor’s degree in a fitness related area.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester

Course	Credits
HPER 1510 Introduction to Physical Education.....	3
HPER 1550 Lifetime Wellness	3
ENGL 1010 English Composition I	3
MATH 1100 Topics and Ideas in Mathematics.....	3
PRTR 2210 Introduction to Personal Training	4
	16

Second Semester

Course	Credits
BIOS 2250 Introduction to Human Anatomy and Physiology I	4
HPER 1240 Circuit Training	1
HPER 1270 Aerobic Fitness	1
HPER 1520 Nutrition for Fitness and Sport or HOEC 1050 Nutrition.....	3
HPER 2400 Care and Prevention of Athletic Injuries	3
PRTR 2410 Advanced Personal Training	4
	16

SOPHOMORE YEAR

First Semester

Course	Credits
HLTH 1060 Comprehensive Medical Terminology	3
HPER 1325 Introduction of Yoga.....	1
HPER 1245 Weight Management	1
Oral Communication*	3
History*	3
Fine Arts and Language*	3
	14

Second Semester

Course	Credits
HPER 1326 Intro to Pilates.....	1
HPER 2200 First Aid and CPR for Healthcare Provider	3
Social Science*.....	3
English/Literature*.....	3
Behavioral Science*	3
HPER 2300 Stress Management	3
	16

Total Credit Hours **62**

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

* See general education requirements.

PHYSICAL EDUCATION-TEACHER EDUCATION

Students pursuing a career in the Physical Education-Teacher Education field are able to complete an Associate of Arts degree with a concentration in Physical Education-Teacher Education. The curriculum is designed to integrate the educational and practical training skills needed to be a Physical Education teacher. Upon completion of this associate of arts degree, students will continue their education at a transfer institution to obtain a Bachelor's degree in Education.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BIOS 1010 General Biology.....	4
HPER 1510 Introduction to Physical Education.....	3
ENGL 1010 English Composition I.....	3
HPER 2110 Individual and Dual Sports.....	3
MATH 1150 College Algebra.....	3
	16

Second Semester	
Course	Credits
HPER 2160 Team Sports.....	3
EDUC 1110 Introduction to Professional Education.....	3
History.....	3
HPER 2310 Community Health.....	3
HLTH 1060 Comprehensive Medical Terminology.....	3
HPER 1550 Lifetime Wellness.....	3
	18

SOPHOMORE YEAR

First Semester	
Course	Credits
HPER 1245 Weight Management.....	1
HPER 2300 Stress Management.....	3
Oral Communication.....	3
Social Science.....	3
HPER 2510 Physical Education in the Elementary School I with Practicum.....	3
HPER 2400 Care and Prevention of Athletic Injuries.....	3
	16

Second Semester	
Course	Credits
HPER 1520 Nutrition for Fitness and Sport.....	3
EDUC 1710 Professional Practicum-Secondary School.....	2
PSYC 1810 Intro to Psychology.....	3
Fine Arts and Language.....	3
Humanities (English Literature).....	3
HPER 2200 First Aid and CPR for the Health Care Provider.....	3
	17

Total Credit Hours 67

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

PHYSICAL THERAPIST ASSISTANT

The Physical Therapist Assistant (PTA) program is designed to prepare qualified individuals for employment as entry-level physical therapist assistants. As a condition of admission to the College, students are subject to placement testing and mandatory placement for general education courses. Students enroll through open admission as Physical Therapy Pre-Professional. The first semester consists of general education and prerequisite coursework. Students are required to earn a grade of “C” in each course, and a cumulative GPA of 2.5 or higher in order to meet the standards of the PTA Program. Interested applicants who wish to transfer into the College should see a PTA Program advisor for transcript evaluation. Science courses must have been completed within the past five years to be considered eligible for transfer. Students must complete an application packet as part of the competitive selection process. See “Special Admission Guidelines” for details.

Program graduates will be eligible to take the National Physical Therapy Examination (NPTE) for PTAs. Upon successful completion of the NPTE, the graduate will be eligible for employment as a PTA under the supervision of a licensed physical therapist.



The Physical Therapist Assistant Program at Northeast Community College is accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE), 3030 Potomac Avenue, Suite 100, Alexandria, Virginia 22305-3085; telephone: 703-706-3245; email: accreditation@apta.org; website www.capteonline.org. If needing to contact the program/institution directly, please call 402-844-7326 or email PTA@northeast.edu.

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BIOS 2250 Introduction to Human Anatomy and Physiology I.....	4
ENGL 1010 English Composition I.....	3
PHYS 1070 Applied Physics for Allied Health.....	4
PTAS 1010 Medical Terminology for Physical Therapist Assistants.....	1.5
PTAS 1020 Introduction to Physical Therapy.....	1
SPCH 1010 Fundamentals of Communication.....	3
Social Science/Exploratory Studies*.....	2
	<u>18.5</u>

Second Semester	
Course	Credits
BIOS 2260 Introduction to Human Anatomy and Physiology II.....	4
PSYC 1810 Introduction to Psychology.....	3
MATH 2170 Applied Statistics.....	3
PTAS 2550 Basic Physical Therapy Procedures.....	2
PTAS 2551 Basic Physical Therapy Procedures Lab.....	2
PTAS 2570 Exercise Principles.....	2
PTAS 2571 Exercise Principles Lab.....	1
PTAS 2520 Introduction to Clinical Management.....	1
	<u>18</u>

SOPHOMORE YEAR

First Semester	
Course	Credits
PTAS 2620 Clinical Management.....	3
PTAS 2650 Physical Agents.....	2
PTAS 2651 Physical Agents Lab.....	2
PTAS 2670 Orthopedic Assessment and Intervention I.....	3.5
PTAS 2671 Orthopedic Assessment and Intervention I Lab.....	2.5
PTAS 2690 Clinical Pathophysiology.....	3.5
PTAS 2691 Clinical Pathophysiology Lab.....	.5
	<u>17</u>

Second Semester	
Course	Credits
PTAS 2700 Clinical Affiliation I.....	3.5
PTAS 2720 Advanced Clinical Management.....	.5
PTAS 2770 Orthopedic Assessment and Intervention II.....	2.5
PTAS 2771 Orthopedic Assessment and Intervention II Lab.....	1.5
PTAS 2790 Neurologic Rehabilitation.....	3
PTAS 2791 Neurologic Rehabilitation Lab.....	2
	<u>13</u>

Summer Session	
Course	Credits
PTAS 2800 Clinical Affiliation II.....	5
PTAS 2900 Clinical Affiliation III.....	5
	<u>10</u>

*See general education requirements

Total Credit Hours 76.5

PHYSICAL THERAPY: PREPROFESSIONAL

Suggested Program of Study for Associate of Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BIOS 2250 Introduction to A & P I.....	4
ENGL 1010 English Composition I.....	3
MATH 2170 Applied Statistics.....	3
PTAS 1020 Introduction to Physical Therapy.....	1
SPCH 1010 or SPCH 1110.....	3
	14

Second Semester	
Course	Credits
BIOS 2260 Introduction to Human Anatomy and Physiology II.....	4
PSYC 1810 Introduction to Psychology.....	3
HLTH 1060 Comprehensive Medical Terminology.....	3
MATH 1150 & MATH 1220.....	6
	16

SOPHOMORE YEAR

First Semester	
Course	Credits
PHYS 1410 Elementary General Physics I with Algebra and Trigonometry.....	5
Humanities Elective*.....	3
Technology Elective*.....	3
Biology Elective**.....	3
	14

Second Semester	
Course	Credits
CHEM 1090 General Chemistry I.....	4
Humanities or Behavioral Science Elective*.....	3
Elective**.....	3
Elective**.....	3
Elective**.....	3
	16

Total Credit Hours 61

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements for associate of science degree.
Suggested Humanities electives: ENGL 1020, 1520, 2100, SPAN 1200
Suggested Behav/Social Science Electives: ECON 2110, SOCI 1010
Suggested Technology Elective: INFO 1100

**Suggested electives: BIOS 1090, 2030, CHEM 1160, PHYS 1420, PSYC 2200
Ex Science: HOEC 1050, HPER 1245, 1270, 1510, 1520, 1550, 2200, 2310, PRTR 2210, 2410
Ath Training: HOEC 1050, HPER 1240, 1245, 1360, 1510, 1520, 1700, 2060, 2200, 2310, 2400

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BIOS 2250 Intro to Human Anatomy & Physiology I.....	4
ENGL 1010 English Composition I.....	3
SPCH 1010 Fundamentals of Comm or SPCH 1110.....	3
PTAS 1020 Introduction to Physical Therapy.....	1
MATH 2170 Applied Statistics.....	3
	14

Second Semester	
Course	Credits
BIOS 2260 Introduction to Human Anatomy and Physiology II.....	4
MATH 1150 College Algebra & MATH 1220 Trig I.....	6
PSYC 1810 Introduction to Psychology.....	3
HPER 1550 Lifetime Wellness.....	3
	16

SOPHOMORE YEAR

First Semester	
Course	Credits
PHYS 1410 Elementary General Physics I with Algebra and Trigonometry.....	5
HLTH 1060 Comprehensive Medical Terminology.....	3
ENGL/Literature*.....	3
Biology/Elective**.....	4
	15

Second Semester	
Course	Credits
CHEM 1090 General Chemistry I.....	4
Social Science*.....	3
History*.....	3
Fine Arts and Language**.....	3
Elective**.....	3
	16

Total Credit Hours 61

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements for associate of arts degree.

Suggested Social Science elective: ECON 2110
Suggested English/Literature electives: ENGL 1020, 1520, 2100
Suggested Fine Arts & Language elective: SPAN 1200

**Suggested electives:
Biology: 1090, 2030, CHEM 1100, CHEM 1160, PHYS 1420, PSYC 2200
Personal Training: HOEC 1050, HPER 1240, 1245, 1270, 1325, 1326, 1520, 2200, 2300, 2400, PRTR 2210, 2410
Phys Ed-Tch Ed: EDUC 1110, HPER 1510, 1520, 2160, 2310, 1245, 2200, 2300, 2510, 2400

PHYSICS

The two-year liberal arts curriculum is designed for students who want to include physics in their general education and for students who plan to concentrate in a STEM field for professional careers by transferring to a four-year college or university.

Suggested Program of Study for Associate of Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
MATH 1600 Analytic Geometry and Calculus I.....	5
CHEM 1140 General Chemistry I for majors with Lab or.....	5
CHEM 1090 General Chemistry I	
ENGL 2070 Technical Communications I.....	3
	13

Second Semester	
Course	Credits
PHYS 2110 General Physics I with Calculus.....	5
MATH 2010 Analytic Geometry and Calculus II.....	5
ENGL 2080 Technical Communications II.....	3
CHEM 1160 General Chemistry II for majors with Lab or.....	5
CHEM 1100 General Chemistry II	
	18

SOPHOMORE YEAR

First Semester	
Course	Credits
PHYS 2120 General Physics II with Calculus.....	5
MATH 2100 Ordinary Differential Equations.....	3
Elective.....	3-4
Behavioral Science*.....	3
English/Literature*.....	3
	17-18

Second Semester	
Course	Credits
MATH 2020 Analytic Geometry and Calculus III.....	5
Social Science*.....	3
Elective.....	3-4
Technology*.....	3
	14-15

Total Credit Hours 62-64

* See general education requirements.

Note: Selection of courses for general education requirements should take into consideration the intended transfer institution. Please see your advisor to help you make the best selection.

PLUMBING TECHNOLOGY

The plumbing technology program prepares individuals for careers in plumbing and pipefitting through the application of technical knowledge and skills in piping selection and layout procedures, plumbing systems and materials, plumbing codes and print reading, and plumbing and pipe installation and maintenance for residential and commercial applications. This program provides training in communications and math critical to the plumbing profession. (Enrollment in this program is limited and is based on the date of application.)

Required Program of Study for Plumbing Technology Diploma (34 weeks)

First Semester		Second Semester	
Course	Credits	Course	Credits
PLMB 1025 Plumbing Safety or INDT 1025 Introduction to Industrial Safety.....	2	PLMB 1010 Electricity and Mechanics for Plumbers.....	3
PLMB 1030 Plumbing Code and Print Reading.....	2	PLMB 1020 Electricity and Mechanics for Plumbers Lab.....	2
PLMB 1040 Plumbing and Pipefitting Fundamentals.....	3	PLMB 1110 Advanced Plumbing and Pipefitting.....	3
PLMB 1050 Plumbing and Pipefitting Fundamentals Lab.....	5	PLMB 1120 Advanced Plumbing and Pipefitting Lab.....	3
PLMB 1060 Plumbing Tools and Processes	2	PLMB 1130 Gas Operations and Maintenance	2
PLMB 1070 Trenching and Shoring.....	1	PLMB 1140 Gas Operations and Maintenance Lab	2
MATH 1020 Technical Mathematics I.....	3	PSYC 1000 Human Relations.....	2
	18		17
		Total Credit Hours	35

PRE-CULINARY ARTS and MANAGEMENT

The culinary arts and management program prepares students for a variety of job opportunities in the rapidly growing food service industry. Students are able to complete the first two semesters of courses at Northeast Community College and transfer those credit hours to Metropolitan Community College to complete an associate of applied science degree. The Metropolitan Community College program is accredited by the American Culinary Federation Accrediting Commission and the Commission on Accreditation of Hospitality Management.

Northeast Community College Courses for Associate of Applied Science Degree (2 years)
 Awarded by Metropolitan Community College

First Semester		Second Semester	
Course	Credits	Course	Credits
ENGL 1010 English Composition I	3	BSAD 1000 Human Relations and Ethics	3
FSDT 1210 Supervision for Food Professionals.....	3	ECON2110 Principles of Macroeconomics	3
FSDT 1221 Introduction to Food Service Nutrition.....	1	ENGL 1020 English Composition II.....	3
FSDT 1222 Culinary Nutrition Applications.....	2	FSDT 1231 Sanitation and Food Safety	2
FSDT 1224 Culinary Nutrition Applications Lab.....	0.5	FSDT 1280 Culinary Math.....	1.5
MATH 1140 Intermediate Algebra.....	4		<u>12.5</u>
OFFT 1500 Microsoft Office.....	3		
	<u>16.5</u>	Total Credit Hours	29

PRE-DIETETICS

Students pursuing a career in Pre-Dietetics or Nutrition field are able to complete an Associate of Science degree with a concentration in pre-dietetics. The curriculum is designed to focus on the science background needed to be a Dietetics professional. Upon completion of this Associate of Science degree, students will continue their education at a transfer institution to obtain a Bachelor's degree in Dietetics or related field.

Suggested Program of Study for Associate of Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BIOS 1010 General Biology.....	4
HPER 1510 Introduction to Physical Education.....	3
ENGL 1010 English Composition I.....	3
CHEM 1090 General Chemistry I.....	4
MATH 1150 College Algebra.....	3
	<u>17</u>

Second Semester	
Course	Credits
BIOS 2250 Intro to Human Anatomy and Physiology I.....	4
HOEC 1050 Nutrition.....	3
CHEM 1100 General Chemistry II.....	4
HPER 2310 Community Health.....	3
	<u>14</u>

SOPHOMORE YEAR

First Semester	
Course	Credits
HPER 1245 Weight Management.....	1
CHEM 2030 Intro to Organic Chemistry.....	4
Oral Communication.....	3
Behavioral and Social Sciences.....	3
BIOS 2260 Intro to Human Anatomy and Physiology II.....	4
	<u>15</u>

Second Semester	
Course	Credits
HLTH 1060 Comprehensive Medical Terminology.....	3
Behavioral and Social Sciences.....	3
MATH 2170 Applied Statistics.....	3
INFO 1100 Microcomputer Applications.....	3
HPER 2200 First Aid and CPR for the Health Care Provider....	3
Humanities (English/Literature).....	3
	<u>18</u>

Total Credit Hours 64

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

PRE-ENGINEERING TRANSFER TO SOUTH DAKOTA SCHOOL OF MINES & TECHNOLOGY

Northeast Community College has entered into an articulation agreement with South Dakota School of Mines and Technology (SDSM&T) for students to complete an associate of science degree and transfer the majority of those credits to SDSM&T to complete a bachelors degree in one of its many colleges of engineering. Students interested in pursuing an SDSM&T degree program should contact SDSM&T office of admissions. Individual guidance on the transfer process will be provided by SDSM&T.

Suggested Program of Study for Associate of Science Degree (2 Years)

FRESHMAN YEAR

First Semester	
Course	Credits
ENGR 1010 Introduction to Engineering Design	3
MATH 1600 Analytic Geometry and Calculus I.....	5
CHEM 1090 General Chemistry I or CHEM 1140 General Chemistry I for majors plus Lab.....	4-5
Humanities*	3
ENGL 1010 English Composition I	3
	<u>18-19</u>

Second Semester	
Course	Credits
ENGR 1020 Programming and Problem Solving **.....	3
MATH 2010 Analytic Geometry and Calculus II.....	5
CHEM 1100 General Chemistry II or CHEM 1160 General Chemistry II for majors plus Lab	4-5
PHYS 2110 General Physics I with Calculus.....	5
	<u>17-18</u>

SOPHOMORE YEAR

First Semester	
Course	Credits
ENGR 2020 Engineering Statics.....	3
MATH 2100 Differential Equations	3
PHYS 2120 General Physics II with Calculus	5
ENGL 2070 Technical Communications I.....	3
Social Science *	3
	<u>17</u>

Second Semester	
Course	Credits
ENGR 2010 Introduction to Circuits and Electronics	4
MATH 2020 Calculus III.....	5
PHYS 2300 Dynamics	3
Behavioral Science *	3
ENGL 2080 Technical Communications II.....	3
	<u>18</u>

Total Credit Hours 70-72

*SDSM&T requires two Humanities Courses totaling six credit hours (each course must have a different course prefix; i.e. HUM, MUSC, THEA, HIST, ENGL; exception two same foreign language courses are acceptable).

*SDSM&T require two Social Science Courses totaling six credit hours (each course must have a different course prefix; i.e. POL, PSY, SOC; Northeast Behavioral Science course may count as one of the two course requirements).

*Northeast requires nine credit hours with one course each from Humanities, Social Science, and Behavioral Science.

** Will not count toward SDSM&T academic major (unless as a potential allowed elective).

PRE-MEDICAL ASSISTING

Medical Assisting is an allied health profession in ambulatory medical offices and clinics primarily. Medical Assistants provide both administrative and clinical procedures and healthcare in direct patient care experiences. This program is a joint cooperative arrangement with Central Community College and Northeast Community College. General education and academic support courses are provided by Northeast Community College. Clinical experience is provided in cooperation with area medical providers in and around Norfolk, Nebraska, and our area hospitals. The degree is granted by Central Community College.

The Central Community College Medical Assisting Program is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep.org) upon the recommendation of the Medical Assisting Education Review Board (MAERB), Commission on Accreditation of Allied Health Education Programs, 25400 US Highway 19 N, Suite 158, Clearwater, FL 33763, (727) 210-2350.

Graduates of the Medical Assisting program are encouraged to take the AAMA certification exam.

Suggested Program of Study for Associate of Applied Science Degree (2 Years) Awarded by Central Community College

FRESHMAN YEAR

First Semester	
Course	Credits
HLTH 1060 Comprehensive Medical Terminology*	3
HIMS 1220 Structure and Function of the Human Body*	3
HIMS 2000 Medical Billing and Reimbursement*	3
INFO 1100 Microcomputer Applications*	3
ENGL 1010 Composition I*	3
	15

Second Semester	
Course	Credits
PSYC 1810 Introduction to Psychology*	3
SPCH 1110 Public Speaking*	3
HIMS 1130 Disease Processes*	3
HIMS 2010 Pharmacology and Drug Administration*	3
HIMS 2030 Health Information Management Application*	3
	15

*Northeast Community College courses.

SOPHOMORE YEAR

First Semester	
Course	Credits
HOEC1050 Nutrition*	3
MEDA1250 Medical Office I**	1
MEDA 1290 Medical Ethics & Law**	2
MEDA 1100 Exam Room I**	1
MEDA 1110 Exam Room I Lab**	1
1630 Administrative Medical Assisting**	3
*/** Student Elective (HLTH 1100)	1
	12

Second Semester	
Course	Credits
MEDA 2300 Exam Room II**	3
MEDA 2310 Exam Room II Lab**	1
MEDA 2330 Laboratory Techniques & Procedures**	2
MEDA 2350 Laboratory Techniques & Procedures Lab**	1
MEDA 2250 Medical Office II**	3
*/** Student Elective (PRDV 1850)	2
	12

Fifth Semester	
Course	Credits
MEDA 2420 Practicum**	6

Total Credit Hours 60

**Central Community College courses.

*NOTE: Prior to entering the medical assisting program, students are required to complete the above courses available at Northeast Community College with a grade of "C" or better and must be admitted to the Central Community College Medical Assisting Program.

PRE-RADIOLOGIC TECHNOLOGY

The radiologic technology program teaches the safe use of radiation to produce images of the human body for diagnostic purposes. This program is a joint cooperative arrangement with Southeast Community College and Northeast Community College. General education and academic support courses are provided by Northeast Community College. Radiologic technology courses are taught on-line through Southeast Community College. Clinical experience is provided in cooperation with Faith Regional Health Services in Norfolk, Nebraska, and the area hospitals. Radiation technology job shadowing experience is also required by Southeast Community College prior to being accepted in the program.

Program graduates earn an associate of applied science degree from Southeast Community College and are eligible to take the national examination of the American Registry of Radiographic Technologists and the designation, R.T. (R) (ARRT).

Required Program of Study for Associate of Applied Science Degree (2 years) Awarded by Southeast Community College

Northeast Community College

The following courses meet the pre-requisite requirements for the SCC radiology technology program.

Course	Credits
BIOS 2250 Introduction to Human Anatomy and Physiology I.....	4
BIOS 2260 Introduction to Human Anatomy and Physiology II.....	4
ENGL 1010 English Composition I.....	3
MATH 1140 Intermediate Algebra.....	4
PHYS 1070 Applied Physics for Allied Health or PHYS 1410 Elementary General Physics I with Algebra and Trigonometry.....	4
SPCH 1110 Public Speaking.....	3
SOCI 1010 Introduction to Sociology.....	3
Job Shadowing Experience (Contact advisor for information)	
Total Credit Hours	25

Southeast Community College

Pre-Requisites:
All courses identified on left.

Course	Credit Hours
Student must complete RADT courses in the following order:	
RADT 1114 Principles of Patient Care.....	2
RADT 1115 Imaging Procedures 1.....	3
RADT 1116 Image Analysis 1.....	0.5
RADT 1117 Radiographic Physics 1.....	2.5
RADT 1119 Clinical Education 1.....	4
RADT 1125 Imaging Procedures 2.....	3
RADT 1126 Imaging Analysis 2.....	0.5
RADT 1127 Radiographic Physics 2.....	2.5
RADT 1147 Advanced Imaging.....	1
RADT 2265 Pathology for Radiographers.....	3
RADT 1129 Clinical Education 2.....	3.5
RADT 1139 Clinical Education 3.....	3.5
RADT 1134 Radiation Biology.....	2
RADT 2276 Imaging Applications.....	3.0
RADT 1149 Clinical Education.....	5
RADT 2277 Radiology Capstone.....	1
RADT 2288 Registry Review.....	1
RADT 2259 Clinical Education.....	5
RADT 2269 Clinical Education.....	5

Total Credit Hours **51**

Optional Courses	
RADT 2500 Principles of Computed Tomography.....	3
RADT 2501 Computed Tomography Procedures.....	3
RADT 2502 Vascular-Interventional Radiography.....	3

NOTE: Prior to entering the radiology technology program, students are required to complete the above courses available at Northeast Community College with a grade of "C+" or better.

See www.southeast.edu for additional information.

PRE-RESPIRATORY CARE

Students pursuing a career in respiratory care can begin their study at Northeast Community College by completing pre-requisite courses. This program is a joint cooperative arrangement with Southeast Community College (SCC) and Northeast Community College. Students may complete over 30 credit hours at Northeast to qualify for admission into the SCC program. Application is made during the final semester of completing pre-requisite courses. By applying for the distance program at SCC, students are able to complete the program within this geographical region. In the SCC respiratory care distance program, all course work is done online. Laboratory and clinical education is arranged by agreement with area hospitals and care facilities. SCC admits students in July for this eighteen month program.

Program graduates earn an Associate of Applied Science degree from Southeast Community College and are eligible to take the national examinations and apply for a license from the State Health Department.

Required Program of Study for Associate of Applied Science Degree (2 years) Awarded by Southeast Community College

Northeast Community College		Southeast Community College	
Course	Credits	Course	Credit Hours
BIOS 2250 Introduction to Human Anatomy and Physiology I.....	4	Student must complete the following RESP courses.	
BIOS 2260 Introduction to Human Anatomy and Physiology II.....	4	RESP 1111 Respiratory Anatomy and Physiology.....	3
ENGL 1010 English Composition I.....	3	RESP 1114 Respiratory Care Principles.....	3
SPCH 1110 Public Speaking or		RESP 1122 Respiratory Care Procedures.....	5
SPCH 1010 Fundamentals of Communication.....	3	RESP 1148 Critical Care Management.....	4
*Social Science Elective.....	3	RESP 1150 Respiratory Pharmacology and Pathology.....	5
(PSYC 1810, SOCI 1010)		RESP 1160 Mechanical Ventilation.....	6
MATH 1140 Intermediate Algebra (or Higher).....	4-5	RESP 1170 Exam Review.....	3
		RESP 1180 Chronic Cardiopulmonary Management.....	3
Total Credit Hours	21-22	RESP 1210 Clinical Education: General/Progressive Care.....	5
		RESP 1220 Clinical Education: Critical Care/Specialty Rotations 1.....	5
		RESP 1230 Clinical Education: Critical Care/Specialty Rotations 2.....	5
		RESP 1240 Clinical Education: Internship.....	2
		RESP 2251 Cardiovascular Principles.....	3
		Total Credit Hours	52

Note: Prior to entering the respiratory care program, students are required to complete the above courses available at Northeast Community College with a grade of "C+" or better.

Appropriate placement score or BIOS 1010 with a minimum grade of "C" is required at Northeast Community College.

PRE-SURGICAL TECHNOLOGY

The Surgical Technology program provides a planned course of classroom study and clinical practice in operating room techniques and principles of asepsis. This program is a joint cooperative arrangement with Southeast Community College and Northeast Community College. General education and academic support courses are provided by Northeast Community College. Surgical technology courses are taught on-line through Southeast Community College. Clinical experience is provided in cooperation with Faith Regional Health Services in Norfolk, Nebraska, and the area hospitals.

Program graduates earn an associate of applied science degree from Southeast Community College and are eligible to take the National Certification Examination for certified surgical technologist status.

Required Program of Study for Associate of Applied Science Degree (2 years) Awarded by Southeast Community College

Northeast Community College		Southeast Community College	
Course	Credits	Course	Credit Hours
BIOS 2250 Introduction to Human Anatomy and Physiology I	4	SURT 1620 Foundations of Surgical Technology.....	5
BIOS 2260 Introduction to Human Anatomy and Physiology II.....	4	SURT 1630 Surgical Procedures 1	6
BIOS 2460 Microbiology.....	4	SURT 1640 Introduction to Surgical Technology.....	5
ENGL 1010 English Composition I.....	3	SURT 1730 Surgical Procedures 2	4
HLTH 1060 Comprehensive Medical Terminology.....	3	SURT 1740 Principles of Surgical Technology.....	3
PSYC 1810 Introduction to Psychology or SOCI 1010 Introduction to Sociology or PSYC 2200 Lifespan Psychology.....	3	SURT 1750 Clinical Education 1	6
SPCH 1110 Public Speaking or SPCH 1010 Fundamentals of Communication	3	SURT 1830 Surgical Procedures 3	4
MEDA 1207 Pharmacology & Dosage Calculations.....	2	SURT 1850 Clinical Education 2	8
(Class offered through SCC only can be taken online while a student at Northeast)		SURT 1940 Senior Seminar.....	4
Total Credit Hours	26	Total Credit Hours	45

Note: Prior to entering the Surgical Technology program, students are required to complete the above courses available at Northeast Community College with a grade of "C+" or better.

Appropriate placement score or BIOS 1010 with a minimum grade of "C" is required at Northeast Community College.

PUBLIC HEALTH COLLEGE TRANSFER

Students interested in pursuing academic transfer in public health to other colleges can obtain an associate of science degree from Northeast Community College. This degree includes several general education classes as well as health related elective classes that transfer easily into baccalaureate programs at other colleges and universities.

Northeast has articulated agreements with the University of Nebraska-Lincoln, University of Nebraska-Omaha, and Concordia University. Individual program plans to transfer to other four-year institutions can be developed with the help of an advisor. Students can obtain specific plans of study for these colleges from the Health and Wellness Division Dean's office.

Public Health degree seeking students are strongly encouraged to meet with a Health and Wellness Faculty advisor regularly to ensure transferability of elective courses to student identified transfer institution.

Suggested Program of Study for Associate of Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
BIOS 2250 Introduction to Anatomy & Physiology I.....	4
ENGL 1010 English Composition I.....	3
HLTH 1060 Comprehensive Medical Terminology.....	3
HPER 1550 Lifetime Wellness.....	3
MATH 2170 Applied Statistics.....	3
	16

Second Semester	
Course	Credits
BIOS 2260 Introduction to Anatomy & Physiology II.....	4
HLTH 1210 Community Health Worker.....	3
HPER 2310 Community Health.....	3
SOCI 1010 Introduction to Sociology.....	3
SPCH 1010 Fundamentals of Communication or SPCH 1110 Public Speaking.....	3
	16

Recommended Health and Wellness Electives:
 BIOS 2460 Microbiology
 HPER 2300 Stress Management
 HUSR 1010 Introduction to Counseling
 HUSR 2020 Social Problems
 MATH 1025 Math for Healthcare Professionals
 MATH 1150 College Algebra
 NURA 1110 Nurse Aide
 NURS 2100 Ethics

SOPHOMORE YEAR

First Semester	
Course	Credits
HOEC 1050 Nutrition.....	3
HPER 2200 First Aid & CPR.....	3
PSYC 1810 Introduction to Psychology.....	3
HW Elective.....	3-4
Math Elective*.....	3
	15-16

Second Semester	
Course	Credits
ENGL/Literature Elective*.....	3
Technology*.....	3
General Studies Electives**.....	6
HW Electives**.....	3
	15

Total Credit Hours 62-63

To earn an associate of science degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

*See general education requirements.

**Upon advisement of college transfer advisor.

SKILLED AND TECHNICAL SCIENCES EDUCATION TRANSFER TO UNIVERSITY OF NEBRASKA-LINCOLN

Northeast Community College has partnered with the University of Nebraska-Lincoln to offer a transfer program for students interested in becoming a skilled and technical sciences (STS) high school teacher. Students who meet entry requirements in the STS Teaching Option will have completed a variety of course work from Northeast Community College. See website <http://agedteaching.unl.edu/sts-2-2-programs>. Courses within the Northeast catalog have direct equivalencies with the ACE program at UNL. Following a comprehensive transfer analysis, students will be provided an accurate degree audit of the remaining ACE courses needed at UNL along with the professional program in agricultural education. The minimum requirements of the College of Agricultural Sciences and Natural Resources reflect the common core of courses that apply to students pursuing degrees in the college. Students should work with a Northeast advisor to satisfy ACE requirements and the program career and technical education courses.

Suggested Program of Study for Associate of Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
CNST 1000 Building Construction Fundamentals	1.5
CNST 1005 Building Construction Fundamentals Lab	2.5
CNST 1065 Principles of Light-Frame Structure Technology	1.5
CNST 1075 Principles of Light-Frame Structure Tech Lab	2.5
PHYS 1410 Elementary General Physics I with Algebra and Trigonometry.....	5
CNST 1050 Residential Blueprint Reading*	3
INDT 1025 Introduction to Industrial Safety*	2
	<hr/> 18

Second Semester	
Course	Credits
PHYS 1100 Physical Science.....	4
MATH 1220 Trigonometry.....	3
INDT 1085 Industrial Maintenance Fundamentals*	3
INDT 1170 Introduction to Total Quality Management*	2
ARTS 1050 Intro to Art History and Criticism I	3
	<hr/> 15

SOPHOMORE YEAR

First Semester	
Course	Credits
ELMC/ELTR 1010 Fundamentals of Electricity*	3
ELMC/ELTR 1020 Fundamentals of Electricity Lab*	2
ENGL 1010 English Composition I	3
AUTT 1010 Suspension, Steering, and Brake Systems Theory*	2.5
AUTT 1020 Suspension, Steering, and Brake Systems Lab*	4.5
	<hr/> 15

Second Semester	
Course	Credits
SPCH 1010/1110 Fundamentals of Communication/ Public Speaking.....	3
MATH 2170 Applied Statistics.....	3
ECON2110 Principles of Macroeconomics	3
INFO 1100 Microcomputer Applications.....	3
ENGL 2100 Introduction to Literature	3
	<hr/> 15

Total Credit Hours 63

*Recommended electives.

**Additional approved electives: AUTT 1110; AUTT 1120; AUTT 1210; SOCI 2150; CNST 1030; CNST 1040; INDT 1015; INDT 1055; INDT 1065; ELMC 1090; ENGR 1010; WELD 1030; WELD 1035; WELD 1040; WELD 1045.

SOCIAL SCIENCE

Today’s workplace requires skills in decision-making, problem-solving, and flexibility. Participation in classes in the social sciences promotes development of these skills through encouragement of intellectual curiosity and appreciation of human diversity. Most careers in the social sciences require a bachelor’s degree. Students may complete the first two years of their education at Northeast and then transfer to a four-year college to complete a bachelor’s degree. A degree with a concentration in social science prepares students for a career in teaching, economics, politics, geography, history, non-profit organizations, urban planning, and a wide variety of other professional careers.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ARTS 1050 Introduction to Art History & Criticism I or ARTS 1060 Introduction to Art History & Criticism II	3
ENGL 1010 English Composition I	3
HIST 2010 American History I	3
HPER 1550 Lifetime Wellness	3
SPCH 1010 Fundamentals of Communication or SPCH 1110 Public Speaking	3
	15

Second Semester	
Course	Credits
ENGL 1020 English Composition II or Literature*	3
GEOG 1020 World Regional Geography.....	3
HIST 2020 American History II.....	3
MUSC 1010 Introduction to Music	3
Mathematics*	3-5
	15-17

SOPHOMORE YEAR

First Semester	
Course	Credits
BIOS 1010 General Biology or other natural science*	4-5
ECON2110 Principles of Macroeconomics	3
HIST 1050 World History I.....	3
POLS 1000 American Government	3
SOCI 1010 Introduction to Sociology	3
	16-17

Second Semester	
Course	Credits
ECON2120 Principles of Microeconomics.....	3
HIST 1060 World History II.....	3
PSYC 1810 Introduction to Psychology.....	3
Fine Arts and Language*	4
Elective**	3
	16

Total Credit Hours 62-65

* See general education requirements.

**Recommended electives depend on desired professional goal and/or requirements at institution of transfer.

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that include the general education requirements.

SOCIAL WORK

Completion of the associate of arts degree with a concentration in social work will introduce students to the field of social work and provide students the foundation to transfer into a social work program at a four-year institution. Students entering the field of social work may choose to work in areas such as aging, alcoholism, child welfare, corrections, family services, and schools.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ENGL 1010 English Composition I	3
POLS 1000 American Government	3
PSYC 1810 Introduction to Psychology.....	3
Fine Arts and Language*	3-4
Mathematics*	3-5
	15-18

Second Semester	
Course	Credits
PSYC 2200 Lifespan Psychology	3
SOCI 1010 Introduction to Sociology	3
English/Literature*	3
Natural Science*	4-5
Elective**	3
	16-17

SOPHOMORE YEAR

First Semester	
Course	Credits
SOWK 2000 Introduction to Social Work.....	3
SOCI 2150 Issues of Unity and Diversity	3
History*	3
Oral Communication*	3
Elective**	3
	15

Second Semester	
Course	Credits
SOWK 2100 Social Work Ethics and Skills.....	3
SOWK 2110 Social Work Practicum	1
SOCI 2320 Social Problems	3
HPER 1550 Lifetime Wellness	3
Electives**	6
	16

Total Credit Hours 62-66

* See general education requirements.

**Electives should be chosen from PSYC, SOCI, CRIM, or HUSR based on professional goals and transfer institution.

THEATRE

Theatre at Northeast Community College is an exciting participation activity. In addition to theatre classes, through a cooperative agreement with the Norfolk Community Theatre and the production of an all-college play, students participate in a wide variety of experiences in the production of theatre. After earning an associate of arts degree, students may either put their skills directly to work or transfer into a bachelor's degree program at a four-year college. Career opportunities in theatre may be found in performing arts, directing, writing, set design and other areas behind the scenes, movies and television, education, and business.

Suggested Program of Study for Associate of Arts Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
ENGL 1010 English Composition I	3
HPER 1550 Lifetime Wellness	3
POLS 1000 American Government or GEOG 1020 World Regional Geography	3
SPCH 1010 Fundamentals of Communication or SPCH 1110 Public Speaking	3
THEA 1100 Applied Theatre I	1
THEA 1340 Introduction to Acting	3
	16

Second Semester	
Course	Credits
THEA 1010 Introduction to Theatre.....	3
HIST 1050 World History I or HIST 1060 World History II.....	3
THEA 1200 Play Production	2
AND	
THEA 1100 Theatre I, THEA 1110 Theatre II, THEA 2120 Theatre III, or THEA 2130 Theatre IV	1
MUSC 1010 Introduction to Music	3
Mathematics*	3-5
	15-17

SOPHOMORE YEAR

First Semester	
Course	Credits
ARTS 1050 Introduction to Art History & Criticism I	3
BRDC 1240 Voice and Diction.....	3
THEA 1110 Theatre II.....	1
THEA 2150 Introduction to Directing	3
Natural Science*	4-5
	14-15

Second Semester	
Course	Credits
ARTS 1060 Introduction to Art History & Criticism II.....	3
PSYC 1810 Introduction of Psychology or SOCIO 1010 Introduction to Sociology	3
SOCI 2150 Issues of Unity and Diversity	3
THEA 2120 Applied Theatre III	1
English/Literature*	3
Elective**	3-4
	16-17

Total Credit Hours **61-65**

To earn an associate of arts degree, a student must satisfactorily complete a minimum of 60 semester hours that includes the general education requirements.

* See general education requirements.

**Recommended Electives: THEA 2130 Theatre IV, ENGL 1020 English Composition II, FREN 1200 Elementary French I, FREN 1210 Elementary French II, SPAN 1200 Elementary Spanish I, SPAN 1210 Elementary Spanish II, ENGL 2030 Creating Poetry I, ENGL 2050 Creating Stories I, ENGL 2730 The Novel and the Movie, HIST 2010 American History I, HIST 2020 American History II.

TRUCK DRIVING

The noncredit truck driving program teaches students the fundamentals of truck operation, safety, government regulations, and necessary recordkeeping. Upon completion of the program, students take the U.S. Department of Transportation and Nebraska Department of Motor Vehicles license exams. This program is approved for the training of veterans. Many employers require a criminal background check prior to employment. Individuals with a criminal record may not be eligible for employment in some settings.

Prior to being accepted into the class, all applicants must complete a CASAC test and score at or above a 7th grade level, or provide documentation of equivalent ACT or SAT scores, high school diploma, or English GED.

A certificate of continued learning is issued upon successful completion of the course.

Program of Study

- A. 190 contact hours of classroom and lab instruction covering such topics as: public and employer relations, accident procedures, extreme driving conditions, hazard perception, regulation agencies (DOT-CVSA), daily logs, fire-fighting, personal health and safety, trip planning, speed and space management, vehicle preventive maintenance, cargo handling and documentation, hazardous materials, basic control of vehicle, coupling and uncoupling, backing and shifting, concourse, city and two-lane highway driving, and other related topics including CDL training and testing.
- B. 50 hours of driving (range and street), including accompanying instructor in truck cab and actual driving under supervision.

Total of 240 contact hours.

Students are trained in conventional tractor-trailer combination units with ten and thirteen speed transmissions. The number of students is limited to eight per class.

Prerequisites

Students must be 21 years of age or older and have a valid driver's license. Students are also cautioned that the physical requirements for a class A Commercial Driver License (required for truck-tractor operators) must be consistent with the standards of the United States Department of Transportation. The required drug/alcohol testing includes pre-admittance, random, post accident, and reasonable suspicion testing.

UTILITY LINE

The utility line program teaches students skills in the installation, operation, and maintenance of electrical utilities. Instruction includes practical application of power line construction and maintenance, mathematics, sciences, electrical theory, and electrical apparatus. Successful completion of the program prepares students for highly marketable careers in installation, replacement, and maintenance of electrical power lines and equipment. In order for students to progress to the next term, they must successfully complete all required classes for the previous term. (See admission guidelines in the Admissions and Records section of this Catalog.) Before admission into the program, students will need to attain the following minimum entrance scores: MAP: Math 212, Reading/Language 216+; ACT: Math 16, Reading 14, English 14. (Enrollment into this program is limited and is based on the date of application. Individuals with a criminal record may not be eligible for employment in some settings.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR – GROUPS A

First Semester		
Course		Credits
UTIL 1010 Concepts of Electricity I	.....	4
UTIL 1020 Concepts of Electricity I Lab	.....	1
UTIL 1030 Line Construction I	.....	4
UTIL 1040 Line Construction I Lab	.....	3
UTIL 1100 Commercial Drivers License	.....	1
UTIL 1110 Commercial Drivers License Lab	.....	1
UTIL 1280 Computer Literacy	.....	2
MATH 1020 Technical Mathematics I	.....	3
		<u>19</u>

Second Semester		
Course		Credits
UTIL 1120 Power Transformer Theory	.....	2
UTIL 1140 Line Construction II	.....	4
UTIL 1150 Line Construction II Lab	.....	3
UTIL 1240 Concepts of Electricity II	.....	4
UTIL 1250 Concepts of Electricity II Lab	.....	1
UTIL 1260 Ropes and Riggings	.....	1
MATH 1060 Technical Mathematics II	.....	3
		<u>18</u>

FRESHMAN YEAR – GROUPS B

First Semester		
Course		Credits
UTIL 1010 Concepts of Electricity I	.....	4
UTIL 1020 Concepts of Electricity I Lab	.....	1
UTIL 1030 Line Construction I	.....	4
UTIL 1040 Line Construction I Lab	.....	3
UTIL 1260 Ropes and Riggings	.....	1
UTIL 1280 Computer Literacy	.....	2
MATH 1020 Technical Mathematics I	.....	3
		<u>18</u>

Second Semester		
Course		Credits
UTIL 1100 Commercial Drivers License	.....	1
UTIL 1110 Commercial Drivers License Lab	.....	1
UTIL 1120 Power Transformer Theory	.....	2
UTIL 1140 Line Construction II	.....	4
UTIL 1150 Line Construction II Lab	.....	3
UTIL 1240 Concepts of Electricity II	.....	4
UTIL 1250 Concepts of Electricity II Lab	.....	1
MATH 1060 Technical Mathematics II	.....	3
		<u>19</u>

Required Summer: 12 weeks

UTIL 1300 Cooperative Internship I.....6
 Prerequisite: Utility Line students must successfully pass their summer internship prior to beginning their sophomore year. No students will be allowed to take second year classes or labs without successful completion of their summer internship. Students who do not successfully pass their summer internship may have the opportunity to complete an internship the following summer.

SOPHOMORE YEAR – SECTION 1

First Semester		
Course		Credits
UTIL 2200 Electrical Apparatus Theory	.....	6
UTIL 2210 Electrical Apparatus Lab	.....	6
UTIL 2240 Utility Occupational Procedures	.....	1
ENGL 1050 Workplace Communication	.....	3
HLTH 1710 First Aid	.....	2
		<u>18</u>

Second Semester		
Course		Credits
UTIL 2400 National Electric Safety Code	.....	2
UTIL 2420 Line Construction III	.....	5
UTIL 2430 Line Construction III Lab	.....	6
ECON 1040 Personal Finance	.....	2
PSYC 1000 Human Relations	.....	2
		<u>17</u>

SOPHOMORE YEAR – SECTION 2

First Semester		
Course		Credits
UTIL 2400 National Electric Safety Code	.....	2
UTIL 2420 Line Construction III	.....	5
UTIL 2430 Line Construction III Lab	.....	6
ENGL 1050 Workplace Communication	.....	3
HLTH 1710 First Aid	.....	2
		<u>18</u>

Second Semester		
Course		Credits
UTIL 2200 Electrical Apparatus Theory	.....	6
UTIL 2210 Electrical Apparatus Lab	.....	6
UTIL 2240 Utility Occupational Procedures	.....	1
ECON 1040 Personal Finance	.....	2
PSYC 1000 Human Relations	.....	2
		<u>17</u>

Total Credit Hours 78

VETERINARY TECHNOLOGY

The veterinary technology program is designed to prepare entry-level veterinary technicians via classroom study, laboratory, and clinical practice with fundamental veterinary technician skills. The graduate should be able to successfully complete the licensing requirement of their state. This program will work toward meeting the needs of the State of Nebraska for well qualified veterinary technicians to perform duties under the scope of the Veterinary Medicine Practice Act. The Veterinary Technology program has special admission guidelines.



The veterinary technology program is accredited by the American Veterinary Medical Association, 1931 N. Meacham Road, Suite 100, Schaumburg, IL 60173-4360, phone (847) 925-8070.

Required Program of Study for Associate of Applied Science (2 years)

Freshman Fall Semester	
Course	Credits
VTEC 1000 Animal Husbandry and Restraint	3
VTEC 1110 Veterinary Medical Terminology	2
VTEC 1120 Anatomy and Physiology	3
VTEC 1123 Anatomy and Physiology Lab	1
BIOS 1010 General Biology	4
Mathematics*	3
	16

Sophomore Fall Semester	
Course	Credits
VTEC 2612 Prin of Veterinary Surgical Nrsng & Dentistry	3
VTEC 2611 Prin of Veterinary Surgical Nrsng & Dentistry Lab..	1
VTEC 2562 Laboratory Techniques II	3
VTEC 2561 Laboratory Techniques II Lab	1
VTEC 2520 Clinical Nursing of Large Animals	3
VTEC 2521 Clinical Nursing of Large Animals Lab	1
VTEC 1220 Pharmacology	3
VTEC 1322 Radiology	3
VTEC 1321 Radiology Lab	1
	19

In order for a student to continue in the Veterinary Technology program, students must meet all requirements and have been selected into the program. The special admission guidelines are found in the catalog.

Freshman Spring Semester	
Course	Credits
VTEC 1121 Anatomy and Physiology II	3
VTEC 1212 Laboratory Techniques I	3
VTEC 1211 Laboratory Techniques I Lab	1
VTEC 1410 Clinical Nursing of Companion Animals	3
VTEC 1411 Clinical Nursing Lab	1
VTEC 2622 Anesthesia for Veterinary Technicians	3
VTEC 2621 Anesthesia Lab for Veterinary Technicians	1
VTEC 2200 Veterinary Office Practices	3
	18

Sophomore Spring Semester	
Course	Credits
VTEC 2570 Laboratory Techniques III	2
VTEC 2571 Laboratory Techniques III Lab	1
VTEC 1440 Lab Animal Science	2
VTEC 2630 Clinical Nursing of Exotics	2
VTEC 2660 Internship	6
VTEC 2680 Board Review for Veterinary Technicians	1
Behavioral Science**	3
	17

Summer	
Course	Credits
Communications***	3-6
Social Sciences**	2-3
	5-9

Total Credit Hours 75-79

NOTE: For successful completion, students must meet the minimum grade that is stated in the course syllabus.

* Mathematics (Placement per test results): 3-6 credit hours
MATH 1025, 1140, or 1150

**Social & Behavioral Sciences: 4-6 credit hours
Social Science: ECON 1010, 1040/BSAD 1040, ECON 2110, AGRI 1410
Behavioral Science: PSYC 1810, SOCI 1010, AGRI 1420, BSAD 1000

***Communication: 3-6 credit hours
Written: ENGL 1010
Oral: SPCH 1050, SPCH 1010, SPCH 1110 Or Combination of oral and written: BSAD 2050 or ENGL 1050

PRE-VETERINARY TECHNOLOGY

The pre-veterinary technology degree is intended for students who are preparing to be accepted into the Veterinary Technology program at Northeast Community College. Upon successfully completing the first semester of courses identified below and going through the selection process, a student may be accepted into the Veterinary Technology program. (See selective admission process) Once selected, a student will complete the change of major process and continue on in the Associate of Applied Science Veterinary Technology degree program.

For students who are not selected into the Veterinary Technology program following their first semester, this degree provides a program of study that will prepare them to work in a variety of related jobs within the animal health and science industries. The coursework will also serve to better prepare students to re-apply for the Veterinary Technology program during the next selection period. Students may also decide to transfer on to a bachelor's degree program in a related subject area after completing the Associate of Science degree.

IMPORTANT NOTE: This degree does not lead to licensure as a veterinary technician, nor is it intended for students pursuing a goal to become a Doctor of Veterinary Medicine.

Suggested Program of Study for Associate of Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
VTEC 1000 Animal Husbandry and Restraint	3
VTEC 1110 Veterinary Terminology.....	2
VTEC 1120 Anatomy and Physiology.....	3
VTEC 1123 Anatomy and Physiology Lab.....	1
BIOS 1010 General Biology.....	4
Mathematics*	3
	16

Second Semester	
Course	Credits
VTEC 1121 Anatomy and Physiology II.....	3
ENGL 1010 English Composition I.....	3
INFO 1100 Microcomputer Applications or AGRI 1500 Microcomputer Application in Ag.....	3
MATH 2170 Applied Statistics.....	3
AGRI 1230 Feeds and Feeding.....	3
	15

SOPHOMORE YEAR

First Semester	
Course	Credits
AGRI 1010 Animal Science	3
AGRI 1340 Animal Science Lab	1
AGRI 2830 Advance Animal Nutrition	2
PSYC 1810 General Psychology	3
AGRI 1131 Plant Science	3
AGRI 1132 Plant Science Lab	1
English/Literature*.....	3
	16

Second Semester	
Course	Credits
AGRI 2210 Animal Health.....	3
ECON2110 Principles of Macroeconomics	3
Natural Science or Math*	4
SPCH 1010 Fundamentals of Speech or SPCH 1110 Public Speaking	3
AGRI 2870 Agricultural Law	3
	16

Total Credit Hours 63

If a student achieves a grade of C+ or above in all VTEC classes during the first semester of the freshman year, meets the program selection criteria, and is selected by the committee through the selective admission's process, the student will be admitted into the Veterinary Technology Program through the Change of Major process for the second semester. (See Veterinary Technology program of study page.)

*See general education requirements.

WELDING

Welding processes are widely used in construction projects and in manufacturing facilities all over the world. These processes require precision, dexterity, and an understanding of metals. The program focuses on the major welding and cutting processes which includes Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), Gas Tungsten Arc Welding (GTAW), and Flux Cored Arc Welding (FCAW). The program also addresses safety, print reading, and math. The welding coursework helps in the development of quality welds in all positions on plate and pipe. Successful completion of the course gives the student the technical information required for entry level employment. (Enrollment into this program is limited and based on the date of application.)

Required Program of Study for Diploma (34 weeks)

First Semester		Second Semester	
Course	Credits	Course	Credits
WELD 1030 SMAW Basic Theory.....	1.5	WELD 1050 GTAW Theory.....	1.5
WELD 1035 SMAW Basic Lab.....	3	WELD 1055 GTAW Lab.....	3
WELD 1040 GMAW/FCAW Theory.....	1.5	WELD 1060 Pipe Applications Theory.....	1.5
WELD 1045 GMAW/FCAW Lab.....	3	WELD 1065 Pipe Applications Lab.....	3
WELD 1110 Introduction to Metallurgy.....	2	WELD 1170 Print Reading and Fabrication Lab.....	2
WELD 1140 Print Reading & Symbols.....	2	HLTH 1710 First Aid OR	
WELD 1155 Fabrication Equipment and Operation Lab.....	2	INDT 1025 Introduction to Industrial Safety.....	2
MATH 1020 Technical Mathematics I.....	3	ENGL 1050 Workplace Communication	
	<u>18</u>	or BSAD 2050 Business Communications.....	3
			<u>16</u>
		Total Credit Hours	34

WIND ENERGY TECHNOLOGY

Wind energy is a rapidly growing industry in Nebraska and throughout the nation. Students in the wind energy program will learn the necessary safety skills and engage in higher skill levels needed to work in positions in the wind energy field. Students will develop their basic skills with courses in wind energy fundamentals, basic electricity, wind turbine systems, and continue with motor controls, mechanical systems, blueprint reading, and fluid fundamentals. The second year, students will engage in wind electronics for control systems that interface with programmable logic controllers and Supervisory Control and Data Acquisition (SCADA) systems. Students will understand rigging and climbing safety in and around a wind turbine. Wind turbine siting will be introduced for awareness of economic development compliance. Successful graduates will be prepared for a position in the wind energy industry. (Enrollment into this program is limited and based on the date of application.)

Required Program of Study for Associate of Applied Science Degree (2 years)

FRESHMAN YEAR

First Semester	
Course	Credits
WIND 1010 Basic Electricity	3
WIND 1020 Basic Electricity Lab	2
WIND 1080 Wind Energy Fundamentals	3
WIND 1085 Wind Energy Fundamentals Lab	2
WIND 1255 Blue Print Reading	2
INFO 1000 Basic Computer Applications	2
HLTH 1710 First Aid	2
MATH 1020 Technical Mathematics I	3
	19

Second Semester	
Course	Credits
WIND 1155 Mechanical Systems for Wind Energy	3
WIND 1160 Mechanical Systems for Wind Energy Lab	2
WIND 2055 Fluid Fundamentals	3
WIND 2065 Fluid Fundamentals Lab	1
WIND 1030 Electrical & Operations Safety for Wind Energy	1
WIND 1230 Motor Control	2
WIND 1240 Motor Control Lab	2
MATH 1060 Technical Mathematics II	3
	17

Required Summer: 12 weeks

ELTR 1300 Cooperative Internship I	8
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SOPHOMORE YEAR

First Semester	
Course	Credits
WIND 2115 Control Systems	2
WIND 2120 Control Systems Lab	2
WIND 2045 Programmable Logic Controllers	4
WIND 2030 Wind Electronics II	3
WIND 2080 Generator Theory	2
WIND 2085 Generator Lab	1
ECON 1010 Personal Finance	2
PSYC 1000 Human Relations	2
	18

Second Semester	
Course	Credits
WIND 2210 Mechanical Systems II	1
WIND 2220 Mechanical Systems II Lab	3
WIND 2095 Airfoils and Composite Repair Lab	2
WIND 2270 Data Communications and Acquisition	4
WIND 2280 Wind Turbine Siting	2
WIND 2290 Power Generation and Distribution	2
BSAD 2050 Business Communications	3
	17

Total Credit Hours	79
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WIND ENERGY TECHNOLOGY

The wind energy technology program will provide individuals with the necessary skills and knowledge needed to work in positions in the wind energy field. Students will acquire knowledge and skills through concentrated classroom and hands-on learning. Upon completion of the program, graduates are placed into positions as wind energy technicians. (Enrollment into this programs is limited and based on the date of application.)

Required Program of Study for Diploma (1 year)

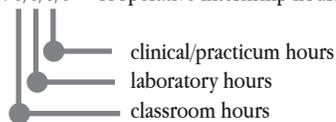
First Semester		Second Semester	
Course	Credits	Course	Credits
WIND 1010 Basic Electricity	3	WIND 1155 Mechanical Systems for Wind Energy	3
WIND 1020 Basic Electricity Lab	2	WIND 1160 Mechanical Systems for Wind Energy Lab	2
WIND 1080 Wind Energy Fundamentals	3	WIND 2055 Fluid Fundamentals	3
WIND 1085 Wind Energy Fundamentals Lab	2	WIND 2065 Fluid Fundamentals Lab	1
WIND 1255 Blue Print Reading	2	WIND 1030 Electrical and Operations Safety for Wind Energy 1	1
INFO 1000 Basic Computer Applications	2	WIND 1230 Motor Control	2
HLTH 1710 First Aid	2	WIND 1240 Motor Control Lab	2
MATH 1020 Technical Mathematics I	3	MATH 1060 Technical Mathematics II	3
	19		17
		Summer (12 weeks)	
		Course	Credits
		WIND 1300 Cooperative Internship I	8
		Total Credit Hours	44



COURSE DESCRIPTIONS

COURSE DESCRIPTIONS

Key: 0/0/0/0 — cooperative internship hours



The contact hours indicated are minimums for state aid reimbursement; actual hours may exceed those listed for each class.

Accounting (ACCT)

ACCT 1060 Basic Accounting Procedures 3 credits
Study of fundamental accounting procedures including payroll preparation, banking practices, and the handling of cash. Includes preparation of end-of-period worksheets and financial statements. Not recommended for transfer or substitution for ACCT 1200. (45/0/0/0)

ACCT 1100 Survey of Accounting 3 credits
Provides a solid overview of the basics of financial and managerial accounting with an emphasis on the relevance of accounting information. Focus of the course is on providing students with an understanding of the major financial statements, the information provided in the financial statements, and enhancing the student's decision making and problem solving abilities from a user perspective. (45/0/0/0)

ACCT 1200 Principles of Accounting I 3 credits
This course is designed to provide introductory knowledge of accounting principles, concepts, and practices. Included topics are the balance sheet, the income statement, the statement of owner's equity, the statement of cash flows, worksheets, journals, ledgers, accruals, adjusting and closing entries, internal controls, inventories, fixed and intangible assets, liabilities, equity, and financial statement analysis. This course provides a foundation for more advanced work in the fields of accounting and business. (45/0/0/0)

ACCT 1210 Principles of Accounting II 3 credits
This course is a continuation of ACCT 1200 Principles of Accounting I and includes accounting for businesses organized as corporations, cash flow statements, accounting for manufacturing businesses, preparing and using accounting data for management decision making, and analyzing and interpreting financial statements. Prerequisite: ACCT 1200 WITH MIN. GRADE OF C (45/0/0/0)

ACCT 2000 Introduction to QuickBooks 1 credit
Students will be introduced to the QuickBooks small business accounting system. Students will learn how to set up QuickBooks, write checks, enter sales and invoices, receive payments, handle bills, process payroll, set up inventory, and create graphs and reports. (15/0/0/0)

ACCT 2010 Spreadsheet Accounting 3 credits
Combines accounting with electronic spreadsheets. Projects are done on PCs and will include budgeting, financial statements, reports, graphics, depreciation schedules, what-if analysis and other aspects of accounting. Prerequisite: OFFT 1500 OR INFO 1010 OR INFO 1100 AND ACCT 1210 (45/0/0/0)

ACCT 2020 Accounting with QuickBooks 3 credits
Accounting with QuickBooks is a comprehensive course in computerized accounting using QuickBooks software. Topics will cover service and merchandising businesses. Students will create a company, manage customers and vendors, record receivables and payables, sales and sales tax, purchases and inventory, reconcile bank and credit card accounts, process payroll, maintain asset, liability and equity accounts, close

books and perform routine company maintenance. Must have working knowledge of MS Office. Prerequisite: ACCT 1060 OR ACCT 1100 OR ACCT 1200 (45/0/0/0)

ACCT 2030 Payroll Accounting 3 credits
An in-depth study of various payroll systems and includes the study of related law and practices. The student practices preparing payrolls and computing deductions. Emphasis is placed on actual preparation of payroll projects, including payroll tax returns. Prerequisite: ACCT 1060 OR ACCT 1200 OR ACCT 1100 (45/0/0/0)

ACCT 2200 Intermediate Accounting I 3 credits
Review of financial accounting. Includes advanced statement construction and theory and practice relating to cash, receivables, inventories, investments, and plant and equipment: acquisition, depreciation, re-evaluations. Prerequisite: ACCT 1210 WITH MIN. GRADE OF C (45/0/0/0)

ACCT 2210 Intermediate Accounting II 3 credits
Covers problems relating to advanced problems in short-term and long-term liabilities, paid-in capital, and retained earnings. Covers statement analysis and advanced problems in preparation of funds statements. Prerequisite: ACCT 2200 WITH MIN. GRADE OF C (45/0/0/0)

ACCT 2260 Individual and Business Income Tax 3 credits
Covers who must file tax returns, gross income inclusions and exclusions, tax deductions, determination of adjusted gross income, and taxable income. Includes preparation of both state and federal tax forms and declaration of estimated tax for individuals and business. Prerequisite: ACCT 1200 (45/0/0/0)

ACCT 2700 Accounting Capstone 3 credits
The accounting capstone course is a comprehensive integration of various accounting and business competencies including accounting research, business and accounting knowledge, computer techniques and communication skills. Prerequisite: ACCT 2200 AND ACCT 2010 AND ACCT 2020 (45/0/0/0)

Administrative Professional (OFFT)

OFFT 1050 Introduction to Windows Operating Systems 1 credit
This course provides an overview of operating system functions that are necessary in a microcomputer working environment. This course includes user interface, file, disk and system management techniques, along with basic operating system terminology. (15/0/0/0)

OFFT 1090 Microsoft Word I 3 credits
Designed to give practical experience in operating word processing software. Emphasis on creating and editing documents using beginning to intermediate editing and formatting features. Basic computer and keyboarding skills are essential. (45/0/0/0)

OFFT 1110 Records and Information Management 3 credits
Study of the systematic analysis and technological control of business records through the records life cycle of both physical and electronic business records. This course covers management considerations for records program development, records creation and form control retention and disposition scheduling and cost analysis of records maintenance. Basic knowledge of a database program and keyboarding skills are essential. (45/0/0/0)

OFFT 1410 Beginning Keyboarding 3 credits
Designed for beginners and those desiring a review of keyboarding technique. Emphasizes the mechanics necessary to gain keyboarding skills; the development of speed and accuracy; and basic formatting of memos, letters, tables, and reports using a computer word processing program. (45/0/0/0)

OFFT 1500 Microsoft Office 3 credits

This course will give the student practical experience in operating the word processing, spreadsheet, database, and presentation graphics portions of the Microsoft Office suite. (45/0/0/0)

OFFT 1510 Microsoft Word 1 credit

This course will give the student practical experience in operating the word processing portion of the Microsoft Office suite. (15/0/0/0)

OFFT 1515 Microsoft Certified Application Specialist-Word 1 credit

Designed to prepare the student for the Microsoft Certified Application Specialist MCAS exam in the Microsoft Word application using the most recent version. Upon completion of the course, the student will take the interactive exam. Certification will be awarded to the students when they pass this exam. Prerequisite: OFFT 1090 OR OFFT 1500 OR OFFT 1510 (15/0/0/0)

OFFT 1520 Microsoft Excel 1 credit

This course will give the student practical experience in operating the spreadsheet portion of the Microsoft Office suite. (15/0/0/0)

OFFT 1525 Microsoft Certified Application Specialist-Excel 1 credit

Designed to prepare the student for the Microsoft Certified Application Specialist MCAS exam in the Microsoft Excel application using the most recent version. Upon completion of the course, the student will take the interactive exam. Certification will be awarded to the students when they pass this exam. Prerequisite: OFFT 1500 OR OFFT 1520 OR INFO 2100 (15/0/0/0)

OFFT 1530 Microsoft Access 1 credit

This course will give the student practical experience in operating the database portion of the Microsoft Office suite. (15/0/0/0)

OFFT 1535 Microsoft Certified Application Specialist-Access 1 credit

Designed to prepare the student for the Microsoft Certified Application Specialist MCAS exam in the Microsoft Access application using the most recent version. Upon completion of the course, the student will take the interactive exam. Certification will be awarded to the students when they pass this exam. Prerequisite: OFFT 1500 OR OFFT 1530 OR INFO 2110 (15/0/0/0)

OFFT 1540 Microsoft PowerPoint 1 credit

This course will give the student practical experience in operating the presentation graphics portion of the Microsoft Office suite. (15/0/0/0)

OFFT 1560 Advanced Microsoft Access 1 credit

This course will give the student advanced practical experience in operating the database portion of the Microsoft Office suite. An in-depth hands-on instruction in advanced queries, macros, modules, and graphical reports. Prerequisite: OFFT 1500 OR OFFT 1530 (15/0/0/0)

OFFT 1570 Voice Recognition Software 1 credit

This trains the computer as much as it trains the users. Each user trains Naturally Speaking software to recognize his or her own unique speech profile. It is a program used to create documents by voice recognition. (15/0/0/0)

OFFT 1580 Microsoft Outlook 1 credit

Outlook is a Microsoft mail application. You can use Outlook to send and receive email. You can also use Outlook as a personal organizer to schedule meetings, appointments, and tasks. (15/0/0/0)

OFFT 1880 Office Practicum 3 credits

Designed to give students realistic practice in business documentation and administrative professional skills involving a wide variety of real-world business activities. This project-based class will integrate administrative functions that are expected of a administrative professional. Prerequisite: OFFT 1090 AND BSAD 2050 (MAY BE TAKEN CONCURRENTLY) AND INFO 2100 (MAY BE TAKEN CONCURRENTLY) (30/45/0/0)

OFFT 2090 Advanced Word Certification 2 credits

Designed for a higher degree of competence in word processing using microcomputer technology. This course will prepare the student for the Microsoft Office Specialist exam in the Microsoft Word application using the most recent version. Upon completion of the course, the student will take the interactive exam. Certification will be awarded to the students when they pass this exam. Prerequisite: OFFT 1090 (30/0/0/0)

OFFT 2500 Advanced Office Integration 3 credits

This course will give the student an advanced hands-on experience in operating the word processing, spreadsheet, database, and presentation graphics portions of Microsoft Office. This project-based class will integrate data using Microsoft Office applications, computer input technologies, and the Internet. Students will work both independently and in teams to initiate and complete Microsoft integrated projects. Prerequisite: OFFT 1090 AND INFO 2100 AND INFO 2110 (MAY BE TAKEN CONCURRENTLY) AND OFFT 1540 (MAY BE TAKEN CONCURRENTLY) (45/0/0/0)

OFFT 2600 Administrative Professional Capstone 2 credits

The administrative assistant capstone course is a comprehensive integration of various administrative competencies including management and business knowledge, computer techniques and communication skills. Permission of instructor, 2.0 GPA and sophomore standing required. Prerequisite: BSAD 1320 AND OFFT 2500 (MAY BE TAKEN CONCURRENTLY) (30/0/0/0)

Agriculture (AGRI)

AGRI 1005 Precision Agriculture Systems 3 credits

A study of methods and technology commonly used in precision agriculture. This course will focus on how precision agriculture is implemented as a management practice and the technologies available that make it possible. (45/0/0/0)

AGRI 1010 Animal Science 3 credits

Introduction to the livestock industry and its role in food production, breeds and selection, reproduction and breeding systems, inheritance and genetics, shelter and facility requirements, nutrition, parasites and insects, diseases, and other aspects of meat, milk, wool, and poultry production. (45/0/0/0)

AGRI 1025 Farm Experience Lab 0.5 credits

In this experiential course, students will perform tasks associated with successful agriculture production on-site at the Northeast Community College Farm. Students will be exposed to the decision making and task completion for the College farm as each crop and livestock season is planned, implemented and evaluated. Experiences/topics will vary by major and an interdisciplinary approach will be utilized to determine daily activities and projects on the College Farm. (0/22.5/0/0)

AGRI 1030 Introduction to Soil Science 3 credits

The development, physics, chemistry, biology, and classification of soils with emphasis on the role of soils in the growth of plants. Corequisite: AGRI1040 (45/0/0/0)

AGRI 1031 Soil Evaluation 1 credit

Students will learn how to effectively evaluate color and texture of each horizon of soil. Land classification of rangeland and fields will be evaluated. Students will be able to evaluate soil on various sites within northeast Nebraska. Course will be taken in preparation for competitions. (15/0/0/0)

AGRI 1040 Introduction to Soil Science Lab 1 credit

Lab for AGRI 1030, including soil samples, texture, soil surveys, nutrient deficiency, lime recommendations, cation exchange capacity, texture triangle, and acre furrow slice. (0/45/0/0)

AGRI 1050 Farm Welding 1 credit

Basics of the metallurgy of welding and making mechanically sound welds with shielded metal arc welding-SMAW and oxyacetylene welding-OAW. (15/0/0/0)

AGRI 1060 Farm Welding Lab 2 credits

Application of knowledge to create mechanically sound welds and efficient cuts with oxyacetylene welding-OAW. Make mechanically sound welds with shielded metal arc welding-SMAW in the flat, horizontal, vertical, and overhead positions. (0/90/0/0)

AGRI 1070 Introduction to Livestock Selection and Carcass Judging 0.5 credits

A preliminary study of selecting beef, swine, sheep, and dairy animals, including livestock type, conformation, and performance data. Instruction in livestock judging based on sound written and oral reasons. (7.5/0/0/0)

AGRI 1080 Introduction to Livestock Selection and Carcass Judging Lab 0.5 credits

An introduction to actual selection and judging experience, with an emphasis placed on evaluating livestock and defending evaluations through oral reasons. (0/22.5/0/0)

AGRI 1090 Livestock Selection and Carcass Judging I 1 credit

Study of selecting beef, swine, sheep, and dairy animals, including livestock type, conformation, and performance data. Instruction in livestock judging based on sound written and oral reasons. (15/0/0/0)

AGRI 1100 Livestock Selection and Carcass Judging I Lab 1 credit

Actual selection and judging experience. (0/45/0/0)

AGRI 1105 Issues in Agriculture I 1 credit

The purpose of this course is to expose students to the broad context of agriculture and critical issues facing the industry. A variety of experiences will provide an overview of agricultural and natural resources as well as the effects of human involvement. Connections will be made regarding coursework, experiences, and future expectations important for the development of an informed agricultural professional. (15/0/0/0)

AGRI 1115 Issues in Agriculture II 1 credit

The purpose of this course is to expose students to the broad context of agriculture and the critical issues facing the industry. Students will study the interrelationship and the impact of increased human involvement in agriculture and natural resources. Topics will include, but are not limited to, genetic engineering, food safety, ethics in animal agriculture, leadership, minority influences in the West, environmental issues such as endangered species and water, and other emerging issues. The course is intended to provide students with an appreciation of the divergent viewpoints of the stakeholders involved in the many issues confronting agriculture in Nebraska and the region. (15/0/0/0)

AGRI 1120 Food-Agriculture-Natural Resources Systems 3 credits

Exploration of careers in the agribusiness industry. Covers the various products available for agricultural use and the companies manufacturing these products. Includes numerous field trips to agricultural industries and visits with manufacturers' representatives as outside resources. (45/0/0/0)

AGRI 1130 Large Engine Maintenance 1 credit

Fundamentals of preventative maintenance of farm machines, including tune-ups, bearings and seals, belts and chains, tires and tracks, and belts and fasteners. (15/0/0/0)

AGRI 1131 Plant Science 3 credits

Study and evaluation of cultural practices, varieties, plant growth and development, planting rates, pests, and diseases, fertility and weather influences throughout the growing season. (45/0/0/0)

AGRI 1132 Plant Science Lab 1 credit

Plant growth and development of Monocot and Dicot plants; basic plant anatomy and growth stages; methods of plant reproduction and seed production; basic plant genetics and plant physiology; identification of uses of crops grown in the Midwest. (0/45/0/0)

AGRI 1140 Large Engine Maintenance Lab 2 credits

Lab experience for AGRI 1130. Applications of preventative maintenance of farm machines including: tune-ups, bearings and seals, belts and chains, tires and tracks, and belts and fasteners. Corequisite: AGRI1130 (0/90/0/0)

AGRI 1145 Introduction to Natural Resources 3 credits

An introduction to natural resources, and how they play an important part in the modern world. How resource management can assist with biodiversity and sustainability on the local/state/country/world platform will be evaluated. (45/0/0/0)

AGRI 1150 Introduction to Entomology 3 credits

Basic course in entomology and pest management to include: life processes of insects, classification, life cycle, ecology, sampling, populations, and management theory as they relate to man, plants, and animals. (45/0/0/0)

AGRI 1180 Livestock Selection and Carcass Judging II 2 credits

Evaluation, grading, and pricing, including beef, pork, and lamb carcass judging classes and retail cut identification. (30/0/0/0)

AGRI 1190 Livestock Selection and Carcass Judging II Lab 2 credits

Experience in evaluation, grading, and pricing of livestock carcasses and retail cut identification. (0/90/0/0)

AGRI 1230 Feeds and Feeding 3 credits

Balancing livestock feed rations and determining the correct rations for all types of livestock using nutrient needs, digestive systems, and feed nutrient compositions. Includes use of programmable calculators to analyze livestock rations. (45/0/0/0)

AGRI 1240 Advanced Farm Welding 1 credit

Mechanically sound welds in the overhead position with shielded metal arc welding and oxyacetylene, including bronze and braze welding, hard facing, basic engine lathe, and milling machine operations. Prerequisite: AGRI 1050 (15/0/0/0)

AGRI 1250 Advanced Farm Welding Lab 2 credits

Application of knowledge to create mechanically sound welds with advanced electrodes in all positions and types including the overhead position with SMAW (shielded metal-arc welding) and OAW (oxyacetylene welding), tool shaping, tool tempering, and measuring with various measuring devices. Prerequisite: AGRI 1060 (0/90/0/0)

AGRI 1280 Crop Chemicals 2 credits

Use of herbicides, insecticides, fungicides, and nematocides, identification of pests, types of pesticide materials and selection, handling and use of pesticides, and application equipment. (30/0/0/0)

AGRI 1290 International Agriculture and Agribusiness 3 credits

An overview of agriculture worldwide and its impact on production agriculture in the United States. An examination of production agriculture and agribusiness from a global perspective. (45/0/0/0)

AGRI 1300 Cooperative Internship I 1 - 6 credits

Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and/or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and employers so that each contributes to the student's education and employability. (0/0/0/360)

AGRI 1310 Agricultural Marketing System 3 credits

This course will provide an introduction to agribusiness and food products marketing in the U.S. This course includes a background on the workings of the U.S. food marketing system and how this system affects farm producers, consumers, and middlemen such as processors, wholesalers, retailers, and food services. Students will gain an understanding of how food products move through a food marketing channel to the final point of consumption and how consumer demand, marketing, and information technology have shaped the agricultural food marketing industry over time. (45/0/0/0)

AGRI 1320 Animal Reproduction Physiology 3 credits

Study of the management of animal reproduction, breeding, genetics, natural conception, artificial insemination, and embryo transfer. (45/0/0/0)

AGRI 1340 Animal Science Lab 1 credit

Experience working with all types of livestock at the college farm. Includes branding, castration, vaccination, foot care, and semen collection. (0/45/0/0)

AGRI 1350 Tillage, Planting and Spraying Equipment 1 credit

Study of the fundamentals of setting and maintaining tillage, planting, and spraying equipment. Emphasizes the evaluation of different farming practices and methods used today to assist students in developing management tools leading to increased profitability and better soil and water conservation. (15/0/0/0)

AGRI 1360 Tillage, Planting and Spraying Equipment Lab 1 credit

Application of knowledge to set tillage equipment, set up planters, calibrate sprayers and operate corn planter. Corequisite: AGRI1350 (0/45/0/0)

AGRI 1400 Farm and Environmental Safety 2 credits

Study of agriculture safety including farm and ranch safety, chemical safety, OSHA and Hazardous Occupation Laws, safe materials handling and CPR/AED certification. (30/0/0/0)

AGRI 1410 Introduction to the Economics of Agriculture 3 credits

Introductory course to help students develop a basic understanding and appreciation for the role of economics in agriculture at the farm, national, and international levels. Students will learn to apply various economic principles and concepts relating to production agriculture, business management, consumer behavior, market price analysis and equilibrium, and policy information. (45/0/0/0)

AGRI 1420 Interpersonal Skills 3 credits

Designed to help students understand how positive interpersonal relationships contribute to the process of potentiality development. The course will include: self-awareness and awareness of others, values clarification, decision-making, appreciation for diversity, and development of healthy personal and professional relationships. (45/0/0/0)

AGRI 1430 Orientation to Irrigation 3 credits

Introductory course to help the student with familiarization of irrigation equipment, operations, and techniques in the Midwest with emphasis on pivot irrigation systems. (45/0/0/0)

AGRI 1450 Irrigation Troubleshooting I 2 credits

Fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers using Ohms law and circuit testing equipment. (30/0/0/0)

AGRI 1460 Irrigation Troubleshooting I Lab 1 credit

Lab experience for AGRI 1450. Fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers using Ohms law and circuit testing equipment. (0/45/0/0)

AGRI 1500 Microcomputer Applications in Agriculture 3 credits

This course covers basic applications of word processing, spreadsheet, data management, and online based programs and how they relate to agriculture. Students will utilize a variety of office and online programs to learn how to create, utilize, move, and manage data. (45/0/0/0)

AGRI 1520 Ag Electronics and Hydraulics 3 credits

The study of electrical and hydraulic systems used in agriculture. Covers basics of electricity and the laws of hydraulics in farm equipment. Corequisite: AGRI1525 (45/0/0/0)

AGRI 1525 Ag Electronics and Hydraulics Lab 1 credit

Application of electrical and hydraulic law in relation to farm equipment. Includes assembly of these components and the basics of troubleshooting. Corequisite: AGRI1520 (0/45/0/0)

AGRI 1530 Introduction to Water Resources 3 credits

Designed to help students develop an understanding and appreciation of the importance of water. The students will develop skills to analyze soil, plant, and water relationships; as well as understand water relationships to environment, economic, and sociological impacts to the public. The course will begin with a historical perspective of how water resources were formed in Nebraska and the Great Plains. The course will continue by examining the process of water development historically by society through the current status of water including water quality, water quantity, water laws, and regulations. (45/0/0/0)

AGRI 1540 Precision Irrigation Management 3 credits

A study of the technology used to manage irrigation and preserve water. The course will provide an overview of the hardware and software used to operate Variable Rate Irrigation and soil moisture monitoring. (45/0/0/0)

AGRI 2000 Integrated Spreadsheet Applications 3 credits

A course that includes introductory through advanced spreadsheet applications, advanced word processing tools, and integrated software applications for agricultural business situations. (45/0/0/0)

AGRI 2005 Precision Agriculture Theory 3 credits

This course is a study of specific components that make precision agriculture work and how to apply them. Students will gain an understanding of these theories through hands-on and case study exercises. Prerequisite: AGRI 1005 (45/0/0/0)

AGRI 2010 Irrigation and Equipment 3 credits

Introduction to the management of irrigation systems. Includes water requirements, water resources, application methods, types and selection of irrigation equipment, application time and rates, irrigation well principles and operation, water rights and legal aspects, costs and returns. (45/0/0/0)

AGRI 2015 Farm and Ranch Management 4 credits

Basic course in economic principles and business management concepts which are involved in the decision-making process when organizing and operating a farming-ranching operation. Includes production economics, record keeping systems, financial budgets and analysis, crop and livestock enterprise analysis, depreciation, farm business organizations, and farm investment analysis. Prerequisite: AGRI 1410 (60/0/0/0)

AGRI 2020 Crops and Irrigation 3 credits

Weed identification and control, cultivation and fertilization, tissue testing, monitoring pests and weeds, and record keeping for crops. Introduction to irrigation, crop water requirements, water resources, supply irrigation methods, surface sprinkler irrigation, water rights and legal aspects of irrigation combining irrigation scheduling with field scouting. (45/0/0/0)

AGRI 2030 Crops and Irrigation Lab 1 credit

Monitoring insect and weed problems, pasture rotation, collection of insects and weeds, cultivation and fertilization, nitrate testing, and fertilizer implement calibration. Infield application of irrigation practices, setting moisture blocks, tension meter, irrigation scheduling, as well as designing an irrigation system and keeping irrigation records. Corequisite: AGRI2020 (0/45/0/0)

AGRI 2035 Introduction to Agroecology 3 credits

An introduction to the relationship of natural ecosystems with agriculture on a local, state, nation, and world wide scale. How countries view and implement sustainable agriculture will be on the forefront of this class. Prerequisite: AGRI 1030 WITH MIN. GRADE OF C AND AGRI 1131 WITH MIN. GRADE OF C (45/0/0/0)

AGRI 2040 Livestock Production I 3 credits

The study of livestock management in the areas of selection, nutrition, reproduction, waste management and marketing as it pertains to cattle, swine, and sheep management. Job opportunities in livestock management and the role of professional organizations in livestock production will also be analyzed. (45/0/0/0)

AGRI 2050 Livestock Production I Lab 1 credit

The study of the fundamentals of livestock production and management, including production practices, ration formulation, pasture management, estrous synchronization, livestock reproductive and growth efficiencies, and critical thinking and problem solving skills. Corequisite: AGRI2040 (0/45/0/0)

AGRI 2080 Small Farm Engines 1 credit

Knowledge of tune-ups, maintenance, and overhaul procedures of small Briggs and Stratton engines. (15/0/0/0)

AGRI 2090 Small Farm Engines Lab 1 credit

Application of knowledge to perform tune-ups, maintenance and overhaul of small engines (0/45/0/0)

AGRI 2100 Farm Electricity and Wiring 1 credit

Utilization of electric energy in agricultural production and processing with an emphasis on safety. Wiring installations; selection of safe and adequate circuit devices; service equipment and conductors; and electric motors and their control; and energy management. (15/0/0/0)

AGRI 2105 Farm Electricity and Wiring Lab 2 credits

Supplement to AGRI 2100. Includes exercises for wiring skills needed in agricultural production operations. Wiring installations; selection of safe and adequate circuit devices; service equipment and conductors; and electric motors and their control; and energy management. Corequisite: AGRI2100 (0/90/0/0)

AGRI 2115 Global Opportunities in Agriculture Leadership Studies 4 credits

The purpose of this leadership course is to develop prominent agriculture spokespersons. This travel study program will examine agricultural production, business, and trade in Name of Country from a comparative point of view with the United States. The course will also discuss the history, culture, the arts, and leisure activities of citizens from Name of Country. Prerequisite: AGRI 1115 (60/0/0/0)

AGRI 2140 Farm Welding Repair and Projects 1 credit

Study of gas metal arc welding-GMAW, steps of repairing metal objects & designing a small project. Prerequisite: AGRI 1050 (15/0/0/0)

AGRI 2150 Farm Welding Repair Class and Projects Lab 2 credits

Application of knowledge to create mechanically sound welds with gas metal arc welding-GMAW in the flat, horizontal, vertical and overhead positions. Making minor repairs to farm equipment. Layout and build a small project. Prerequisite: AGRI 1060 Corequisite: AGRI2140 (0/90/0/0)

AGRI 2165 Value-Added Diversified Marketing 3 credits

A course in the basic planning and marketing of small-scale value-added products. This includes the inclusion of farmers markets, roadside-stands, and other small retail and wholesale operations. Focus will be on products that are considered niche. (45/0/0/0)

AGRI 2180 Livestock Selection and Carcass Judging III 1 credit

Continuation of the study of selecting beef, swine, sheep, and horses, including conformation and performance data. Instruction in livestock judging based on sound written and oral reasons. Prerequisite: AGRI 1180 (15/0/0/0)

AGRI 2190 Livestock Selection and Carcass Judging III Lab 1 credit

Continuation of the study of selecting beef, swine, sheep, and horses, including conformation and performance data. Instruction in livestock judging based on sound written and oral reasons in a lab situation. Prerequisite: AGRI 1190 (0/45/0/0)

AGRI 2200 Advanced Fertilizers 2 credits

Study of advanced formulations of fertilizers based on soil tests. Review of soils testing and evaluation, nutrient requirements. Includes use of programmable calculators where applicable. Prerequisite: AGRI 1030 (30/0/0/0)

AGRI 2210 Animal Health 3 credits

Fundamentals of animal and herd health, including beef and dairy cattle, swine sanitation, and animal drugs. (45/0/0/0)

AGRI 2250 Grain Harvesting and Handling Systems 3 credits

Harvesting techniques, new and different methods of crop production, new grain varieties, and methods of storing and drying of crops. Prerequisite: AGRI 1131 (45/0/0/0)

AGRI 2260 Beef Feedlot Production Management 2 credits

A study of the beef cattle industry including the consumer, retailer, packer, and feeder. (30/0/0/0)

AGRI 2285 Swine Production Management 2 credits

A study of the role of swine in the world and their functions. Methods of establishing a swine enterprise through selection and performance testing are also studied. Management as a factor in the cost and efficiency of production is given special attention. The importance of feed costs, nutrient requirements of swine, and processing of feeds are also demonstrated. (30/0/0/0)

AGRI 2290 Agricultural Commodities Marketing 3 credits

Introduction to the concepts of agricultural marketing including, but not limited to the study of marketing alternatives (cash, contracts, futures, and options). Development of marketing plans and analysis of current industry trends will be utilized to enhance the concepts. (45/0/0/0)

AGRI 2300 Cooperative Internship II 4 credits

Continuation of Cooperative Internship I (0/0/0/240)

AGRI 2400 Forage, Pasture and Grassland Production 3 credits

Economical management and cultural practices used in hay, haylage, silage, pasture and range production. Theories and practices relating to variety selection, seeding rates, fertilization, establishment, weed control and harvesting of forages. (45/0/0/0)

AGRI 2410 Forage, Pasture and Grassland Production Lab 1 credit

Lab for AGRI 2400, including a hands-on approach to grass and legume morphology. Identification of forage seeds and plants. Adaptation, use and special management practices for various forage species. (0/45/0/0)

AGRI 2420 Hydraulic Components and Irrigation Pump Applications 3 credits

Study the design to analyze pump classes and types, selection, and application. Includes pump curves, system curves, suction characteristics, piping systems, and pumping-system economics. (45/0/0/0)

AGRI 2430 Irrigation Blueprints 3 credits

Provides familiarization and utilization of blueprints and schematics used in the irrigation industry. (45/0/0/0)

AGRI 2450 Modern Technologies in Agriculture 3 credits

A study of the principles and concepts involved with site specific management and the evaluation of geographic information systems for crop product practices. The course will focus on hands-on experience with the hardware and software necessary for successful application of the information affecting crop management. (45/0/0/0)

AGRI 2460 Resource Efficient Crop Management 3 credits

Integration of principles of crop and soil science, plant breeding, climatology, integrated pest management, and natural resource management in the development and evaluation of crop management practices. Efficient use of solar radiation, water, nutrients, heat, carbon dioxide and other resources in field crop management will be emphasized. Prerequisite: AGRI 1030 AND AGRI 1040 AND AGRI 1131 (45/0/0/0)

AGRI 2500 Data Collection Methodologies 3 credits

A study of advanced methods of collecting data and the technology required for collection. Methods will include the use of sensors, soil moisture probes, Unmanned Aerial Vehicles. (UAVs) as well as new and emerging technologies. (45/0/0/0)

AGRI 2510 Ag GIS Fundamentals 3 credits

A study of Ag GIS software and its applications in agriculture. Includes data management, working with map layers, and underlying attribute data. (45/0/0/0)

AGRI 2520 Ag GPS Applications 3 credits

A study of principles and components that make GPS work in relation to agriculture. Includes correction levels, hardware, guidance, and mapping. Prerequisite: AGRI 1005 Corequisite: AGRI2525 (45/0/0/0)

AGRI 2525 Ag GPS Applications Lab 1 credit

An application of principles and components that make GPS work in relation to agriculture. Includes installation of hardware and guidance components, guidance calibrations, and mapping. Prerequisite: AGRI 1005 Corequisite: AGRI2520 (0/45/0/0)

AGRI 2530 Precision Hardware 3 credits

A study of principles and components that make variable rate application in agriculture possible. Includes equipment for applying fertilizer, chemicals, and seed. Prerequisite: AGRI 1520 Corequisite: AGRI2535 (45/0/0/0)

AGRI 2535 Precision Hardware Lab 1 credit

A study of principles and components that make variable rate application in agriculture possible. Includes equipment for applying fertilizer, chemicals, and seed. Prerequisite: AGRI 1520 Corequisite: AGRI2530 (0/45/0/0)

AGRI 2810 Horsemanship and Horse Care 2 credits

Basic knowledge of horse skills including: nutrition, daily care, horsemanship and management. (30/0/0/0)

AGRI 2830 Advanced Animal Nutrition 2 credits

The study of nutrition of farm animals including selection of feedstuffs, feed preparation and processing, and ration formulation. Nutritional management of beef and dairy cattle, sheep, swine, horses, and poultry will also be covered. (30/0/0/0)

AGRI 2840 Cow Calf Production Management 2 credits

A study of beef cattle identification, management procedures for Beef AI, and forage management systems. Resource requirements for a cow herd are studied along with beef cow herd management calendars. Grazing management strategies are also dealt with. Basic consideration for cow nutrition are considered. (30/0/0/0)

AGRI 2850 Sheep Production Management 1 credit

A study of sheep identification, management procedures for lambing, shearing considerations, and financial and marketing considerations. Resource requirements for a sheep herd are studied along with sheep herd management calendars. Grazing management strategies are also dealt with. Sheep herd health including infectious diseases, parasites, and plant poisoning are also reviewed. Basic considerations for sheep nutrition are considered. (15/0/0/0)

AGRI 2860 Dairy Production Management 2 credits

This course is designed to provide applicable hands on instruction in fundamental dairy management tools to help the dairy technician achieve the following goals: Ability to perform basic dairy-specific management procedures, to identify the basic signs of a sick cow, and to take the crucial first steps in correcting day-to-day operational problems. (30/0/0/0)

AGRI 2870 Agricultural Law 3 credits

The study of law that governs agriculture. To include estate planning, contracts, leasing, personal and liability for the producer and agribusiness. (45/0/0/0)

AGRI 2880 Principles of Agricultural Selling 2 credits

A study of fundamental concepts and methods involving a combination of technical solutions to complex problems using sales and marketing tools to achieve mutual benefit of both the customer and the agribusiness. (30/0/0/0)

AGRI 2885 Agriculture Finance 3 credits

An analysis of capital investments, interpretation of financial statements, capital structure considerations of agricultural firms, and farm real estate pricing. Prerequisite: AGRI 1410 AND AGRI 2015 (45/0/0/0)

AGRI 2890 Agriculture Capstone Experience 1 credit
The course will provide students with an opportunity to reflect on previous coursework, synthesize the content and merit of their program of study while strengthening their competency level to enter the workforce upon graduation. Students will improve critical thinking and communication skills through the development of professional presentations. Through a variety of examination and demonstration exercises, students will show competency in their subject areas. (15/0/0/0)

Art (ARTS)

ARTS 1000 Introduction to Photoshop 1 credit
Designed to introduce the student to Adobe Photoshop and use the software to repair damaged prints, combine images, improve images, and add text to photographs. The student will have the opportunity to use a digital camera, scanner, and inkjet printer. Students can bring their own photos to work on or use images provided by the instructor. (15/0/0/0)

ARTS 1005 Photoshop II 1 credit
A continuation of Introduction to Photoshop. This course covers additional selection and editing procedures. The student will be introduced to additional methods to add impact to their images and will create objects and modify text. Prerequisite: ARTS 1000 (MAY BE TAKEN CONCURRENTLY) (15/0/0/0)

ARTS 1050 Introduction to Art History and Criticism I 3 credits
A survey of major works of art in all media from Prehistory through the end of the 14th Century. Artistic styles will be discussed in relation to contemporary history, society, and culture. Individual works of art will be explored as well as the role of art and architecture in a cultural context. (45/0/0/0)

ARTS 1060 Introduction to Art History and Criticism II 3 credits
A survey of major works of art in all media from the 14th Century to the present. Artistic styles will be discussed in relation to contemporary history, society, and culture. Individual works of art will be explored as well as the role of art and architecture in a cultural context. (45/0/0/0)

ARTS 1250 Drawing Logic I 3 credits
Fundamental principles of drawings and perspective based on observation and imagination. (30/30/0/0)

ARTS 1300 Design I 3 credits
Two-dimensional study of structural use of line, form and color, including color theory. (30/30/0/0)

ARTS 1350 Watercolor 3 credits
Introduction to the technical processes of the watercolor medium. Students will explore a variety of issues including form and expression. (30/30/0/0)

ARTS 1400 Ceramics 3 credits
Introduction to the varied processes and development of the skills needed to work in clay. The course covers different construction methods, hand building, and wheel throwing. Glazes and glazing, and steps in kiln firing and finishing will also be discussed. (30/30/0/0)

ARTS 1450 Graphic Arts I 3 credits
A concentrated study of the design process using commercial computer applications to create graphic design images. The student will develop design principles and applications that provide a foundation for advanced graphic design course work. (30/30/0/0)

ARTS 1500 Drawing Logic II 3 credits
Basic elements of drawing using a variety of media, including ink, watercolors, and charcoal. Prerequisite: ARTS 1250 OR GCAD 1250 (30/30/0/0)

ARTS 1600 Design II 3 credits
A continued investigation of spatial organization based on the principles of design. Exploration of art history will accent assignments. Individual interpretations of style and intent will develop. Prerequisite: ARTS 1300 OR GCAD 1300 (30/30/0/0)

ARTS 1700 Digital Photography 3 credits
This course is designed to introduce the student to digital photography as it relates to the graphic design industry. The student will use imaging hardware (cameras, scanners, computers), and photo manipulation software; alter, combine, create and recreate custom images to graphic design industry specifications. Class projects require specific knowledge and skill-set techniques. Group class critiques will be held to develop the student's professional level photography skills, visual aesthetic, and industry vocabulary. (30/30/0/0)

ARTS 1750 Painting I 3 credits
Introduction to oil painting with an emphasis on the study of forms existing in space. Issues of representational painting will be addressed. (30/30/0/0)

ARTS 2250 Elementary School Art 3 credits
Study of art activities related to the teaching of elementary school children. Provides a basis for evaluation of art in elementary grades. Five hours of volunteer service learning required. Prerequisite: EDUC 1110 WITH MIN. GRADE OF C (45/0/0/0)

ARTS 2450 Graphics Arts II 3 credits
Advanced application of graphic design principles and processes, as expressed through the development of advanced projects in advertising and product design which incorporate the use of industry-standard software. Prerequisite: ARTS 1450 OR GCAD 1450 (30/30/0/0)

ARTS 2750 Painting II 3 credits
Formal and technical concerns will be investigated. Subject matter will vary, yet figure study will be emphasized. Prerequisite: ARTS 1750 (30/30/0/0)

Audio Recording Technology (AUDR)

AUDR 1580 Physics of Sound 3 credits
Introduction to the physics of sound. The physical properties of sound, oscillation, and periodic movement are covered as a parallel development with math skills and problem solving. (45/0/0/0)

AUDR 1600 Audio Principles and Technology I 2 credits
AUDR 1600 is an introduction to audio engineering topics and principles including psychoacoustics, hearing safety, microphones, signal processing, and digital audio technology. (30/0/0/0)

AUDR 1615 Audio and Recording Techniques I Lab 1 credit
Introduction to hands-on techniques utilized in recording studios. Students will be involved in mock recording sessions while learning how to operate the various components found in recording studios such as microphones, mixing consoles, multi-track recorders and two-track recorders. (0/45/0/0)

AUDR 1625 Audio Principles and Technology II 2 credits
An advanced study of Audio Principles and Technology with greater detail of individual microphone characteristics and techniques, stereo microphone techniques, signal processing, psychoacoustics and introductory acoustic principles of studio spaces. Prerequisite: AUDR 1580 (MAY BE TAKEN CONCURRENTLY) AND AUDR 1600 (MAY BE TAKEN CONCURRENTLY) AND AUDR 1615 (MAY BE TAKEN CONCURRENTLY) (30/0/0/0)

AUDR 1635 Audio and Recording Techniques II Lab 3 credits

Continuation of instruction for hands-on techniques utilized in recording studios. Students will be involved in mock recording sessions while learning how to operate the various components found in recording studios such as microphones, mixing consoles, digital audio workstations (DAW), multi-track recorders and two-track recorders. Prerequisite: AUDR 1615 AND AUDR 1760 Corequisite: AUDR1780 (15/90/0/0)

AUDR 1665 Electronics for Audio I 3 credits

Comprehensive study of electronics from atomic structure through parallel and series circuits, magnetism, and alternating current. Ohm's law will be used to analyze current flow and voltages. Introductory analysis of various circuits and components including resistors, capacitors, inductors, transformers, and diodes. Use of electronic multimeters and oscilloscopes will be introduced. (45/0/0/0)

AUDR 1680 Electronics for Audio II 2 credits

Applicable study of audio system signal flow and electronics. Discussion will include patch bay schemes, switches, relays, and block diagrams. Discussion will also include the components of live sound systems as well as strategies for sound system operation and signal flow. Prerequisite: AUDR 1660 AND AUDR 1670 OR AUDR 1665 (30/0/0/0)

AUDR 1760 Digital Audio Workstation I 1 credit

Introduction to concepts and techniques of video and audio editing and production using a non-linear, computer-based production system. This course will follow the Avid software training curriculum for Pro Tools 101. (15/0/0/0)

AUDR 1780 Digital Audio Workstation II 1 credit

Continuation of the concepts and techniques of audio editing and production using a non-linear, computer-based production system. This course will follow the Avid software training curriculum for Pro Tools 110. Students will be given the opportunity to take the Pro Tools user-level certification exam. Prerequisite: AUDR 1760 (15/0/0/0)

AUDR 1800 Electronic Soldering 1 credit

This course will instruct students to make electronic connections using a pencil-style soldering iron. These connections will mostly consist of audio connections such as XLR, TRS, TS and RCA. Students will also be building a direct input (D.I.) box. (0/45/0/0)

AUDR 2000 Advanced Audio Principles I 3 credits

Continuation of audio engineering topics and principles including electronics, signal processing, metering, and equipment wiring. Prerequisite: AUDR 1600 AND AUDR 1615 (45/0/0/0)

AUDR 2010 Audio Systems and Live Sound Lab 2 credits

Audio Systems and Live Sound Lab is designed to give students the background and skills necessary to enter the field of live sound production. In this course, students will apply the skills and knowledge acquired from previous Audio Recording classes to the practice of live sound setup, live mixing and troubleshooting. Prerequisite: AUDR 1625 (MAY BE TAKEN CONCURRENTLY) AND AUDR 1680 (MAY BE TAKEN CONCURRENTLY) (22.5/22.5/0/0)

AUDR 2020 Advanced Audio Principles II 3 credits

Continuation of audio engineering topics and principles including recording studio procedures, copyright, physics of sound, and acoustics. Prerequisite: AUDR 2000 AND AUDR 1635 (45/0/0/0)

AUDR 2500 Fundamentals of Digital Audio 1 credit

Study of the underlying fundamentals of modern digital audio systems. Covers basics of the binary number system and digital logic gates. Students will discuss sampling, aliasing, bit resolution, quantization, and dither. Prerequisite: AUDR 1660 AND AUDR 1670 AND AUDR 1680 AND AUDR 1690 (15/0/0/0)

AUDR 2600 Audio Principles and Technology III 3 credits

Advanced study of Audio Principles Technology with additional emphasis on Recording Session set up and operation in digital and analog environments. Study of acoustic analysis of recording and mixing spaces as well as techniques of hardware and software in the recording and monitoring chain. Students will explore advanced stereo capture techniques and approaches based on ensemble type and delivery medium. Live sound system goals, components, connectivity and setup will be discussed. Prerequisite: AUDR 1625 AND AUDR 1635 AND AUDR 1680 (45/0/0/0)

AUDR 2610 Audio and Recording Techniques III Lab 3 credits

Lab for AUDR 2600. Prerequisite: AUDR 1625 AND AUDR 1635 AND AUDR 1680 (0/135/0/0)

AUDR 2620 Audio Principles and Technology IV 3 credits

An advanced study of Audio Principles and Technology with an emphasis on studio/postproduction design and equipment utilization within the recording studio environment. Implementation and integration of the common building blocks common in studio and postproduction environments will reflect the type of facility and market appropriate to that facility. An overview of legacy equipment and technology will include basics of tape and linear technology as well as pros and cons of each type of technology. Prerequisite: AUDR 2600 (45/0/0/0)

AUDR 2630 Audio and Recording Techniques IV Lab 3 credits

Lab for AUDR 2620. Prerequisite: AUDR 2600 AND AUDR 2610 (0/135/0/0)

AUDR 2660 Audio Systems I 2 credits

Intermediate study of modern audio systems and underlying theory. Digital theory, computer hardware, operating systems, and modern workstation components will be studied. Students will also discuss the operation of digital recording media. Open discussions will be conducted regarding latest industry trends and tools. Prerequisite: AUDR 1620 AND AUDR 1635 AND AUDR 1680 AND AUDR 1690 AND AUDR 1720 AND AUDR 1780 (30/0/0/0)

AUDR 2670 Audio Technology Lab I 1 credit

Practical application of techniques and tools presented in previous audio classes. Using on-site equipment, signal flow and design of audio consoles, tape decks, and outboard devices will be studied. System interface will be explored in both live and studio configurations. Soldering techniques will be introduced and explored. Component and system level troubleshooting will be introduced. In addition, students will be responsible for the maintenance and repair of studio equipment under the supervision of the instructor. Prerequisite: AUDR 1620 AND AUDR 1635 AND AUDR 1680 AND AUDR 1690 AND AUDR 1720 AND AUDR 1780 (0/45/0/0)

AUDR 2760 Digital Audio Workstation III 1 credit

An advanced study of Digital Audio Workstation including concepts and techniques of audio editing, mixing and production using a non-linear, computer-based production system. This course will follow the Avid software training curriculum for Pro Tools 201. Prerequisite: AUDR 1780 (MAY BE TAKEN CONCURRENTLY) (15/0/0/0)

AUDR 2770 Digital Audio Workstation IV 1 credit

An advanced study of Digital Audio Workstation including concepts and techniques of audio editing, mixing and production using a non-linear, computer-based production system. This course will follow the Avid software training curriculum for Pro Tools 210M, which focuses on music production. Prerequisite: AUDR 2760 (15/0/0/0)

AUDR 2775 Digital Audio Workstation V 1 credit
An advanced study of Digital Audio Workstation including concepts and techniques of audio editing, mixing and production using a non-linear, computer-based production system. This course will follow the Avid software training curriculum for Pro Tools 210P, which focuses on audio-for-video post production. (15/0/0/0)

AUDR 2780 Digital Audio Workstation VI 1 credit
An advanced study of Digital Audio Workstation including concepts and techniques of audio editing, mixing and production using a non-linear, computer-based production system. This course will follow the Avid software training curriculum for Pro Tools 310M, which focuses on advanced music production. Prerequisite: AUDR 2770 (15/0/0/0)

AUDR 2800 Audio and Recording Projects I 2 credits
Includes all aspects of a recording project. Depending on the nature of project preparation, it may include song and talent selection, recording and overdub sessions, mixdown sessions, and editing the master tape for mastering and pressing. Student must have sophomore standing in the audio and recording program. Prerequisite: AUDR 1625 OR CINE 1020 AND AUDR 1635 OR CINE 1030 AND AUDR 1680 OR CINE 1720 FOR (15/45/0/0)

AUDR 2820 Audio and Recording Projects II 2 credits
Continuation of AUDR 2800. Prerequisite: AUDR 2800 (15/45/0/0)

AUDR 2840 Production Lab I 1 credit
Continuation of self-guided lab intended for the further development of recording, mixing, editing and post production skills. Prerequisite: AUDR 2630 (0/45/0/0)

AUDR 2850 Production Lab II 1 credit
Continuation of self-guided lab intended for the further development of recording, mixing, editing and post production skills. Prerequisite: AUDR 2630 (0/45/0/0)

AUDR 2860 Production Lab III 1 credit
Continuation of self-guided lab intended for the further development of recording, mixing, editing and post production skills. Prerequisite: AUDR 2630 (0/45/0/0)

AUDR 2870 Production Lab IV 1 credit
Continuation of self-guided lab intended for the further development of recording, mixing, editing and post production skills. Prerequisite: AUDR 2630 (0/45/0/0)

AUDR 2880 Production Lab V 1 credit
Continuation of self-guided lab intended for the further development of recording, mixing, editing and post production skills. Prerequisite: AUDR 2630 (0/45/0/0)

AUDR 2890 Production Lab VI 1 credit
Continuation of self-guided lab intended for the further development of recording, mixing, editing and post production skills. Prerequisite: AUDR 2630 (0/45/0/0)

AUDR 2900 Legal Protection of Musical Material 2 credits
Study of copyright laws and how they apply to today's musical situations. (30/0/0/0)

Auto Body Repair Technology (AUTB)

AUTB 1015 Glass, Trim, and Welding Theory 2.5 credits
Course includes study of glass installation, servicing, automotive trim, and a study of MIG welding procedures. Course also emphasizes the theory of expansion, contraction, and distortion of sheet metal along with problems and control. (37.5/0/0/0)

AUTB 1035 Glass, Trim, and Welding Lab 4.5 credits
Involves servicing both fixed and adjustable glass, moldings, and interior trimming. A study of MIG welding emphasizes the theory of expansion, contraction, and distortion of sheet metal along with problems and control. Corequisite: AUTB1015 (22.5/135/0/0)

AUTB 1045 Beginning Paintless Dent Repair 2 credits
Beginning look at the art of paintless dent repair (PDR). The course covers specialized tools, techniques, and strategies, including metal characteristics and corrosion protection, commonly used by industry in dent repair without the need for refinishing or repainting. (30/0/0/0)

AUTB 1050 Panel Adjustment and Metalworking Theory 2.5 credits
Course includes study of basic metalworking procedures, terminology, and metallurgy. Also includes the effect of impact on automobile sheet metal, its classification, analysis, repair procedures, and proper adjustments of all body bolts on panels. Prerequisite: AUTB 1015 (MAY BE TAKEN CONCURRENTLY) (37.5/0/0/0)

AUTB 1060 Panel Adjustment and Metalworking Lab 4.5 credits
Course includes minor collision damage repair, including the effect of force on shape, basic straightening operations, and proper adjustment of all body bolt on panels. Corequisite: AUTB1050 (22.5/135/0/0)

AUTB 1210 Major Body Damage Repair Theory 5 credits
Includes instruction in car body design, the use of plastic body filler, body lead, and various auto body materials. Also includes fiberglass repair, plastic welding, MIG welding, portapowers and alignment equipment, power tools and equipment, and basic electricity and chassis electrical systems. Prerequisite: AUTB 1050 AND AUTB 1060 (75/0/0/0)

AUTB 1245 Major Damage and Metalworking Lab 9 credits
Covers all major panel replacement and repair operations, including replacement of weld-on panels, sections, and straightening major damaged panels. Also includes the repair of basic automotive electrical systems. Corequisite: AUTB1210 (45/270/0/0)

AUTB 1300 Cooperative Internship I 1 - 6 credits
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and/or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Auto Body Repair Technology program or permission of instructor. (0/0/0/360)

AUTB 2015 Paint Care and Refinishing Theory 5 credits
Extensive study of detailing procedures, automotive refinishing, surface preparation, undercoats and automotive colors. Course also includes proper use of refinishing tools and equipment required in minor spot repair to major auto refinishing projects. Prerequisite: AUTB 1210 AND AUTB 1245 (75/0/0/0)

AUTB 2025 Paint Care and Refinishing Lab 9 credits
Involves the proper use of materials, equipment, and refinishing techniques used to restore and refinish all types of automotive paint finishes. Corequisite: AUTB2015 (45/270/0/0)

AUTB 2045 Advanced Collision Repair Lab 3 credits
This course introduces advanced hands-on experiences involving high production practices used by industry collision repair technicians in real world shop situations. (0/135/0/0)

AUTB 2055 Auto Body Restoration Theory 0.5 credits
A look at autobody restoration as it applies to old and newer vehicles alike. Classroom theory include rust repair, panel straightening and replacement, glass and refinishing. (7.5/0/0/0)

AUTB 2065 Auto Body Restoration Lab 0.5 credits
A hands on look at auto body restoration. Practice of classroom theory including welding and straightening of panels as it relates to the students restoration project. (0/22.5/0/0)

AUTB 2215 Frame and Heavy Collision Theory 5 credits
A study of frame and unitized body terminology and measuring including the effects of impact, its classification, analysis and repair procedures. All phases of collision repair including methods and procedures of estimating collision damage, calculating estimates according to local standards, on live projects. As well as business practices involved in estimating and acquainting students with the shop manager's role in organizing the shop and its equipment along with customer relations, and employer-employee relations. Prerequisite: AUTB 2025 (75/0/0/0)

AUTB 2225 Frame and Heavy Collision Lab 4.5 credits
Involves application of frame measuring, diagnosis and repair of all types of damage, including suspension using the latest frame equipment available to restore major collision projects to industry standard. Corequisite: AUTB2215 (22.5/135/0/0)

AUTB 2250 Applied Body Repair Lab 4.5 credits
Covers all major repair operations, with emphasis on the more complex repair and refinishing encountered in auto body repair. Provides essential knowledge and skills to perform all operations necessary to put a vehicle back into service under actual shop conditions. Corequisite: AUTB2215 (22.5/135/0/0)

Automotive Technology (AUTT)

AUTT 1010 Suspension, Steering, and Brake Systems Theory 2.5 credits
Study of various suspension and steering systems along with the functions and purpose of related members of the system. Covers front-end and rear-end alignment angles and their effects on the system. Emphasizes hydraulics and components of modern automotive brake systems. (37.5/0/0/0)

AUTT 1020 Suspension, Steering, and Brake Systems Lab 4.5 credits
Involves practical shop experiences, analyzing and correcting various suspension and steering problems, front-end and rear-end alignment and steering systems repair. Includes diagnosis of brake system problems, repair, and service of brake systems using the proper procedures, methods, tools, and equipment. Corequisite: AUTT1010 (22.5/135/0/0)

AUTT 1110 Electrical Systems Theory 2.5 credits
Study of basic electricity, automotive circuitry, and wiring diagrams. Complete coverage of batteries, starting, charging, and accessory systems including application, testing, diagnosis, and repair. (37.5/0/0/0)

AUTT 1120 Electrical Systems Lab 4.5 credits
Practical application, analysis and repair of areas and systems covered in the electrical systems theory class, AUTT 1110. Involves use of proper methods, tools, specifications, and equipment. Corequisite: AUTT1110 (22.5/135/0/0)

AUTT 1150 Automotive Welding and Repair Lab 1 credit
This course will cover safe and proper use of oxyacetylene cutting and heating equipment, MIG welding, and aluminum spool gun use. (0/45/0/0)

AUTT 1210 Electrical Tune-Up and Fuel Systems Theory 2.5 credits
Covers the ignition systems, standard, transistorized, and the fuel system including tanks, pumps, filters and fuel system designs. The purpose, application, testing, diagnosis, service and repair of the ignition and fuel systems. Prerequisite: AUTT 1110 (37.5/0/0/0)

AUTT 1220 Electrical Tune-Up and Fuel Systems Lab 4.5 credits
Lab experience corresponds to the material covered in AUTT 1210. The proper use of test equipment, procedures, and specification to diagnose, repair, adjust and overhaul components of the engine's ignition and fuel systems. Corequisite: AUTT1210 (22.5/135/0/0)

AUTT 1300 Cooperative Internship I 1 - 6 credits
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and/or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Automotive Technology program or permission of instructor. (0/0/0/360)

AUTT 1310 Automotive Electronics Theory 2.5 credits
The study of the complete electronics systems including microprocessors, sensors, and controllers of the computerized ignition and fuel injection systems. Covers the computers, sensors, and controllers, their circuits, application, operation and the testing and diagnosing of these systems. Prerequisite: AUTT 1210 (MAY BE TAKEN CONCURRENTLY) (37.5/0/0/0)

AUTT 1320 Automotive Electronics Lab 4.5 credits
Lab experiences correspond to the material covered in AUTT 1310. Includes the proper use of tools, scanners, and other test equipment to diagnose the computers, sensors and controllers, along with the repair and adjustment of the ignition and fuel injection systems. Corequisite: AUTT1310 (22.5/135/0/0)

AUTT 2010 Clutch, Manual Transmission and Transaxle, Drive Shaft and Differential Theory 2.5 credits
Explanation of automotive clutch purposes, design and function along with the working of various modern three, four, and five-speed standard transmissions. Includes discussion of drive shaft assemblies along with differential and front wheel drive types. (37.5/0/0/0)

AUTT 2020 Clutch, Manual Transmission and Transaxle, Drive Shaft and Differential Lab 4.5 credits
Lab work relative to all these systems. Includes use of correct diagnostic, reconditioning and overhaul procedures. Corequisite: AUTT2010 (22.5/135/0/0)

AUTT 2110 Automatic Transmission and Transaxle Theory 2.5 credits
Fundamentals of hydraulics, planetary gears, holding devices, and their application to automatic transmissions. Includes introduction to the various components and their functions along with rebuilding the power flows of various present-day automatic transmissions. Including four-speed overdrives and front wheel drive systems. (37.5/0/0/0)

AUTT 2120 Automatic Transmission and Transaxle Lab 4.5 credits
Includes complete servicing and adjustment procedures, troubleshooting, diagnosis, repair and overhaul of various present-day automatic transmissions in a live shop. Provides maximum supervision and guidance for completion of this very complex and exacting work. Corequisite: AUTT2110 (22.5/135/0/0)

AUTT 2210 Major Engine Theory 2.5 credits
Includes the complete theory and techniques of rebuilding, servicing, and diagnosing of the internal combustion engine and its related parts and systems. Prerequisite: AUTT 1310 (37.5/0/0/0)

AUTT 2220 Major Engine Lab 4.5 credits
Practical application of the techniques of rebuilding and servicing the automotive engine and its related systems using the proper procedures, tools and testing equipment. Corequisite: AUTT2210 (22.5/135/0/0)

AUTT 2310 Automotive Environmental System Theory 2.5 credits
Covers principles of evaporation, heat transfer, temperature, and pressure. Study of various systems in regard to circuits, components and their operation in each application. Includes explanation of heating and air conditioning systems as presently used in today's automobiles, including integrated and isolated installation, and their corresponding control systems. Prerequisite: AUTT 1110 (37.5/0/0/0)

AUTT 2320 Automotive Environmental System Lab 4.5 credits
Includes diagnosis, service, repair, installation, and overhaul of live environmental systems. Covers custom, factory, and automatic systems of the popular makes and models used in present-day automobiles. Corequisite: AUTT2310 (22.5/135/0/0)

AUTT 2410 Automotive High Performance 2 credits
A study of the fundamentals of applying high performance techniques to the various systems of the automobile, including suspension, steering, brakes, engine, and drive train. (30/0/0/0)

AUTT 2415 Automotive Performance Drive Train 1 credit
A study of the fundamentals of applying high performance techniques to the various systems of the automobile, including suspension, steering, brakes, engine, and drive train. (15/0/0/0)

Biology (BIOS)

BIOS 1005 Science Laboratory Techniques 1 credit
This course will familiarize students with the scientific method through the conducting of experiments related to everyday living. Students will apply critical thinking skills in the implementation and analysis of basic laboratory experiments, and effectively record their results in lab reports. (0/30/0/0)

BIOS 1010 General Biology 4 credits
This course covers fundamental processes of cells and organisms, cell structure genetics, evolution, classification, diversity, and interaction of organisms at the molecular, cellular, organismic, ecosystems, and biosphere level. It is designed as both a course for non-majors and as a foundation course for those planning additional work in biology. Includes a lab. (45/30/0/0)

BIOS 1050 General Botany 4 credits
Survey of the plant kingdom with a study of representative plants from each of the major plant groups. Emphasis on local flora and economic botany where possible. Prerequisite: BIOS 1010 OR A03 FOR MIN. SCORE OF 19 OR ACCR FOR MIN. SCORE OF 90 OR MAPR FOR MIN. SCORE OF 225 (45/30/0/0)

BIOS 1090 General Zoology 4 credits
Introductory survey of the morphology, anatomy, physiology, evolution, and distribution of the major animal groups. Prerequisite: BIOS 1010 OR A03 FOR MIN. SCORE OF 19 OR ACCR FOR MIN. SCORE OF 90 OR MAPR FOR MIN. SCORE OF 225 (45/30/0/0)

BIOS 2020 Introduction to Environmental Issues 4 credits
Introduction to some of the principles of ecology and the mechanisms by which these principles affect our lives. Emphasizes concepts of preservation and conservation of renewable and nonrenewable resources, such as fossil fuels. Explores the effects of increasing population on these resources. (45/30/0/0)

BIOS 2170 Principles of Heredity and Genetics 4 credits
Introduction to the fundamental principles of genetics including Mendelian and non-Mendelian genetics, molecular genetics, gene frequency and distribution, probabilities and statistics and applied human genetics. Prerequisite: BIOS 1010 (45/30/0/0)

BIOS 2250 Introduction to Human Anatomy and Physiology I 4 credits
Introduction to the form and function of the human body. Including organization, basic chemistry, cells, tissues, skin, skeletal system, muscular system, nervous system and introduction special senses. Prerequisite: BIOS 1010 WITH MIN. GRADE OF C OR ACCR FOR MIN. SCORE OF 90 OR A03 FOR MIN. SCORE OF 19 OR MAPR FOR MIN. SCORE OF 225 (45/30/0/0)

BIOS 2260 Introduction to Human Anatomy and Physiology II 4 credits
Introduction to the form and function of the following human body systems: continuation of the special senses, endocrine systems, blood and cardiovascular system, lymphatic system, immune system, respiratory system, digestive system, metabolism, urinary system, fluid electrolyte and pH balance, and reproductive systems. Prerequisite: BIOS 2250 OR BIOS 2110 (45/30/0/0)

BIOS 2460 Microbiology 4 credits
Study of microbiology with emphasis on structure of microbial cells, their nutrition and growth, control of growth, genetics and genetic engineering, metabolic and biosynthesis activity, and host-parasite interactions. Accompanying laboratory study emphasizes microbiological techniques including microbial control and manipulation. Prerequisite: APPROPRIATE PLACEMENT SCORE OR BIOS 1010 WITH MIN. GRADE OF C (45/30/0/0)

Broadcasting (BRDC)

BRDC 1010 Introduction to Mass Media 3 credits
An introduction to the history and technology of Mass Media. The history of print, radio, television, recorded music and the internet will be introduced along with a study of advertising, ethics, social impact, new technologies, government regulation and the future of media. Students are also introduced to audio and video editing tools in an effort to create projects such as podcasts and music videos. (45/0/0/0)

BRDC 1110 Radio Production and Performance 3 credits
Theory and application of radio production and announcing techniques beginning with control board operation, turntables, tape recorders, routing signals, audio signal flow and microphones; and finishing the semester by learning and developing announcing skills, including reading, interpreting copy, pronunciation, voice development, announcing music, reading commercials, and interviewing. Jobs in radio are also discussed. (30/45/0/0)

BRDC 1120 Broadcast News 3 credits
Principles of news writing for radio and TV, plus techniques of news gathering are studied and practiced. Some assignments will be based on actual wire service copy and news stories from local stations. During the semester, students will be scheduled to write news stories for the college's cable channel. (45/0/0/0)

BRDC 1210 Television Production and Performance **3 credits**

Knowledge and skill development in camera operation, TV audio, lighting, videotape recorders, set and graphics design, electronic editing, electronic field production and principles of television production are featured. Also included are remote productions, TV studio and control room use and special effects. Jobs in TV are discussed. (30/15/0/0)

BRDC 1220 Television Production and Performance II **3 credits**

Planning, shooting and editing TV news reports and longer feature segments are covered along with television performing, producing and directing. Students also deliver a TV weather segment, conduct a studio interview and produce a video announcement. Prerequisite: BRDC 1210 (MAY BE TAKEN CONCURRENTLY) (30/45/0/0)

BRDC 1235 Broadcast Scripts **1 credit**

Writing principles for radio and television are introduced. Additional topics covered are: formats of scripts, writing public service announcements and promotional announcements, working with advertisers to write commercials. (15/0/0/0)

BRDC 1240 Voice and Diction **3 credits**

Learn how the voice works and how articulators are used in speech. Explore the voice-over industry and act with just your voice. Create character voices and tell stories so that your audience understands them better and can imagine the scene and characters clearly. (45/0/0/0)

BRDC 1250 Applied Radio Production I **0.5 - 3 credits**

Practical experience as a staff member of KHWK, the college cable access channel. Duties will include disc jockey shifts, writing and announcing news and producing public service announcements. Night work will be included. Prerequisite: BRDC 1110 (0/135/0/0)

BRDC 1600 Drone Operations **1 credit**

This course is designed to introduce students to the rules of small UAS (drone) operations as required by the Federal Aviation Administration. It is also intended to help students learn and understand the interworking of drones and proper flight planning and protocol for various drone missions. Another goal of this course is to prepare the student for the successful completion of the FAA Part 107 UAS Remote Pilot certification. This course is designed for those who want to become commercially licensed drone pilots, but also includes useful rules and information for the drone hobbyist. Corequisite: BRDC1610 (15/0/0/0)

BRDC 1610 Drone Operations Lab **1 credit**

Students will learn how to safely operate and pilot small UAS (drones) owned and insured by Northeast Community College in controlled environments. This course will also cover proper mission planning. In addition, students will learn how to take aerial photos and videos and use them to relay data. They will also learn to think critically and responsibly about drone use. This course should be taken together with the Drone Operations classroom function or in a subsequent semester. It's vital that rules are understood before flying a drone. This course will be instructed by an FAA certified commercial drone pilot. Corequisite: BRDC1600 (0/45/0/0)

BRDC 2150 Applied Radio Production II **0.5 - 3 credits**

Additional practical experience as a staff member of KHWK. Operations duties, management responsibilities, and scriptwriting are added to the list of duties from Applied Radio Production I. Prerequisite: BRDC 1235 AND BRDC 1250 (0/135/0/0)

BRDC 2160 Broadcast Operations **3 credits**

Radio and TV station functions other than production and performance are studied, including programming, log

preparation, music cataloging, station promotion, directing the news department, maintaining station equipment, and assigning production work. Students are assigned to fill operations functions for KHWK, the college cable channel. Prerequisite: BRDC 1110 AND BRDC 1120 AND BRDC 1210 AND BRDC 1235 (45/0/0/0)

BRDC 2170 Applied TV Production I **0.5 - 3 credits**

Practical experience in producing and performing television programs on Hawk TV, including regular programs about the college, remote coverage of college sports events, special college events, and special projects. Prerequisite: BRDC 1210 (0/135/0/0)

BRDC 2180 Digital Storytelling I **1 credit**

After getting an overview and understanding of storytelling, students will use a mix of writing, video and audio production skills and techniques to produce and present feature-length television stories. Unlike regular news stories, which are typically under two minutes and give a broad overview, stories created in this course will be 5 minutes long and be more specific. Prerequisite: CINE 1700 (0/45/0/0)

BRDC 2250 Applied Radio Production III **0.5 - 3 credits**

A final semester of practical experience as a KHWK radio staff member. Students will be rotated through all operations and on-air functions for which they are qualified. Prerequisite: BRDC 2150 (0/135/0/0)

BRDC 2260 Broadcast Sales **3 credits**

Marketing principles, basic sales skills, advertising, fundamentals, attitude and motivation, and opportunities in broadcast and cable sales are included. The course introduces broadcast and cable sales information and skills, then checks them with a final project where students make a sales presentation. Students will also continue management roles begun in BRDC 2160. Prerequisite: BRDC 2160 (45/0/0/0)

BRDC 2265 Media Sales and Copywriting **3 credits**

Marketing principles, basic sales skills, advertising fundamentals, consumer attitudes and motivation, and opportunities in broadcast and online media are all included. This course will introduce media sales strategies and approaches, then check the student with a final project where they will make a sales presentation to a local business. In addition, students will be instructed how to write commercial copy for use across all media platforms based on client needs. Commercials will be written to accompany the final project presentation. (45/0/0/0)

BRDC 2270 Applied TV Production II **0.5 - 3 credits**

Additional practical experience in production of television programs for Hawk TV. If preparatory courses are complete, students may take role of producer or director for some productions. Prerequisite: BRDC 1210 (0/135/0/0)

BRDC 2280 Digital Storytelling II **1 credit**

An advanced course that takes digital storytelling to the next level. Students will use a mix of writing, video and audio production skills and techniques to produce and present feature-length television stories. Prerequisite: BRDC 2180 (MAY BE TAKEN CONCURRENTLY) (0/45/0/0)

BRDC 2980 Broadcasting Capstone **3 credits**

The Broadcasting Capstone will help the student create an appealing resume portfolio before leaving Northeast. The course will also provide the student with an opportunity to assess and showcase their skills in creating a project that will encapsulate their Northeast broadcasting experience. Sophomore standing. Course is to be taken during the student's final semester, prior to the completion of their AAS Degree. (15/90/0/0)

Building Construction (CNST)

CNST 1000 Building Construction**Fundamentals****1.5 credits**

This course provides an introductory overview of the various materials, components, methods, and sequences used in residential construction. Students further gain exposure to the properties of wood and wood-based products used in structural systems. Students are also introduced to the various tools used in construction and their proper usage and care. (22.5/0/0/0)

CNST 1005 Building Construction**Fundamentals Lab****2.5 credits**

This course is the practical application of basic building materials, components, methods, and sequences in residential construction. It is designed to provide students with basic, hands-on experience in entry level construction and related trades. Emphasis is placed on safety and the proper use of both hand and power tools. This course provides students the experience of participating in the building of a construction project. (0/52.5/0/0)

CNST 1030 Construction Drafting**2 credits**

Theory of freehand sketching and lettering using proper drawing instruments and techniques. Includes identification of basic house design, proper room design and identification of different types of architecture. (30/0/0/0)

CNST 1035 Construction Safety**1 credit**

This course covers OSHA policies, procedures, and standards for the construction industry, as well as safety and health principles. Sections of the OSHA construction standards are covered with special emphasis placed on more hazardous areas, while using OSHA standards as a guide. (15/0/0/0)

CNST 1040 Construction Drafting Lab**1 credit**

Course includes sketching and dimensioning different types of houses and various other projects using the proper dimensioning and lettering techniques. Corequisite: CNST1030 (0/45/0/0)

CNST 1050 Residential Blueprint Reading**3 credits**

The study and practice of blueprint reading, identifying lines and symbols, using construction math and identifying proper dimensioning procedures. (45/0/0/0)

CNST 1060 Basic Woodworking Theory**0.5 credits**

Theory of small wood project design and construction. Includes materials and cost estimating along with safe working practices using hand and power tools. (7.5/0/0/0)

CNST 1065 Principles of Light-Frame Structure Technology**1.5 credits**

Principles of Light-Frame Structure Technology provides students with an understanding of the construction industry, processes, and building materials used in residential and light-frame construction. Students are introduced to the entire framing process: from regulation and design through site preparation, and ultimate delivery of a completed structure. Students gain exposure to laying out foundations, floors, walls, ceiling, and roofing systems. (22.5/0/0/0)

CNST 1070 Basic Woodworking Lab**0.5 credits**

Practical application of construction techniques used in the construction of small wood projects. Emphasizes safety in use of hand and power tools. Corequisite: CNST1060 (0/22.5/0/0)

CNST 1075 Principles Light-Frame Structure Technology Lab**2.5 credits**

This course is practical application of residential and light-frame construction. It is designed to provide students with basic, hands-on experiences in framing techniques used in flooring, walls, and ceiling components. Students will apply these techniques as they lay out and begin building the structural components of a student design home. Corequisite: CNST1065 (0/52.5/0/0)

CNST 1210 Building Construction II**3 credits**

Study of the procedures used in closing in a house and in preparing the inside of a house for finish carpentry. Develop skills in proper floor, wall, ceiling and roof framing procedures using appropriate hand and power tools in a safe manner. Prerequisite: CNST 1000 AND CNST 1065 (45/0/0/0)

CNST 1220 Building Construction II Lab**5 credits**

Hands on experience in closing in a house in preparation for finish carpentry. Safely operating hand and power tools in framing floors, exterior and interior walls, ceilings and roof systems in a teamwork environment. Prerequisite: CNST 1005 AND CNST 1075 Corequisite: CNST1210 (0/225/0/0)

CNST 1230 Construction and Architectural**Drafting****2 credits**

The theory of plot plans, footing details, foundation plans, floor plans, interior and exterior elevations, window and door schedules, section drawings, and construction details. Prerequisite: CNST 1030 (30/0/0/0)

CNST 1240 Construction and Architectural**Drafting Lab****1 credit**

Design, draw, dimension and letter a house floor plan incorporating proper room design and completing a set of house plans. Corequisite: CNST1230 (0/45/0/0)

CNST 1250 Materials Estimating**2 credits**

Study of types, amounts, and costs of building products used in modern construction. Corequisite: CNST1210 (30/0/0/0)

CNST 1300 Cooperative Internship I**1 - 6 credits**

Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and/or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Building Construction program or permission of instructor. (0/0/0/360)

CNST 2010 Concrete Construction**2 credits**

Principles involved in concrete forms, concrete materials, and concrete finishing. Stresses concrete wall forms prefabricated and job site built, and flatwork such as driveways, sidewalks, and floor forming and placement. Prerequisite: CNST 1220 (30/0/0/0)

CNST 2020 Concrete Construction Lab**1 credit**

Provides a working knowledge of concrete materials, wall forms, flatwork, and finishing. Emphasis on placement of forms, concrete, and finishing through assigned lab projects. Corequisite: CNST2010 (0/45/0/0)

CNST 2030 Cabinet and Finish Construction I**3 credits**

Theory and practical application of cabinet construction and millwork covering the design, construction, and placement of cabinets with proper methods of joinery, construction, and finishes. Prerequisite: CNST 1220 (45/0/0/0)

CNST 2040 Cabinet and Finish Construction I Lab**4 credits**

Designed to introduce the construction practices of cabinetry and all related millwork by the construction and placement of cabinets, millwork, and finish materials in related projects. Corequisite: CNST2030 (0/180/0/0)

CNST 2050 Blueprint Reading and Estimating I**2 credits**

Designed for theory of blueprint reading, estimating, and drawing for residential and some light commercial building. Emphasis on specifications, schedules, elevations, floor plans and site plans. (30/0/0/0)

CNST 2060 Blueprint Reading and Estimating I Lab 1 credit

Course provides an opportunity to properly use drafting equipment and read existing construction drawings and specifications to accurately implement construction. Corequisite: CNST2050 (0/45/0/0)

CNST 2230 Millwork and Finish Construction II 4 credits

Advanced theory of finish materials used in construction. Covers the selection and application of paints and other finishes and other finishing materials for decoration and redecoration of homes. Prerequisite: CNST 2030 (60/0/0/0)

CNST 2240 Millwork and Finish Construction II Lab 5 credits

Lab experience for CNST 2230 with application of interior doors, trim work, and related finishing practices. Corequisite: CNST2230 (0/225/0/0)

CNST 2250 Blueprint Reading and Estimating II 2 credits

Continuation of theory of print reading, estimating and drawing for residential and some light commercial building. Emphasis on specifications, schedules, floor plans, elevations, site plans, and construction management. Prerequisite: CNST 2050 (30/0/0/0)

CNST 2260 Blueprint Reading and Estimating II Lab 1 credit

Course provides practice in the proper use of drafting equipment, how to accurately read construction drawings and specifications to develop working drawings used in construction projects. Corequisite: CNST2250 (0/45/0/0)

CNST 2270 Construction Management 1 credit

Basic knowledge of contract preparation, construction financing, liens, construction insurance, and other construction legalities. (15/0/0/0)

Business (BSAD)

BSAD 1000 Human Relations and Ethics 3 credits

Study of modern methods and procedures used in effective human relations and ethics including information on the following: definition and history of human relations, ethics, diversity, self-esteem, motivation, communication and personality styles, conflict management and resolution, and team building and rapport as well as self expression and effective listening skills. (45/0/0/0)

BSAD 1040 Personal Finance 2 - 3 credits

This course will cover the basic principles needed for effective personal financial management, including the practical applications of money management, budgeting, taxes, credit, insurance, housing, investments, and retirement planning. (45/0/0/0)

BSAD 1050 Introduction to Business 3 credits

An introductory study and overview of the role of business in society as well as a discussion of the various disciplines of business including an overview of business organization, management, marketing, human resource management, and finance. Also a study and discussion of various strategies for success of specific public and private firms as well as a small business. Business vocabulary used to understand and interpret business news and information. (45/0/0/0)

BSAD 1070 Business Math 3 credits

This course will develop and apply mathematical skills to solve problems related to business occupations. Topics include application, basic mathematics related to cash and trade discounts, markup and markdowns, interest, payroll, annuities, stocks and bonds, installment buying, mortgages, taxes, insurance, banking, payroll, and business statistics. (45/0/0/0)

BSAD 1200 Introduction to Electronic Commerce 3 credits

An introduction to Electronic Commerce and the technology infrastructure needed to successfully operate a business online. The course explores electronic storefronts, auctions, virtual communities and web portals. The principles related to building a web presence, marketing and selling on the web, legal, ethical, and tax issues, security considerations, and payment systems will be covered. Current issues in e-commerce will be discussed. (45/0/0/0)

BSAD 1300 Cooperative Internship 3 credits

Work-study program for in-depth experience on the job. Cooperative internships are planned and supervised by the college and employers so that each contributes to the student's education and employability. Prerequisite: completion of the first year coursework in the applicable AAS degree with a 2.0 minimum GPA and/or permission of instructor. (0/0/0/180)

BSAD 1310 Cooperative Internship 3 credits

Work-study program for in-depth experience on the job. Cooperative internships are planned and supervised by the college and employers so that each contributes to the student's education and employability. Prerequisite: Completion of the first year coursework in the applicable AAS degree with a 2.0 minimum GPA and/or permission of the instructor. (0/0/0/180)

BSAD 1320 Cooperative Internship 3 credits

Work-study program for in-depth experience on the job. Cooperative internships are planned and supervised by the college and employers so that each contributes to the student's education and employability. Prerequisite: completion of the first year coursework in the applicable AAS degree with a 2.0 minimum GPA and/or permission of instructor. (0/0/0/180)

BSAD 1600 Real Estate Principles and Practices 3 credits

Introduction to real estate with reference to estates in land, acquisition of title, legal instruments used in real estate transactions, real estate markets, ownership, interests, contracts, closing transfers, financing brokerage, management, appraising, developing, and government influences in real estate. (45/0/0/0)

BSAD 1620 Real Estate Finance 3 credits

Study of the methods of financing various types of real estate, lending institutions involved in making mortgage loans, and the institutions that are the permanent investors in real estate loans. Examines source of funds and the factors affecting the supply of money available for mortgage loans. (45/0/0/0)

BSAD 2010 Personal Insurance 3 credits

Students in the personal insurance course will explore property and casualty insurance in three segments: automobile insurance, homeowner's and residential insurance, and personal-human loss prevention. Students will collaborate on group projects for a deeper understanding of personal insurance principles. Resources will be provided for additional independent study at the interest of the student. Prerequisite: BSAD 2240 (MAY BE TAKEN CONCURRENTLY) (45/0/0/0)

BSAD 2020 Commercial Insurance 3 credits

This course will explore the fundamentals of commercial insurance and its application. Students will gain knowledge of commercial coverage forms and endorsements. Topics covered are commercial property, business income, commercial crime, equipment breakdown, commercial general liability, commercial auto, business owners, farm, workers' compensation and employers' liability. Prerequisite: BSAD 2240 (MAY BE TAKEN CONCURRENTLY) (45/0/0/0)

BSAD 2050 Business Communications 3 credits

Development of both oral and written communicative skills. Students will be able to organize and present effective presentations gaining audience rapport and sending appropriate nonverbal messages as well as formulate effective letters, memos, and reports for business and industry. Prerequisite: APPROPRIATE PLACEMENT SCORE OR ENGL 0910 OR ENGL 0920 WITH MIN. GRADE OF A and Appropriate Writing Placement Score OR ENGL 0930 OR ENGL 0935 WITH MIN. GRADE OF A (45/0/0/0)

BSAD 2130 Salesmanship 3 credits

Deals with sales as a career and the application of professional selling techniques. Topics include the duties and responsibilities of a professional salesperson, the development, planning and implementation of a sales presentation, role-playing activities, and the various techniques and methods involved in making a sale. Prerequisite: BSAD 2050 (45/0/0/0)

BSAD 2140 Principles of Banking 3 credits

This course is to provide entry-level bankers with information they need to provide effective service to their customers, thereby having an impact on banking profitability. This information includes how banks affect the economy, why they are in business, what services they provide, and how they provide them. Students also get a basic understanding of the interrelationships of various departments within a bank. (45/0/0/0)

BSAD 2160 Customer Service and Business Etiquette 3 credits

Emphasis on the importance of customer service in an overall business setting. Topics include recognizing the importance of customer service, identification of customer needs, handling of routine and difficult situations, and emphasis of long lasting customer relationships. Students will also develop knowledge and practical experience to exercise good manners, project a professional image, and confidently respond to most business situations. (45/0/0/0)

BSAD 2170 Applied Statistics 3 credits

The course is an introduction to basic probability and statistical methods that are used in a wide variety of disciplines. Topics include descriptive statistics, probability distributions, sampling distributions, methods of statistical inference and bivariate relationships. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 1140 WITH MIN. GRADE OF C OR MATH 1150 WITH MIN. GRADE OF C OR MATH 1075 WITH MIN. GRADE OF C (45/0/0/0)

BSAD 2180 Advertising 3 credits

Utilizes marketing concepts to recognize and develop an effective advertising campaign. Activities include creating simulated advertisements using various print and broadcast media. Prerequisite: BSAD 2520 (45/0/0/0)

BSAD 2190 Principles of Lending 4 credits

Principles of lending will cover three categories of lending: consumer, real estate and agricultural. This course is designed for the student to gain an understanding of these regulations governing mortgage lending, their requirements and penalties, the technical requirements of lending, and industry history. Students will also explore how lending decisions will impact the consumer, bank, industry, and nation's economy. (60/0/0/0)

BSAD 2230 Retail Management 3 credits

An exploration of the retail environment. Topics include buying, store design and layout, visual merchandising, financial strategies including sales, hot tickets, slow movers, pricing, mark-ups, and markdowns. Prerequisite: BSAD 2520 (45/0/0/0)

BSAD 2240 Principles of Insurance 3 credits

This course will examine the field of insurance, risk and risk management, and the basic provisions of various types of insurance-accident, casualty, health and life. (45/0/0/0)

BSAD 2250 International Business 3 credits

Designed to assist students in development of appreciation, knowledge, skills, and abilities needed to live and work in a global marketplace. (45/0/0/0)

BSAD 2260 Introduction to Claims 3 credits

This course will explore insurance basics including factors affecting the claim environment, the claim process and first party automobile and property claims in addition to liability claims for worker's compensation. Students will learn to improve claim handling by exploring effective and proven liability claim investigation, evaluating, valuing and settlement techniques. Prerequisite: BSAD 2010 AND BSAD 2020 (45/0/0/0)

BSAD 2320 Agency Operations 3 credits

The course focuses on the producer's office environment and the ability to use sales management techniques as a means to identify and sell to selected markets. Students learn to apply management principles to the business of running an agency. (45/0/0/0)

BSAD 2340 Introduction to Underwriting 3 credits

This course is designed to provide students with a broadened overview of underwriting. Students will explore underwriting as a decision making tool and analyze personal lines underwriting for auto and homeowners, commercial lines underwriting for property and general liability, and the measurement of underwriting results. Prerequisite: BSAD 2260 (MAY BE TAKEN CONCURRENTLY) (45/0/0/0)

BSAD 2350 Security and Loss Prevention 3 credits

Provides insight into the complex problems of loss prevention in today's society, including security staffing needs, fire protection and control, duties and responsibilities of security personnel, internal controls, emergency and disaster planning, and internal theft. (45/0/0/0)

BSAD 2520 Principles of Marketing 3 credits

A study of the development of an effective marketing program including consumer behavior, product, pricing, distribution, and promotional strategies. (45/0/0/0)

BSAD 2530 Advanced Marketing 3 credits

Application of marketing principles and knowledge using case study and project based learning to simulate decisions made by marketing managers utilizing marketing research and analytic based statistics. Course will thoroughly explore strategies to deal with opportunities and challenges of evolving technology in marketing, including social media and mobile marketing. An Integrated Marketing Campaign will be created and evaluated. Prerequisite: BSAD 2520 (45/0/0/0)

BSAD 2540 Principles of Management 3 credits

Introduction to management theory and practice for supervisors of employees or managers of organizations. Topics include the functions of planning, organizing, directing, controlling, and supervising along with new and rapidly developing areas of management. (45/0/0/0)

BSAD 2550 Advanced Management 3 credits

This course provides an application-based study of management theory and fundamentals related to first-line, supervisory positions and helps students to develop a framework for decision making, motivation, leadership, human resources management, and conflict resolution. Prerequisite: BSAD 2540 (45/0/0/0)

BSAD 2600 Real Estate Law 3 credits
Study of the principles of law governing the interests in real estate including acquisition, encumbrance, transfer, rights of obligations of parties, and state and federal regulation thereof. (45/0/0/0)

BSAD 2620 Fundamentals of Real Estate Appraisal 3 credits
Provides instruction in real estate appraisal. Examines the nature of different values, the function and purpose of an appraisal, the methods of establishing value with emphasis on residential market value. (45/0/0/0)

BSAD 2630 Advanced Real Estate Appraisal 3 credits
Examines different values, function and purpose of an appraisal, methods of establishing value with emphasis on capitalization rates, income analysis, and the narrative appraisal report on all types of real estate properties. Permission of instructor required. Prerequisite: BSAD 1600 AND BSAD 2620 (45/0/0/0)

BSAD 2640 Real Estate Investments 3 credits
Study of the feasibility and the analysis of long-term investment characteristics of condominiums, dormitories, apartments, housing complexes, office buildings, shopping centers, industrial properties, and subdivisions. Prerequisite: BSAD 1600 (45/0/0/0)

BSAD 2660 Real Estate Brokerage 3 credits
Study of the nature of the real estate business. Emphasizes the functions of the real estate salesperson and broker. Prerequisite: BSAD 1600 (45/0/0/0)

BSAD 2670 Real Estate Farm and Ranch Brokerage 3 credits
Designed for those interested in the field of rural real estate. Examines the nature and business of farm and ranch operations, purchasing, selling, and owning rural real estate, and the tax considerations of all phases of rural real estate. Prerequisite: BSAD 1600 (45/0/0/0)

BSAD 2680 Real Estate Management 3 credits
Introduction to property management as a specialized activity pertaining to residential, commercial, and industrial real estate, leases, tenant-landlord rights, feasibility analysis of ownership, the marketing aspect, the administrative process, governmental involvement in real estate, maintenance, and the management contract. Prerequisite: BSAD 1600 (45/0/0/0)

BSAD 2700 Business Law I 3 credits
Practical course regardless of the subsequent occupation of the student, covering contracts, negotiable instruments, sales and mortgages of personal property. (45/0/0/0)

BSAD 2710 Business Law II 3 credits
Study of negotiable instruments, business organizations including partnerships and corporations, and agencies. Prerequisite: BSAD 2700 (MAY BE TAKEN CONCURRENTLY) (45/0/0/0)

BSAD 2760 Applied Business Projects 3 credits
Designed as a capstone experience, this project based course requires students to apply knowledge from the marketing, accounting, management, business communications and sales disciplines. Students will create projects designed to implement their knowledge into real world applications using problem solving and creative thinking skills. Prerequisite: BSAD 2520 AND BSAD 2540 AND BSAD 2050 AND BSAD 2160 AND ACCT 1100 OR ACCT 1200 (45/0/0/0)

Career Planning (CAPL)

CAPL 1150 Career Planning 1 credit
Provides assistance in making career decisions through interest and aptitude testing. Examines occupations via research and explorations. Includes identification of goals and steps necessary to achieve goals. (15/0/0/0)

CAPL 1290 Introduction to Job Search and Employment 1 credit
Basic course in analysis of qualifications and operation of cooperative internship programs, locating and researching a prospective business or company, developing a resume and cover letter, and preparing for an employment interview. (15/0/0/0)

Chemistry (CHEM)

CHEM 1020 Survey of Chemistry 3 credits
Fundamental principles of chemistry including atomic structure, basic inorganic and organic nomenclature and selected chemical reactions as well as techniques in handling laboratory equipment. (45/0/0/0)

CHEM 1090 General Chemistry I 4 credits
This is the first course of comprehensive chemistry sequence. Topics include nomenclature, atomic structure, chemical reactions, essentials of bonding, periodic properties, Valence Shell Electron Pair Repulsion Theory (VSEPR) theory, modern bonding theories, stoichiometry, thermochemistry, and the chemistry of solids, liquids, and gases. (45/30/0/0)

CHEM 1100 General Chemistry II 4 credits
This is the second course of a comprehensive chemistry sequence. Topics include solutions, kinetics, equilibrium, acid-base reactions, solubility, thermodynamics, and electrochemistry. (45/30/0/0)

CHEM 1140 General Chemistry I for Majors 5 credits
Study of general principles including atomic structure, nomenclature, reactions, and compounds. (60/30/0/0)

CHEM 1160 General Chemistry II for Majors 5 credits
The study of interactions of substances and the effects of temperature, pressure and concentrations as it applies to solubility, reaction rate, pH, kinematics, thermodynamics, and electrochemistry. It is also an introduction to nuclear chemistry and organic chemistry. Prerequisite: CHEM 1140 (60/30/0/0)

CHEM 2030 Introductory Organic Chemistry 4 credits
Introduction to properties, syntheses, uses, and nomenclatures of the aliphatic and aromatic compounds. Prerequisite: CHEM 1160 (45/30/0/0)

CHEM 2040 Organic Chemistry I 4 credits
To give chemistry majors and health career students a working knowledge of organic chemistry nomenclature, properties, preparation methods, and reactions and reaction mechanisms of alkanes, cycloalkanes, alkenes, alkynes, and alkyl halides as well as providing an introduction to the analytical techniques of IR, NMR, UV, and mass spectroscopy. Prerequisite: CHEM 1140 AND CHEM 1160 (45/30/0/0)

CHEM 2050 Organic Chemistry II 4 credits
To give chemistry majors and health career students a working knowledge of the nomenclature, properties, preparation techniques, and the reactions and reaction mechanisms of aromatics, alcohols, ethers, carboxylic acids and their derivatives. Provide knowledge on the effects of organic chemicals on humans and on society. To provide a basic introduction to biochemistry and polymers. Prerequisite: CHEM 2040 (45/30/0/0)

Cinema (CINE)

CINE 1000 Camera and Lighting I 2 credits

An introductory course in the basics of camera functions, lighting and film style production principals for film and cinema production. Corequisite: CINE1010 (30/0/0)

CINE 1010 Camera and Lighting I Lab 1 credit

An application of the introductory practice of basic camera functions, lighting and film style production techniques for film and cinema production. Corequisite: CINE1000 (0/45/0/0)

CINE 1020 Camera and Lighting II 2 credits

An intermediate course in camera and lens selection configuration and lighting for dramatic impact and corporate/commercial production. Analysis and study of select existing films and shot sequences will be used to further define production styles and approaches in film and video. Sound techniques relevant to these styles and music videos will be introduced. Prerequisite: CINE 1000 AND CINE 1010 Corequisite: CINE1030 (30/0/0/0)

CINE 1030 Camera and Lighting II Lab 1 credit

An application of film and videography concepts that focus on camera and lens selection, configuration and lighting for dramatic impact and corporate/commercial production. Sound capture techniques relevant to these styles and music videos will be practiced. Prerequisite: CINE 1000 AND CINE 1010 Corequisite: CINE1020 (0/45/0/0)

CINE 1100 Script Writing and Analysis 3 credits

Script writing and analysis is designed to present students with a practical approach to scriptwriting techniques and formats. Writers will explore the various elements, structure and styles used in crafting all types of television script genres and motion picture screenplays. They will experience this process writing news, commercials, corporate video scripts, long form features, documentaries, short films and the first act of a feature-length script. Students will work in small groups to discuss script assignments and proposals. Writers' work will be shared and discussed regularly in class, and short film scripts will be implemented by the Digital Cinema Film & Video Lab. (45/0/0/0)

CINE 1200 Media Graphics 3 credits

This course is designed to help students develop proficiency in and knowledge of digital graphics used in broadcasting, film and web-based media production. Students will learn raster and vector based graphics design programs including Photoshop, Illustrator, and InDesign, and gain hands-on experience in the integration of graphic design into video and motion graphics projects. Students will design graphics packages for broadcast, movie titles, full screen graphics, lower-third templates and understand image compression and manipulation for television, film and the web. (45/0/0/0)

CINE 1700 Post Production I 1 credit

Introduction to concepts and techniques of video and audio editing and post-production using a non-linear, computer-based production system. (15/0/0/0)

CINE 1720 Post Production II 3 credits

Continuation of concepts and techniques of video and audio editing and production using a non-linear, computer-based production system. The student will demonstrate comprehension of basic editing techniques to enhance visual storytelling. The student will learn to critically analyze shot construction, motion and composition in storytelling. The student will be introduced to motion graphics, effects and color correction techniques that will support their creativity and enhance their digital skill-set. (45/0/0/0)

CINE 2000 Camera and Lighting III 2 credits

An advanced class that explores set design, continuity, set etiquette and set dressing for drama, corporate and feature-product style production. Use of specialized lenses and lighting for commercial and music video as well as 3-D moving camera techniques discussed. Analysis and study of select existing films and shot sequences will be used to further define production styles and approaches relevant to student film and video techniques. Prerequisite: CINE 1020 AND CINE 1030 Corequisite: CINE2010 (30/0/0/0)

CINE 2010 Camera and Lighting III Lab 1 credit

An applied lab class that practices techniques and applications of set design, continuity, set etiquette and set dressing for drama, corporate and feature-product style production. Use of specialized lenses and lighting for commercial and music video as well as 3-D moving camera techniques practiced. Prerequisite: CINE 1020 AND CINE 1030 Corequisite: CINE2000 (0/45/0/0)

CINE 2700 Post Production III 3 credits

Advanced video and audio editing using industry standard television and film non-linear, computer-based production software. This class builds upon enhanced digital storytelling techniques and concepts. The student will video edit and audio sweeten short films, music videos, documentary projects, long form features and student directed movies created in the digital cinema program. Prerequisite: CINE 1720 (45/0/0/0)

CINE 2720 Post Production IV 3 credits

Professional level video and audio editing and 2D/3D motion graphics animation. The student will function as the online video editor, colorist and motion graphics specialist for Digital Cinema Film & Video lab short films, music videos, documentary projects, long form features and student directed movies. Prerequisite: CINE 2700 (45/0/0/0)

CINE 2982 Digital Cinema and Media**Capstone** 4 credits

Students will produce professional-level projects appropriate to their individual areas of interest. Projects can include, but are not limited to, short films, documentaries, long form features, corporate videos, PSAs and commercials. Students will end the semester with an industry ready resume and demo reel. Sophomore standing. Course is to be taken during the student's final semester, prior to the completion of their AAS degree. Prerequisite: CINE 2000 (15/135/0/0)

Criminal Justice (CRIM)

CRIM 1010 Introduction to Criminal Justice 3 credits

Provides an overview of the history, development, and philosophies of the criminal justice system within the United States. Areas covered include crime and the criminal justice system, the police, the courts, corrections, and the juvenile justice system. (45/0/0/0)

CRIM 1020 Introduction to Corrections 3 credits

Outlines corrections in a systematic process showing the evolving changes within institutional and community-based corrections. Topics include, but are not limited to the history of corrections, the influence of social thought and philosophy on the development of corrections, the rights of the incarcerated inmate, and the duties of the correctional officer. (45/0/0/0)

CRIM 1030 Courts and Judicial Process 3 credits

Surveys the United States judicial system. Topics include, but are not limited to, legal and constitutional concepts, institutions, and processes. Coverage includes adult and civil courts. (45/0/0/0)

CRIM 1270 Introduction to Forensic Crime Scene Investigation 3 credits

This course provides an overview of the basic concepts of forensic crime scene investigations. The course reviews the basic principles used by crime scene investigators. Topics include protecting the crime scene as a first responder, processing and establishing evidence, and understanding personnel disciplines that aid in the investigation to include special physical evidence handling. (45/0/0/0)

CRIM 1800 Criminal Justice Practicum 3 credits

Under faculty and agency supervision, students will work at a criminal justice agency in all appropriate facets of that agency and apply acquired skills and principles studied in the classroom. (0/0/135/0)

CRIM 2000 Criminal Law 3 credits

Outlines the purpose and function of criminal law. Topics include, but are not limited to, the rights and duties of citizens and police in relation to local, state, and federal law such as arrest, search and seizure, and confessions; the development, application, and enforcement of laws; constitutional issues; and sentencing. (45/0/0/0)

CRIM 2030 Police and Society 3 credits

Examines the role of the police in relationship to law enforcement and the United States of American society. Topics include, but are not limited to, the role and function of police, the nature of police organizations and police work, and the patterns of police-community relations. (45/0/0/0)

CRIM 2080 Criminal Procedures 3 credits

This course is a study of the legal limitations on criminal investigative practices contained in the Fourth, Fifth, and Sixth Amendments to the Constitution. Topics include probable cause, reasonable suspicion, warrants (arrest and search), search and seizure of persons and things, motor vehicle stops, arrest and detention, the exclusionary rule, stop and frisk, electronic surveillance and evidence, lineups and show ups, interrogations, confessions, the right to counsel and legal liabilities of public officers. (45/0/0/0)

CRIM 2100 Juvenile Justice 3 credits

Examines the origins, philosophy, and objectives of the juvenile justice system. Topics include, but are not limited to, causation of crime, such as race and gender, socioeconomic relevance, and victimization; the juvenile court system, the law enforcement approach, corrections, and prevention. (45/0/0/0)

CRIM 2200 Criminology 3 credits

Examines crime and criminology from a broad social perspective. Emphasizes the nature and causes of crimes, investigation and prosecution, and treatment and prevention. (45/0/0/0)

CRIM 2250 Community-Based Corrections 3 credits

Emphasizes the correctional process as applied in a community setting. Focuses on probation, parole, and other current community-based strategies for dealing with the offender. Prerequisite: CRIM 1020 (45/0/0/0)

CRIM 2260 Criminal Investigation 3 credits

Introduces criminal investigation procedures. Reviews the historical development and investigative processes related to law enforcement functions. Topics include, but are not limited to: the proper collection, organization and preservation of evidence; basic investigative tools; examining the primary sources of information; analysis of the importance of writing skills; and reviewing of the constitutional, specifically legal limitations of the investigation. (45/0/0/0)

CRIM 2300 Sociology of Deviant Behavior 3 credits

Theoretical analysis of the relation of deviant behavior including crime, vice, innovation, individual pathology, and deviant subgroups to community standards of conventional behavior as expressed in law and norms. (45/0/0/0)

CRIM 2350 Security and Loss Prevention 3 credits

Provides insight into the complex problems of loss prevention in today's society, including security staffing needs, fire protection and control, duties and responsibilities of security personnel, internal controls, emergency and disaster planning, and internal theft. (45/0/0/0)

CRIM 2400 Jail Management Certification Training 5.5 credits

Provides applicants with skills and instruction in accordance with Nebraska Jail Standards regulations. Upon successful completion of the course, the student will be certified to work in Nebraska county and local jails. (82.5/0/0/0)

CRIM 2580 Communication Skills in Criminal Justice 3 credits

This course will address communication skills that are essential in today's criminal justice environment. Concentration will be on enhancing speaking skills, understanding body language, interview and interrogation techniques, and developing listening skills. Additionally, a portion of the class will concentrate on report writing for both law enforcement and corrections. (45/0/0/0)

CRIM 2700 Issues in Criminal Justice 3 credits

This capstone course serves to synthesize the knowledge gained from each course taken within either concentration of the criminal justice curriculum. In addition to exploring issues in criminal justice, the student will develop job-seeking skills. Eighteen credit hours of criminal justice coursework required. Prerequisite: CRIM 1010 (45/0/0/0)

Diesel Technology (DESL)**DESL 1010 Ag Electrical Systems Theory 2.5 credits**

The study of basic electricity, circuitry and wiring diagrams used on farm equipment. Complete coverage of batteries, starting circuits, charging circuits, multi-meters and accessory circuits including operation, testing, and diagnostic procedures. (37.5/0/0/0)

DESL 1020 Ag Electrical Systems Lab 4.5 credits

A practical application of the analysis, repair, and testing of the material covered in DESL 1010. This lab involves the use of proper methods, tools and service materials to complete work requirements. Corequisite: DESL1010 (22.5/135/0/0)

DESL 1025 Basic CDL Driver Training Theory 0.5 credits

The Basic CDL Training program at Northeast Community College is designed to prepare each student for completing the minimum requirements necessary to acquire their Commercial Drivers License. Students enrolling in this CDL course must have their CDL learners permit prior to the start of the course. (7.5/0/0/0)

DESL 1035 Basic CDL Driver Training Lab 1 credit

The Basic CDL Training program at Northeast Community College is designed to prepare each student for completing the minimum requirements necessary to acquire their Commercial Drivers License. Corequisite: DESL1025 (0/45/0/0)

DESL 1055 Ag Power Trains and Farm Machines Theory 5 credits

Study of the practical operations of bearings, bushings, gears, and the systems of power trains incorporated in farm tractors. Includes the fundamentals of mechanical steering, gear repair and adjustment, and the basic study of farm machinery used in modern farming, this includes a study of a variety of farm machinery operations, tests and troubleshooting of farm machinery. Corequisite: DESL1085 (75/0/0/0)

DESL 1065 Ag Air Conditioning Theory 2.5 credits

An introduction to the fundamentals of air conditioning and basic refrigeration principles including the study of different types of compressors, evaporators, controls and condensers used on today's farm equipment. Gauge reading as a diagnostic tool, environmental issues and preparation for certification to handle refrigerants is also covered. (37.5/0/0/0)

DESL 1075 Ag Air Conditioning Lab 4.5 credits

A practical application of the diagnosis, service, repair installation, and overhaul of the systems covered in DESL 1065. Lab projects emphasize the proper use of gauges and other tools to diagnose and repair the system. Corequisite: DESL1065 (22.5/135/0/0)

DESL 1085 Ag Power Trains and Farm Machines Lab 9 credits

Practical experience in repair, troubleshooting and testing of various power trains and farm machinery used in today's farm equipment. Students are required to disassemble, analyze, troubleshoot, repair and assemble farm machinery. Corequisite: DESL1055 (45/270/0/0)

DESL 1095 Shop Processes and Safety 2 credits

This course covers basic shop processes, tools, fasteners, and equipment including the identification, use, inspection, and care of those tools and equipment. The course also addresses OSHA regulations as it pertains to shop safety. Students have the opportunity to earn both a shop safety certificate and forklift operator certification upon successful completion of the curriculum. (30/0/0/0)

DESL 1110 Truck Electrical Systems Theory 2.5 credits

The study of basic electricity, circuitry and wiring diagrams used on trucks. Complete coverage of batteries, starting circuits, charging circuits, ignition circuits and accessory systems. Includes operation, testing, diagnosis and repair procedures. (37.5/0/0/0)

DESL 1120 Truck Electrical Systems Lab 4.5 credits

A practical application of the analysis, repair and testing of the material covered in DESL 1110. Involves the use of proper methods, tools and service materials to complete work requirements. Corequisite: DESL1110 (22.5/135/0/0)

DESL 1155 Truck Power Trains, Brakes and Suspension Systems Theory 5 credits

The study of power train, suspension & steering components and their function, repair, and preventive maintenance of these systems. Including clutches, torque converters, manual and automatic transmissions, driveshafts, differentials, wheels, brakes, suspension & steering systems and wheel alignment. Corequisite: DESL1185 (75/0/0/0)

DESL 1165 Truck Air Conditioning Theory 2.5 credits

An introduction to the fundamentals of air conditioning and basic refrigeration principles including the study of different types of compressors, evaporators, controls, and condensers used on today's trucks. Gauge reading as a diagnostic tool, environmental issues and certification to handle refrigerants is also covered. (37.5/0/0/0)

DESL 1175 Truck Air Conditioning Lab 4.5 credits

A practical application of the diagnosis, service, repair, installation, and overhaul of the systems covered in DESL 1165. Lab projects emphasize the proper use of gauges and tools to diagnose and repair the system. Corequisite: DESL1165 (22.5/135/0/0)

DESL 1185 Truck Power Trains, Brakes and Suspension Systems Lab 9 credits

Includes hands on training in maintenance, troubleshooting, repair and overhaul of clutches, manual transmissions, driveshafts, differentials, wheels, brakes, suspension and steering systems and wheel alignment. Corequisite: DESL1155 (45/270/0/0)

DESL 1300 Cooperative Internship I 1 - 6 credits

Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and/or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each

contributes to the student's education and employability. First year completion of the Diesel Technology program or permission of instructor. (0/0/0/360)

DESL 2015 Ag Electronics Theory 2.5 credits

The study of electronic systems used on today's farm equipment including microprocessors, sensors, monitors, controllers, emergency shutdown systems and GPS systems. Also includes operation, set-up, testing and diagnosing of these systems. Prerequisite: DESL 1010 AND DESL 1020 Corequisite: DESL2025 (37.5/0/0/0)

DESL 2025 Ag Electronics Lab 4.5 credits

Includes proper use of tools, scanners, and other test equipment required to service electronic circuits on farm equipment. Also covers proper installation, calibration, set-up, testing, and diagnosing various types of electronic devices. Prerequisite: DESL 1010 AND DESL 1020 Corequisite: DESL2015 (22.5/135/0/0)

DESL 2030 Ag Engine and Fuel Systems Theory 5 credits

A study of the various types of diesel engines including both two and four-stroke cycle and direct and indirect injection styles. Includes diagnosis, service, and repair procedures for the basic engine as well as air induction, fuel, lubrication and cooling systems. Must have completed first year of the DESL program or permission of instructor. (75/0/0/0)

DESL 2040 Ag Engines and Fuel Systems Lab 9 credits

The course includes disassembly, repair, measurement, and assembly procedures for diesel engines and diesel fuel systems. Emphasis on diagnosis, testing and repairing of diesel engines and related systems including fuel systems. Corequisite: DESL2030 (45/270/0/0)

DESL 2070 Hydraulic Theory 2.5 credits

Practical application of basic laws of hydraulics and schematics of farm tractors and industrial hydraulics. Includes the theory and operations of hydraulic components, testing and troubleshooting used in today's equipment. Prerequisite: DESL 1010 AND DESL 1020 Corequisite: DESL2080 (37.5/0/0/0)

DESL 2080 Hydraulic Lab 4.5 credits

Practical experience in repair, troubleshooting, and testing various hydraulic components used in today's farm tractors and industrial equipment. Students are required to disassemble, analyze, troubleshoot, repair, and assemble hydraulic components. Prerequisite: DESL 1010 AND DESL 1020 Corequisite: DESL2070 (22.5/135/0/0)

DESL 2110 Diesel Truck Electronics Theory 2.5 credits

The study of the electronics systems used on today's trucks including sensors, microprocessors, components, and harnesses. Operation testing and diagnosing of these systems are covered including some programming. Prerequisite: DESL 1110 AND DESL 1120 (37.5/0/0/0)

DESL 2120 Diesel Truck Electronics Lab 4.5 credits

Lab experience corresponds to the material covered in DESL 2110. Includes proper use of tools, scanners, and other test equipment required to service electronic circuits on today's medium and heavy duty trucks. Also covers proper installation, calibration, set-up, testing and diagnosing various types of electronic devices. Corequisite: DESL2110 (22.5/135/0/0)

DESL 2130 Truck Engine and Fuel Systems Theory 5 credits

A study of various types of internal combustion engines specific to the trucking industry. Includes their internal components, cooling, lubrication, intake, exhaust systems, engine brakes, and mechanical fuel systems, preventative maintenance, trouble shooting, failure analysis, parts inspection, overhaul and tune up. Must have completed first year of DESL program or permission of instructor. (75/0/0/0)

DESL 2140 Truck Engines and Fuel Systems Lab 9 credits

A practical application of disassembly, measurement and repair of diesel engines used in the trucking industry. Includes engine brakes and mechanical fuel systems, preventative maintenance, trouble shooting, failure analysis, parts inspection, overhaul and tune up. First year completion of Diesel Technology program or permission of instructor required. Corequisite: DESL2130 (45/270/0/0)

DESL 2170 Transportation Refrigeration Theory 2.5 credits

The study of the fundamentals of refrigeration trailer operation and maintenance. Prerequisite: DESL 1165 AND DESL 1175 (37.5/0/0/0)

DESL 2180 Transportation Refrigeration Lab 4.5 credits

The practical application of the theories learned in DESL 2170 with hands on experience in the function, diagnosis, and repair of refrigeration trailers. Corequisite: DESL2170 (22.5/135/0/0)

Drafting (ARCH)

ARCH 1100 Architectural Drafting I 2 credits

Basic techniques and fundamentals of architectural drafting with emphasis on line work, lettering, and basic technical drawing. Basic drafting skills are developed through projects devoted to acquiring knowledge of basic residential construction methods and their graphical representation. Emphasis is placed on industry standards. Corequisite: ARCH1110 (30/0/0/0)

ARCH 1110 Architectural Drafting I Lab 2 credits

Lab experience for ARCH 1100. Corequisite: ARCH1100 (0/90/0/0)

ARCH 1120 Materials of Construction 3 credits

As related to the architectural industry, the study of standards, codes, materials, and methods of construction. Raw materials and manufactured products are studied. (45/0/0/0)

ARCH 1130 Introduction to Construction Documents 3 credits

Basic plan reading skills are developed through use of both residential and commercial drawings and specifications. The student will become familiar with codes, bidding and negotiation concepts. (45/0/0/0)

ARCH 1150 Introduction to Construction Lab 2 credits

Lab for ARCH 1140. Through group projects, students learn basic construction practices and will build a small structure. Corequisite: ARCH1140 (0/90/0/0)

ARCH 1160 Fundamentals of Drafting 3 credits

A course that will provide a study into the basic concepts of drafting. The student will use traditional as well as computer aided drafting to create various drawings. Industry graphic standards will be emphasized through the creation of sketches, board and CAD drawings. (15/90/0/0)

ARCH 1170 Introduction to Construction 3 credits

Basic building construction theory, methods, and techniques, including site work, concrete, masonry, rough and finish carpentry, structural calculation. Wood and steel building components are discussed. Through group projects, students learn basic construction practices and will build a small structure. (15/90/0/0)

ARCH 1200 Architectural Drafting II 4 credits

A sequence course to Architectural Drafting I that will provide a study into the basic design theories applied in the creation of residential structures both single and multi-unit and light commercial structures. Application of theory will be through projects designed to acquaint the student with the accepted structural methods used and the transformation of this

knowledge into working drawings using dimension lumber, steel joists with decking and other material. Prerequisite: ARCH 1100 Corequisite: ARCH1210 (60/0/0/0)

ARCH 1210 Architectural Drafting II Lab 6 credits

Lab experience for ARCH 1200. Corequisite: ARCH1200 (0/270/0/0)

ARCH 1220 Estimating for Construction 3 credits

Sequence course to ARCH 1120 that provides further study into materials, quantity determination, and costs. (45/0/0/0)

ARCH 1230 Introduction to Revit 4 credits

Basic skills in 3-D Computer-Assisted Drafting (CAD) using REVIT ARCHITECTURE. Projects consist of various residential drawings. Students will plot and print drawings using CAD equipment. Emphasis is placed on following industry and office standards. (30/90/0/0)

ARCH 1250 Computer Assisted Drafting I Lab 2 credits

The development of basic skills in CAD using the microcomputer and AutoCAD. Students will plot and print drawings using CAD equipment and develop written documents with the word processor. Emphasis is placed on following industry and office standards. Corequisite: ARCH1240 (0/90/0/0)

ARCH 1260 Architectural Concepts 5 credits

A study into the application of CAD in the creation of architectural drawings for residential and light commercial structures. Students will be introduced to the accepted structural methods used and the transformation of this knowledge into working drawings. Prerequisite: ARCH 1240 AND ARCH 1250 (30/135/0/0)

ARCH 1270 Computer Assisted Drafting I 4 credits

Basic skills in Computer-Assisted Drafting (CAD) by assigned problems and projects using keyboard and mouse entry, drawing and lettering with CAD, and printing finished work. Students work in model and paper space. Projects consist of various mechanical drawings. Students will plot and print drawings using CAD equipment. Emphasis is placed on following industry and office standards. (30/90/0/0)

ARCH 1280 Introduction to SolidWorks 4 credits

This course offers an introduction to 3D, parametric, solid modeling concepts and practices through the use of SolidWorks. Students will develop an understanding and apply industry standards for the use of SolidWorks as a tool to design, model, and create documentation for parts and assemblies. Students will also utilize tools in Sheet Metal Fabrication, Weldments, and Simulation. At the end of the course, students will take the Certified SolidWorks Associate exam and upon successful completion of the exam, earn the CSWA certification. Prerequisite: ARCH 1270 (30/90/0/0)

ARCH 1285 Geometric Dimensioning and Tolerancing 2 credits

This course offers an introduction to Geometric Dimensioning and Tolerancing. Students will develop an understanding of GD&T per the ASME Y14.5, standard. The course will cover the basics of why and how to apply Geometric Tolerances for manufacturing quality parts. Prerequisite: ARCH 1160 (30/0/0/0)

ARCH 1295 Engineering Materials and Processes 2 credits

This course applies the design process to solve hypothetical design problems using concurrent engineering models and product lifecycle management combined with the study of manufacturing processes and industrial materials. Students will develop critical thinking abilities to solve design and process problems typical in industry. Prerequisite: ENGR 1010 AND ARCH 1160 (30/0/0/0)

ARCH 1300 Cooperative Internship I 3 credits

Work study program for in-depth experience on the job. Cooperative internships are planned and supervised by the college and employers so that each contributes to the student's education and employability. Completion of the first year of coursework in the AAS Drafting degree program, a 2.0 minimum GPA, and Instructor/Program Advisor approval is required. (0/0/180)

ARCH 1400 Industrial Plant Layout and Manufacturing Process Flow 4 credits

A study of commercial and industrial layout and design, including the development of efficient flow of product and people through the facility, facility orientation, traffic patterns, employee parking, emergency access and other site related issues. This course will also review how building codes, environmental regulations, ADA, and other government regulations can affect the facility site plan layout. (30/90/0/0)

ARCH 2010 Structural CAD Drafting I 6 credits

This theory and lab course covers the introduction of detailing structural systems utilizing steel, concrete, and timber. The main emphasis is on how and why of engineering bidding documents and shop drawings for steel, concrete, and timber structural systems. The student technician will sketch and develop construction (shop) drawings from the text book. The student will produce all shop drawings using recent AutoCAD software. Drafting emphasis is placed on presentation, industry standards, labeling and plotting. Prerequisite: ARCH 1230 (45/135/0/0)

ARCH 2020 Computer Assisted Drafting III 4 credits

A continuation of CAD Drafting II with theory and lab designed to develop a proper understanding of how the program functions and knowing the program limitations. The class will help in developing skills and procedures to draw a three dimensional solid models. Prerequisite: ARCH 1230 (30/90/0/0)

ARCH 2100 Surveying and Site Planning 3 credits

A theory and lab course devoted to the study of plane surveying and the application to civil drafting and architectural site planning. The use of field surveying equipment and office aspects of plane surveying help to develop the skills needed to gather, record and use information from the site. Prerequisite: MATH 1020 (30/45/0/0)

ARCH 2110 Architectural CAD I 4 credits

A course that will provide a study into the basic design theories applied in the creation of residential structures both single and multi-unit and light commercial structures. Application of theory will be through projects designed to acquaint the student with the accepted structural methods used and the transformation of this knowledge into working drawings using dimension lumber, steel joists with decking and other material. Emphasis will be in 2-D working drawings using AutoCAD. Prerequisite: ARCH 1130 AND ARCH 1230 (30/90/0/0)

ARCH 2130 Mechanical Drafting I 4 credits

In this course, students will use parametric 3D modeling software to design and plan drawings for a variety of parts including: machined parts, plastic injection molded parts, castings, and turned parts. A focus will be applied on using appropriate geometry based on the manufacturing process, calculating appropriate hole sizes, applying GD&T, and applying industry standards to drawings. Students will virtually test part geometry using simulation and build prototype parts to validate their designs. Prerequisite: ARCH 1280 AND ARCH 1285 AND ARCH 1295 (30/90/0/0)

ARCH 2150 Civil Drafting 2 credits

A lecture and lab course devoted to the study of map drafting designed to present fundamental graphical concepts and related material as they apply to the field of civil technology. Course includes a lab segment devoted to the application of

civil drafting and designed to practice fundamental graphical concepts and related material as they apply to site planning. The activity problems will be completed on the computer using a recent AutoCAD Version for Windows and Word for Windows. Prerequisite: MATH 1020 (15/45/0/0)

ARCH 2180 Process Piping CAD-P and ID 4 credits

This course is a detailed study of process piping and the various utility piping systems used in commercial and industrial facilities. Topics include piping types, piping materials and connections used on different types of piping systems. The class reviews applicable codes related to the design and fabrication of piping systems. Also covered are the drafting standards that apply to the creation of schematic and detailed piping drawings needed for fabrication and installation. Prerequisite: ARCH 2300 (30/90/0/0)

ARCH 2200 Structural CAD Drafting II 6 credits

This course is a lecture and lab class that covers the detailing of structural systems utilizing steel and concrete. The main emphasis is on the how and why of engineering bidding documents and shop drawings for steel and concrete structural systems. The student technician will sketch and develop construction, shop, drawings from construction documents. The student will produce all shop drawings using recent AutoCAD software. Drafting emphasis is placed on presentation, industry standards, labeling and plotting. Prerequisite: ARCH 2010 (45/135/0/0)

ARCH 2210 Architectural CAD II 6 credits

This is a continuation course which uses the knowledge gained in previous classes. The student will work individually and in teams to create both 2-D and 3-D drawings using AutoCAD and Revit. Students will create both working and presentation drawings. Prerequisite: ARCH 2110 AND ARCH 1160 AND ARCH 1230 (45/135/0/0)

ARCH 2220 Computer Assisted Drafting IV 4 credits

This course incorporates theory and lab designed to develop a proper understanding of how the program functions and knowing the program limitations. The class will help in developing skills and procedures to draw a three dimensional Structural Steel models using Structural Steel CAD Software. Prerequisite: ARCH 1230 (30/90/0/0)

ARCH 2230 Mechanical Drafting II 6 credits

In this course, students will utilize all the concepts from Mechanical Drafting I and create 3D models and drawings for assemblies including: weldments, jig and fixture, consumer products, machinery, and medical devices. Students will be responsible for managing data, validating their work, and applying industry standards to their designs and drawings. Students will plan the manufacturing processes used, estimate the costs associated, and build prototypes of their projects. Prerequisite: ARCH 2130 (45/135/0/0)

ARCH 2240 Power Distribution and Electrical CAD Drafting 3 credits

This course is a detailed study of electrical power distribution, motor control centers, lighting, electrical panel room layout, and electrical safety regulations. Students will be introduced to the electrical power systems common to most commercial and industrial facilities. Students will study and apply current drafting standards to produce electrical layout, design schematic, ladder-logic schematic and single line electrical diagrams. Electrical service drawings needed for commercial and industrial facilities will also be studied. Prerequisite: ARCH 2300 (15/90/0/0)

ARCH 2250 Construction Documents 2 credits

This course is a theory and lab study of construction contract documents regarding the content, preparation, application, and interpretation of the AIA forms. These documents are part of the administration of the construction process. The student will study interrelationships of the front ends, technical specifications, and drawings. Prerequisite: ARCH 1200 (30/0/0/0)

ARCH 2260 Introduction to Inventor 3 credits
This course offers an introduction to basic drafting concepts and practices through the use of AutoDesk Inventor. The students will develop an understanding of how industry uses this software to quickly create 3-D objects. The student will learn the process of creating basic shapes to build solid models, create assemblies of multiple objects, create animations, and do final working drawings. Permission of instructor required. (15/90/0/0)

ARCH 2300 Computer Assisted Drafting II 4 credits
A continuation of CAD Drafting I with theory and lab designed to develop a proper understanding of how the program functions and knowing the program limitations. The class will help in developing skills and procedures to draw a three dimensional model of a commercial building using Autodesk Architecture. Prerequisite: ARCH 1240 AND ARCH 1250 (30/90/0/0)

ARCH 2310 Plumbing, Water Treatment, and Wastewater 4 credits
This course is a detailed study of plumbing, water treatment and water supply systems, wastewater piping and wastewater treatment systems common in commercial and industrial facilities. Students will be introduced to water supply systems ranging from private water treatment systems to municipal systems and regulations regarding water supply and wastewater plumbing systems as detailed in the applicable codes will be reviewed. Drafting standards to produce water and wastewater piping drawings will be examined. Prerequisite: ARCH 2300 (30/90/0/0)

Early Childhood (ECED)

ECED 1050 Expressive Arts 3 credits
This course focuses on the development and application of materials, activities, and experiences that encourage the young child's (birth-8 years olds') creativity and aesthetic appreciation through visual arts, music, body movement, creative/open-ended thinking, dramatic arts, and play. (45/0/0/0)

ECED 1060 Observation, Assessment, and Guidance 3 credits
This course introduces a variety of observation, assessment, and guidance strategies used in early childhood education settings birth through age eight. (45/0/0/0)

ECED 1110 Infant/Toddler Development 3 credits
This course focuses on typical-atypical development of children in the prenatal period of development through 36 months. Planning curriculum in the domains of physical growth and motor skills, cognition and language, and social-emotional development are examined across diverse settings. (45/0/0/0)

ECED 1120 Preschool Child Development 2 credits
This course focuses on typical-atypical development of the child ages 3 through 5 years, in the domains of physical growth and motor skills, cognition and language, and social-emotional development across diverse settings. (30/0/0/0)

ECED 1150 Introduction to Early Childhood Education 3 credits
This course provides an overview of the history, trends and philosophies of early childhood education. Diversity, inclusion, licensing standards, current legislation, professionalism, and advocacy are examined. (45/0/0/0)

ECED 1160 Early Language and Literacy 3 credits
This course focuses on the development of literacy and language skills from birth to age eight including typical/atypical and dual/multiple language learners. (45/0/0/0)

ECED 1220 Pre-Practicum 1 credit
This course is designed to provide an orientation to practicum experiences in the early childhood education program. Students will review the process for setting up a practicum, forms used during practicum, understand child care licensing requirements for their state, and have their names cleared through appropriate background checks. Students will understand practicum expectations and responsibilities, methods of evaluation, and the importance of professionalism in the work place (15/0/0/0)

ECED 1230 School Age Child Development and Programming 2 credits
This course focuses on typical-atypical development of the children ages 5 through 8 years. The course will examine program design in out of school care that addresses the domains of physical growth and motor skills, cognition, and language, and social/emotional development. (30/0/0/0)

ECED 1260 Health, Safety, and Nutrition 3 credits
This course addresses the interrelatedness of health, safety, and nutrition in the life of a young child, birth through age eight. Practices that assess and promotes good health are introduced. Effective control of communicable diseases and acute illnesses found in the early childhood years and early education settings is addressed. Safety management and the handling of child abuse and neglect are examined. Students learn appropriate nutritional guidelines and practices for planning meals and snacks in the classroom. (45/0/0/0)

ECED 1610 Infant Practicum 1 credit
This course is designed to provide an understanding of the developmental stages of children from birth through 18 months-of-age by participating in hands-on learning experiences in diverse early childhood care and education settings. Students will develop an awareness of appropriate adult/child interaction while developing positive employee skills. Basic skills in planning and implementing a daily routine and curriculum activities for infants are presented. Students are required to complete a minimum of 45 clock hours of practical work experience. A passing grade of "C" or better is required for ECED majors. Prerequisite: ECED 1220 WITH MIN. GRADE OF C AND ECED 1110 WITH MIN. GRADE OF C (0/0/45/0)

ECED 1620 Toddler Practicum 1 credit
This course is designed to provide an understanding of the developmental stages of children 18 months through 36 months-of-age by participating in hands-on learning experiences in diverse early childhood care and educational settings. Students will develop an awareness of appropriate adult/child interaction while developing positive employee skills. Basic skills in planning and implementing a daily routine and curriculum activities for toddlers are also presented. Students are required to complete a minimum of 45 clock hours of practical work experience. A passing grade of "C" or better is required for ECED majors. Prerequisite: ECED 1220 WITH MIN. GRADE OF C AND ECED 1110 WITH MIN. GRADE OF C (0/0/45/0)

ECED 1630 Preschool Practicum 1 credit
This course is designed to provide an understanding of the developmental stages of children from three to five years of age by participating in hands-on learning experiences in diverse early childhood care and education settings. Students will develop an awareness of appropriate adult/child interaction while developing positive employee skills. Basic skills in planning and implementing a daily routine and curriculum activities for children from 3-5 years are also presented. Students are required to complete a minimum of 45 clock hours of practical work experience. A passing grade of "C" or better is required for ECED majors. Prerequisite: ECED 1120 WITH MIN. GRADE OF C AND ECED 1220 WITH MIN. GRADE OF C (0/0/45/0)

ECED 1640 School-Age Practicum 1 credit

This course is designed to provide an understanding of the developmental stages of children from five to eight years of age by participating in hands-on learning experiences in diverse early childhood care and education settings. Students will develop an awareness of appropriate adult/child interaction while developing positive employee skills. Basic skills in planning and implementing a daily routine and curriculum activities for school age children are also presented. Students are required to complete a minimum of 45 clock hours of practical work experience. A passing grade of "C" or better is required for ECED majors. Prerequisite: ECED 1220 WITH MIN. GRADE OF C AND ECED 1230 WITH MIN. GRADE OF C (0/0/45/0)

ECED 2050 Children with Exceptionalities 3 credits

This course focuses on the theory, development and philosophy of early childhood education programs serving children (from birth to age 8) with exceptionalities. Topics include working with families, legislation, role of the interventionist, interdisciplinary teams and inclusion of children with special needs in natural environments. Observation of inclusionary practices and exceptional children are required. Strongly suggest prior knowledge of child growth and development. (45/0/0/0)

ECED 2060 Early Childhood Education Curriculum Planning 3 credits

This course prepares students to plan a developmentally appropriate curriculum and environments for children ages 3-8 years of age. Topics include writing goals and objectives, lesson plans, daily schedules, working with families, and inclusionary practices. (45/0/0/0)

ECED 2070 Family and Community Relationships 3 credits

This course focuses on the development of skills, techniques and attitudes needed to form successful collaboration with diverse family systems and communities. Ten hours of volunteer service learning required. (45/0/0/0)

ECED 2500 Early Childhood Administration 2.5 credits

Analysis of procedures for managing child care operations with emphasis on types in Nebraska. This is intended as a capstone course for this major. Student must have earned a minimum of 19 credit hours of early childhood education course work. (37.5/0/0/0)

ECED 2710 Heads Up! Reading 3 credits

The research-based principles and practices for providing children birth through age five a strong foundation in early reading and writing within a developmentally appropriate approach. (45/0/0/0)

Economic (ECON)

ECON 1010 Personal and Business Finance 2 credits

Covers the basic principles needed for effective personal and business finance management, including the practical applications of budgeting, credit, insurance, taxes, along with business overhead, break-even analysis, and return on investment. (30/0/0/0)

ECON 1040 Personal Finance 2 - 3 credits

This course covers the basic principles needed for effective personal financial management including the practical applications of money management, budgeting, taxes, credit, insurance, housing, investments, and retirement planning. (45/0/0/0)

ECON 2110 Principles of Macroeconomics 3 credits

This course is a study of the "big ideas" of macroeconomics such as GDP, inflation, unemployment, labor, and international trade. A look at public-policy decision making using macro theories such as: monetary policy, fiscal policy and other economic-stabilization theories, is also presented. This course will also examine the economic challenges facing our economy. (45/0/0/0)

ECON 2120 Principles of Microeconomics 3 credits

Analysis of competitive and non-competitive markets, including the behavior of producers and consumers. Topics include price and income elasticity, income distribution, production costs, resource allocation, comparative advantage and current economic problems. Prerequisite: ECON 2110 WITH MIN. GRADE OF C (45/0/0/0)

Education (EDUC)

EDUC 1110 Introduction to Professional Education 3 credits

An overview of education in the United States viewed in terms of history, philosophy, finance and governance. Encourages critical thought regarding the role of education in our ever-changing diverse society, the role of the teacher, and educational practices in schools. The course is designed to help students explore education as a prospective career. (45/0/0/0)

EDUC 1700 Professional Practicum-Elementary School 1 - 2 credits

Designed to acquaint the student with the classroom situation and atmosphere by participation in the teaching-learning process. Includes observation and assistance in classroom-related activities under supervision of an experienced teacher. Permission of instructor required. Prerequisite: EDUC 1110 WITH MIN. GRADE OF C (5/0/75/0)

EDUC 1710 Professional Practicum-Secondary School 1 - 2 credits

Designed to acquaint the student with the classroom situation and atmosphere by participation in the teaching-learning process. Includes observation and assistance in classroom-related activities under supervision of an experienced teacher. Permission of instructor required. Prerequisite: EDUC 1110 WITH MIN. GRADE OF C (5/0/75/0)

EDUC 2070 Family and Community Relationships 3 credits

This course focuses on the development of skills, techniques and attitudes needed to form successful collaboration with diverse family systems and communities. Ten hours of volunteer service learning required. (45/0/0/0)

EDUC 2250 Children's Literature 3 credits

Provides the potential elementary teacher an introduction to literature suited to children. Addresses genres, authors and illustrators, historical development, trends, and techniques of presentation. (45/0/0/0)

EDUC 2920 Introduction to Online Instruction 1 credit

Provides instructor training on how to construct and facilitate an online course using the campus-supported learning management system, or LMS. Introduces common LMS tools used to build course content, interact with students, and assess student learning. Demonstrates how to perform basic course management tasks and implement best practices of online instruction. (15/0/0/0)

Electrical Construction and Control (ELTR)

ELTR 1010 Basic Electricity 3 credits

Fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers electrical measurement with emphasis on circuit analysis using Ohm's law, circuit testing equipment, and the use of each instrument. (45/0/0/0)

ELTR 1015 Basic Electricity and Components for Reinke Irrigation 3 credits

A study of the basic electrical principles used in Reinke Irrigation systems. (45/0/0/0)

ELTR 1018 Basic Electricity and Components for Zimmatic Irrigation 3 credits

A study of the basic electrical principles and components used to mechanically assist the movement of Lindsay Zimmatic Center pivot irrigation systems. (45/0/0/0)

ELTR 1020 Basic Electricity Lab 2 credits

Includes practical application of safe work practices in building series and parallel circuits as used in the building industry. Includes utilizing digital meters and related test equipment in a live work setting. Corequisite: ELTR1010 (0/90/0/0)

ELTR 1030 Electrical Wiring I 3 credits

Application of electrical fundamentals to actual residential and agricultural wiring. Involves installation of common electrical devices, sizing, and routing of circuits of single-phase services. Includes use of tools and techniques for various types of installations. (45/0/0/0)

ELTR 1040 Electrical Wiring I Lab 3 credits

Practical application of pulling wire, wiring switches, electrical boxes, circuit breakers in residential electrical construction according to electrical code. Corequisite: ELTR1030 (0/135/0/0)

ELTR 1050 National Electrical Code I 3 credits

Basic study of the National Electrical Code and its interpretation. (45/0/0/0)

ELTR 1070 Industrial Maintenance Code 2 credits

Basic study of proper use of the National Electrical Code for installation emphasizing industrial branch circuits, control circuits, and motor operated loads. (30/0/0/0)

ELTR 1200 National Electrical Code II 3 credits

A study of the national Electric Code and the application of these codes to electrical installations. Prerequisite: ELTR 1050 AND MATH 1020 (45/0/0/0)

ELTR 1210 Electrical Wiring II 3 credits

Application of commercial wiring as to installation of branch circuits and services for lighting, heating, and power installations. (45/0/0/0)

ELTR 1220 Electrical Wiring II Lab 2 credits

Hands on application of commercial electrical wiring methods and components. Corequisite: ELTR1210 (0/90/0/0)

ELTR 1230 Motor Control 2 credits

Practical source on various circuits commonly used to control electrical motors, including practice in troubleshooting and wiring control circuits in a laboratory situation. Prerequisite: ELTR 1010 (30/0/0/0)

ELTR 1240 Motor Control Lab 2 credits

Practical application in constructing circuits used to control motors. Includes troubleshooting and repair of motor control systems in a lab setting. Prerequisite: ELTR 1020 Corequisite: ELTR1230 (0/90/0/0)

ELTR 1250 Blueprint Reading and Cost Estimating 3 credits

Study of the use of electrical and structural blueprints and material list takeoff and cost estimating of electrical projects. Prerequisite: ELTR 1030 AND ELTR 1040 AND ELTR 1050 Corequisite: ELTR1230 AND ELTR1240 (45/0/0/0)

ELTR 1300 Cooperative Internship I 1 - 8 credits

Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and-or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Electrical Construction and Control program or permission of instructor. (0/0/0/480)

ELTR 2000 Motor Theory and Application 2 credits

A practical course on the theory, operation, and construction of electric motors and generators including field repair of AC and DC motors. Prerequisite: ELTR 1230 AND ELTR 1240 (30/0/0/0)

ELTR 2010 Motor Theory and Application Lab 1 credit

Diagnosis and repair of electrical motors and generators including field repair of AC and DC motors. Corequisite: ELTR2000 (0/45/0/0)

ELTR 2015 Electrical Licensing I 1 credit

Course designed for licensed electricians' to obtain contact hours for license renewal. The course includes review of current code topics and electrical code changes relevant to industry standards as dictated by the State electrical code. (15/0/0/0)

ELTR 2020 Automation Fundamentals 2 credits

Installation and maintenance of commercial and industrial electric systems. Completion of first-year of ELTR course work required. (30/0/0/0)

ELTR 2025 Electrical Licensing Prep 2 credits

Study of National Electric Code and electrical basics in preparation of the State Licensing exam. The course is designed to help the student pass electrical licensing exams in a state electrical licensing program. (30/0/0/0)

ELTR 2030 Automation Fundamentals Lab 2 credits

Installation and maintenance of commercial and industrial components in a simulated workplace setting. Corequisite: ELTR2020 (0/90/0/0)

ELTR 2045 Electrical Energy Conservation I 3 credits

Study of the cost of installation, maintenance, and operation of electric lighting and heating systems. Completion of first-year of ELTR course work required. (45/0/0/0)

ELTR 2055 Electrical Troubleshooting 2 credits

Problem solving of electrical circuits including motor control circuits. Completion of first-year of ELTR course work required. (30/0/0/0)

ELTR 2065 Electrical Troubleshooting Lab 2 credits

Application of safe electrical troubleshooting techniques used in motor control circuits. Corequisite: ELTR2055 (0/90/0/0)

ELTR 2210 Control Wiring 3 credits

Study of control and measurement circuits used in industry including logic controlled motor circuits. Prerequisite: ELTR 2020 (45/0/0/0)

ELTR 2215 Control Wiring and Solid State Lab 2.5 credits

Practical experience in operation, troubleshooting and maintenance of industrial control systems. Corequisite: ELTR2210 (0/112.5/0/0)

ELTR 2235 Electrical Energy Systems 3 credits

This course introduces an advanced knowledge of electrical systems. Emphasis on electrical system design, troubleshooting and repair using various diagnostic tools and procedures, power factors and power quality, alternative energy sources and systems such as solar energy systems, and energy management and conservation concepts are presented. (45/0/0/0)

ELTR 2245 Electrical Energy Systems Lab 2 credits

Application of the concepts and principles of advanced electrical energy systems. Student will experimentally test and evaluate electrical system design, troubleshoot and repair techniques using various diagnostic tools and procedures, determine power factors and power quality, become familiar with alternative energy sources and systems such as solar energy systems, and employ energy management and conservation concepts. Corequisite: ELTR2235 (0/90/0/0)

ELTR 2260 Solid State Fundamentals 2 credits
Basic study of the use of solid state electronic devices in the control and measurement of electricity. (30/0/0/0)

Electromechanical Technology (ELMC)

ELMC 1010 Fundamentals of Electricity 3 credits
This course covers the fundamentals of electrical theory, including electrical components and their effects on AC and DC circuits. The students will study electrical measurements with emphasis on circuit analysis using Ohm's law, circuit testing equipment, and the use of other instruments. (45/0/0/0)

ELMC 1020 Fundamentals of Electricity Lab 2 credits
Practical application of safely testing components and circuitry, proper use of electrical test equipment, and diagnosing circuitry using circuit diagrams. Corequisite: ELMC1010 (0/90/0/0)

ELMC 1030 Orientation and Safety 2 credits
This course covers the basic lockout-tagout, electrical hazards such as arc flash and arc blast and an individual's role in safety programs. (30/0/0/0)

ELMC 1035 OSHA 30-Hour Safety 2 credits
The OSHA 30-Hour General Industry course provides compliance safety training to prepare all employees for the hazards found in manufacturing, service, and distribution companies. You will gain in-depth knowledge of the following course topics: OSHA regulations, OSH Act and general duty clause, walking and working surfaces, means of egress and fire protection, flammable and combustible liquids, personal protective equipment, permit-required confined spaces, machine guarding, hazard communication, safety and health programs, hearing conservation, industrial hygiene, hand and portable power tools, toxic and hazardous substances, lockout/tagout, and electrical safety. To meet Department of Labor standards, students must attend all class periods to receive a 30-hour certification card. (30/0/0/0)

ELMC 1045 PLC Basics 2 credits
The development of basic PLC skills utilizing common PLCs and application software. Prerequisite: ELMC 1120 (30/0/0/0)

ELMC 1070 Automation Fundamentals 3 credits
The coverage of fundamental personal computer system, terminology, operation, and the introduction of computer software applications. Software applications cover the basics of word processing, spreadsheet, and computer-aided drawing. (45/0/0/0)

ELMC 1090 Mechanical Matter and Energy 3 credits
This course will provide the student with a comprehensive presentation of the basic concepts and principles of general algebra based physics. The student will achieve a generalized understanding of the concepts and principles that form the basis of manufacturing. The student will also develop skills in formulating and applying physical principles based on data and use scientific reasoning to solve real-world problems. (45/0/0/0)

ELMC 1110 Motor Control 2 credits
The study of various circuits and controls commonly used to control electrical motors and the techniques used to troubleshoot these circuits and controls. Prerequisite: ELMC 1010 (30/0/0/0)

ELMC 1120 Motor Control Lab 2 credits
Construct and troubleshoot various motor control circuits utilizing different switch and relay components. Prerequisite: ELMC 1010 AND ELMC 1020 Corequisite: ELMC1110 (0/90/0/0)

ELMC 1150 Introduction to Mechanics 3 credits
This course is an introduction to the form and function of mechanical systems. The emphasis for this course will be on power transmission, lubrication, safety procedures, maintenance, and repair of mechanical equipment and systems. Prerequisite: ELMC 1050 OR INDT 1150 (45/0/0/0)

ELMC 1160 Introduction to Mechanics Lab 3 credits
Practical application of power transmission devices, lubrication practices, safety, maintenance, and repair of mechanical equipment. Prerequisite: ELMC 1060 OR INDT 1160 Corequisite: ELMC1150 (0/135/0/0)

ELMC 1170 Total Quality Management 2 credits
This course examines concepts, tools, and techniques used in the management and measurement of quality, productivity, and competitiveness in an industrial environment. Topics include total quality control and management, employee involvement in quality, team building for quality, quality circles, relation between quality, productivity and competitiveness, and statistical process control. The course also emphasizes the development of decision-making skills through consultation with local organizations and industry personnel. (30/0/0/0)

ELMC 1300 Cooperative Internship I 1 - 8 credits
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and/or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Electromechanical Technology program or permission of instructor. (0/0/0/480)

ELMC 2010 Introduction to Automated Controls 2 credits
The student shall study various machine control systems that utilize a programmable logic controller as the system controller. The student will write numerous ladder programs to be used with these PLC's. Prerequisite: ELMC 1110 AND ELMC 1120 (30/0/0/0)

ELMC 2020 Introduction to Automated Controls Lab 2 credits
The student shall construct and program various industrial control systems utilizing various programmable logic controllers. Prerequisite: ELMC 1110 AND ELMC 1120 Corequisite: ELMC2010 (0/90/0/0)

ELMC 2030 Motor Repair 2 credits
A practical course on the theory, operation, and construction of electric motors and generators including repair of AC and DC motors. (30/0/0/0)

ELMC 2040 Motor Repair Lab 1 credit
Practical application of safety practices used in motor repair. Experience in motor repair and trouble-shooting procedures on AC and DC motors using proper tools and testing equipment. Corequisite: ELMC2030 (0/45/0/0)

ELMC 2052 Fluid Fundamentals 3 credits
The study of fluid characteristics, the operation of valves, pumps, and cylinders, and the basic steps in hydraulic troubleshooting. Prerequisite: ELMC 1090 (45/0/0/0)

ELMC 2062 Fluid Fundamentals Lab 1 credit
Practical application in the safe use of high pressure hydraulic fluids. Students will also work as a team to draw and construct a simple hydraulic circuit, analyze a hydraulic system and demonstrate the use of flow control components. Corequisite: ELMC2052 (0/45/0/0)

ELMC 2070 Machine Repair 2 credits
This course will focus on machines used as part of industrial manufacturing processes and in materials handling. It will provide the student an overview of machine operation and maintenance. The student will study continuous, intermittent, and custom systems. Prerequisite: ELMC 1110 AND ELMC 1150 (30/0/0/0)

ELMC 2080 Machine Repair Lab 2.5 credits
This course will focus on building and automating simple machines. The students will automate machines using control relays and then replace control relays with PLCs and sensors to increase machine efficiency. Students will demonstrate trouble-shooting techniques for fault isolation. Prerequisite: ELMC 1120 AND ELMC 1160 Corequisite: ELMC2070 (0/112.5/0/0)

ELMC 2110 Control Systems 3 credits
The student will study various industrial control systems that utilize advanced electrical components and devices such as sensors, relays, switches and controllers. Prerequisite: ELMC 2010 AND ELMC 2020 (45/0/0/0)

ELMC 2120 Control Systems Lab 2.5 credits
Demonstrate safe working habits when installing system controllers and remote sensing devices in control systems, as well as program and trouble-shooting PLC systems design. Prerequisite: ELMC 2010 AND ELMC 2020 Corequisite: ELMC2110 (0/112.5/0/0)

ELMC 2150 Solid State Fundamentals 4 credits
The basic study of the use of solid state devices in the control and measurement of electricity. Prerequisite: ELMC 1010 (60/0/0/0)

ELMC 2170 Electromechanical Systems 1 credit
The study of manufacturing systems and how each system interacts with various connecting systems. Prerequisite: ELMC 2010 (15/0/0/0)

ELMC 2180 Industrial Ethernet Basics 2.5 credits
This course is an introduction to Ethernet communications, including documentation and system layout. (37.5/0/0/0)

ELMC 2185 PLC Intermediate 2 credits
The development of intermediate programmable logic controller (PLC) skills utilizing common PLCs and application software. Prerequisite: ELMC 1045 (30/0/0/0)

ELMC 2190 Electromechanical Systems Lab 2 credits
Student will identify which computer protocol to use in setting up network communications, follow trouble-shooting procedures using a computer, and demonstrate set-up of a variable frequency drive for network communications and motor controls in a safe work environment. Prerequisite: ELMC 2020 AND ELMC 2080 Corequisite: ELMC2170 (0/90/0/0)

English (ENGL)

ENGL 0900 Reading and Writing Skills 3 credits
This course prepares students for success in college by providing opportunities to review and practice a variety of reading, writing, and critical thinking skills. Students will work with an instructor to develop an individualized education plan. The self-paced instruction of this course will also accommodate a variety of learning styles. Prerequisite: APPROPRIATE PLACEMENT SCORE (45/0/0/0)

ENGL 0905 Reading and Writing Skills for Workplace Communication 2 credits
This course prepares students for success in college by providing opportunities to review and practice a variety of reading, writing, and critical thinking skills. Students will work with an instructor to develop an individualized plan of study which will also accommodate a variety of learning styles.

Instruction will include texts and materials that are relevant to the students' areas of studies. Prerequisite: APPROPRIATE PLACEMENT SCORE (30/0/0/0)

ENGL 0955 Individualized English for Workplace Communication 1 credit
This course provides academic support to a student who is enrolled in a Workplace Communication course. (15/0/0/0)

ENGL 0960 Transitional English Skills-Spelling and Vocabulary 1 - 2 credits
This course provides basic spelling and vocabulary skills. It includes acquisition of dictionary and thesaurus skills; context, examples, and general sense of the sentence clues, word elements and word families; and spelling rules. (30/0/0/0)

ENGL 0980 Individualized English 1 - 2 credits
This course provides academic support to a student who is enrolled in any writing intensive course. (30/0/0/0)

ENGL 0990 Introduction to College Writing 3 credits
Introduces academic writing with an emphasis on integrated reading and writing skills. The course examines common grammar topics found in composition and encompasses the parts paragraph and essay composition, including using critical thinking skills, previewing and annotating texts, crafting main ideas with support, identifying and using text patterns, using organization, drafting, and summarizing skills, and writing with specific tone for different types of audiences. This course is designed for students who may not be ready for ENGL 1010. Prerequisite: APPROPRIATE PLACEMENT SCORE OR ENGL 0900 (45/0/0/0)

ENGL 1005 Spelling And Vocabulary 1 - 2 credits
This course provides spelling and vocabulary skills. It includes dictionary and thesaurus skills; context, examples and general sense of the sentence clues; word elements, word families, and spelling rules. (30/0/0/0)

ENGL 1010 English Composition I 3 credits
English Composition I offers instructional practice in the techniques of effective writing. The process of planning, writing, revising, and editing essays for particular audiences and purposes and research-related skills are also emphasized. Prerequisite: Appropriate placement score or ENGL 0990 or ENGL 1050 or ENGL 1000 or BSAD 2050 or ESLX 0885 WITH A MIN GRADE OF C (45/0/0/0)

ENGL 1020 English Composition II 3 credits
Students will read and analyze various texts and respond with research-based argumentative essays that demonstrate information literacy, critical-reading, and source integration. A significant argument-based research project is required. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 1050 Workplace Communication 3 credits
Develop and implement oral and written workplace communication skills. Students will organize and present effective presentations and interviews, send appropriate nonverbal messages, formulate effective business reports, letters, memos, electronic correspondence, plan and execute effective business meetings, and create employment documents. Prerequisite: Appropriate placement score or ENGL 0900 or ENGL 0905 or ESLX 0885 WITH A MIN GRADE OF C (45/0/0/0)

ENGL 2030 Creating Poetry I 3 credits
Study of the fundamentals involved in the process of creating and developing poetry, both formal and free verse. Includes feedback in a workshop environment. Reading, writing and performance assignments. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2040 Creating Poetry II 3 credits

Continuing study of the process of creating and developing poetry, both formal and free verse. Feedback in a workshop environment. Reading, writing and performance assignments. Prerequisite: ENGL 2030 OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2050 Creating Stories I 3 credits

Study of the fundamentals involved in the process of creating and developing stories as either fiction or creative non-fiction. Feedback in a workshop environment. Reading, writing and performance assignments. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2060 Creating Stories II 3 credits

Continuing study of the process of creating and developing stories as either fiction or creative non-fiction. Feedback in a workshop environment. Reading, writing and performance assignments. Prerequisite: ENGL 2050 OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2070 Technical Communications I 3 credits

Introduces both written and oral technical communications as applied in science and technology including technical library research Prerequisite: Appropriate placement score or ENGL 0990 or ENGL 1050 or ENGL 1000 or BSAD 2050 or ESLX 0885 WITH A MIN GRADE OF C (45/0/0/0)

ENGL 2080 Technical Communications II 3 credits

Comprehensive approach to written, oral, visual, and electronic technical communications applicable to scientific and technological fields. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2090 Editing and Publishing 1 credit

Students will focus on the selection, design an execution of a literary publication. Publishing ethics are also addressed. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C (0/30/0/0)

ENGL 2100 Introduction to Literature 3 credits

This course offers a critical analysis of culturally diverse works of poetry, drama, and fiction. Students employ various techniques for discussing, evaluating, and writing about literature. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2140 Introduction to Shakespeare 3 credits

Focus is on an examination of the plays by William Shakespeare and the history that influenced the major themes of his canon. Students will study several of his plays from the three major divisions of his work as a playwright: the tragedies, history plays, and the comedies. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2150 American Literature to 1865 3 credits

Critical reading and evaluation of writers of prose and poetry from the colonial period to 1865. Emphasizes such writers as Edwards, Hawthorne, Melville, Longfellow, Emerson, Thoreau, and Native American writing. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2160 American Literature after 1865 3 credits

Covers American writers from 1865 to the present, such as Whitman, Twain, Frost, Hemingway, Faulkner, and Eliot. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2170 Comic and Graphic Novels 3 credits

This course offers a critical analysis of culturally diverse works of poetry, drama, and fiction. Students imply various techniques for discussing, evaluating, and writing about literature. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2190 Comparative Mythology 3 credits

Introduces students to mythological and folkloric materials from a variety of cultural traditions, including, but not limited to, Greek, Roman, Norse, Native American, Aboriginal, Chinese, Japanese, East Indian, and Arthurian and Celtic. Themes within the course structure will encompass Creation myths, gods and goddesses, the Fall of Humankind, the Heroic ideal, the Afterlife, and rites of passage. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2200 British Literature to 1800 3 credits

Study and comprehensive reading in English literature from 700-1800 following its development from Beowulf to the Romantic period with emphasis on poetry and essay forms. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2210 British Literature after 1800 3 credits

Study and comprehensive reading in English literature from the Romantic movement to the present day, including poetry and the essay with works by representative novelists. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

ENGL 2730 The Novel and the Movie 3 credits

Readings in fiction and viewing of films based on or elaborating on that fiction with class discussions on the relationships between the fiction and the film. Written response to reading and viewing is expected. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

English as a Second Language (ESLX)

ESLX 0805 Beginning ESL 8 credits

Focus is on fundamental grammar structure using conversation, reading, and writing skills. Prerequisite: APPROPRIATE PLACEMENT SCORE (120/0/0/0)

ESLX 0815 ESL Pronunciation 4 credits

Provides students the opportunity to learn to distinguish spoken English sounds and to produce those sounds verbally to improve listening and speaking skills. Prerequisite: APPROPRIATE PLACEMENT SCORE (60/0/0/0)

ESLX 0825 Literacy Fundamentals for the ESL Learner 2 credits

Provides an introduction to computer basics in conjunction with reading skill development for the English language learner. Prerequisite: APPROPRIATE PLACEMENT SCORE (0/60/0/0)

ESLX 0835 Intermediate ESL 6 credits

Students will build on their foundation of grammar structure, sentence patterns and vocabulary development in speaking, reading, and writing. Prerequisite: APPROPRIATE PLACEMENT SCORE (90/0/0/0)

ESLX 0850 ESL Conversation I 3 credits

Focuses on developing intermediate communication skills through listening, vocabulary development, role playing, oral presentations, and class discussions. Prerequisite: APPROPRIATE PLACEMENT SCORE (45/0/0/0)

ESLX 0855 Advanced ESL 6 credits

Study will focus on developing functional communication, grammatical accuracy in speech and writing, and vocabulary development. Prerequisite: APPROPRIATE PLACEMENT SCORE (90/0/0/0)

ESLX 0870 ESL Conversation II 3 credits

Focuses on developing advanced communication skills through vocabulary development, class discussions, and public speaking. Prerequisite: ESLX 0850 WITH MIN. GRADE OF C (45/0/0/0)

ESLX 0875 ESL Writing I 3 credits
Course emphasizes the fundamentals of English language writing, including composing sentences and paragraphs; identifying parts of speech; recognizing active and passive voice; building vocabulary and spelling skills; using general punctuation. Students will develop effective personal writing processes appropriate for paragraph writing to include prewriting, writing, proofing, and revising strategies. (45/0/0/0)

ESLX 0885 ESL Writing II 3 credits
Course builds English language writing skills, including paragraph and short essay development; building vocabulary and spelling skills; making a claim and supporting it with evidence; evaluating source material; and using general punctuation correctly. Students will develop effective personal writing processes appropriate for essay writing to include prewriting, writing, proofing, and revising strategies. Placement based on writing sample. Prerequisite: ESLX 0875 WITH MIN. GRADE OF C (45/0/0/0)

Entrepreneurship (ENTR)

ENTR 1050 Introduction to Entrepreneurship 3 credits
The student will evaluate the business skills and commitment necessary to successfully operate an entrepreneurial venture and review the challenges and rewards of entrepreneurship. The student will understand the role of entrepreneurial businesses in the United States and the impact on our national and global economy. (45/0/0/0)

ENTR 2040 Entrepreneurship Feasibility Study 3 credits
Students will assess the viability of a new venture business idea to determine if the concept is feasible for business start up and long term growth based on strengths and skills, personal, professional and financial goals. The student will identify and analyze through basic research the present climate for their business idea by completing an industry, target market and competitive analysis. The student will assess the financial needs for startup as well as their own skills, strengths and talents to launch a successful business idea. (45/0/0/0)

ENTR 2090 Entrepreneurship Business Plan 3 credits
The student will evaluate a business concept and write a sound business plan. Students will assess the strengths and weaknesses of a business concept; collect, analyze and organize market research data into a marketing plan; and prepare the financial projections for their business concept. Students will be able to identify and evaluate various resources available for funding small businesses. (45/0/0/0)

Food Service Dietary Training (FSDT)

FSDT 1210 Supervision of Food Service Professionals 3 credits
Includes techniques in supervision, and human relations and communication in food service management. (45/0/0/0)

FSDT 1221 Introduction to Food Service Nutrition 1 credit
Includes principles of basic nutrition and healthy menu planning to meet nutrient needs for individuals through each stage of the life cycle and those with special health care needs. (15/0/0/0)

FSDT 1222 Culinary Nutrition Applications 2 credits
Includes principles of nutrition in food preparation and menu planning for the future chef. Prerequisite: FSDT 1221 (MAY BE TAKEN CONCURRENTLY) (30/0/0/0)

FSDT 1223 Food Service for Medical Nutrition Therapy 1.5 credits
Includes principles of nutrition screening, assessment, care planning, nutrition education, regulations, and therapeutic menu planning for the Dietary Manager. Prerequisite: FSDT 1221 (MAY BE TAKEN CONCURRENTLY) (22.5/0/0/0)

FSDT 1224 Culinary Nutrition Applications Lab 0.5 credits
This class affords students the opportunity to apply health-centered cooking techniques in preparing meals for the healthy population and for individuals with common dietary restrictions. Prerequisite: FSDT 1221 (MAY BE TAKEN CONCURRENTLY) Corequisite: FSDT1222 (0/22.5/0/0)

FSDT 1225 Field Experience-Nutrition and Diet Therapy 1.5 credits
Clinical application experience for FSDT 1221. Includes basic nutrition, principles of diet therapy and nutritional assessment, and menu planning for the Dietary Manager. Program director approval required. Prerequisite: FSDT 1221 (MAY BE TAKEN CONCURRENTLY) AND FSDT 1223 (MAY BE TAKEN CONCURRENTLY) (0/0/67.5/0)

FSDT 1231 Sanitation and Food Safety 2 credits
Includes sanitation and safety principles to provide an understanding of food borne diseases, preventive maintenance and environmental controls in food service. To gain an understanding of the role the dietary manager has in food safety. (30/0/0/0)

FSDT 1250 Managing Food Service Operations 2.5 credits
Includes purchasing, equipment selection, costing and records. (37.5/0/0/0)

FSDT 1255 Field Experience-Management of Food Service Operations, Sanitation and Food Safety 1.5 credits
Application field experience for FSDT 1230 and FSDT 1250. Includes sanitation and food safety practices; quantity food purchasing, equipment selection, costing and records. Program director approval required. Prerequisite: FSDT 1230 (MAY BE TAKEN CONCURRENTLY) OR FSDT 1231 (MAY BE TAKEN CONCURRENTLY) AND FSDT 1250 (MAY BE TAKEN CONCURRENTLY) (0/0/67.5/0)

FSDT 1260 Field Experience-Supervision for Food Service Professionals 1 credit
Application field experience for FSDT 1210. Includes techniques in supervision, and human relations and communication in food service management. Program director approval required. Prerequisite: FSDT 1210 (MAY BE TAKEN CONCURRENTLY) (0/0/45/0)

FSDT 1280 Culinary Math 1.5 credits
This course covers the basics of culinary math. Topics will include cost and profit formulas, recipe conversion, baking formulas, as well as basic math principles. (22.5/0/0/0)

French (FREN)

FREN 1200 Elementary French I 4 credits
Introduction to the grammatical and conversational study of French. (60/0/0/0)

FREN 1210 Elementary French II 4 credits
Continuation of FREN1200 with more intense concentration on verbs and conversation. Prerequisite: FREN 1200 (60/0/0/0)

Geography (GEOG)

GEOG 1020 World Regional Geography 3 credits
This course expands students' knowledge of the world through a study of the major global regions. It focuses on understanding regional patterns around the world, geographic processes contributing to the character and diversity of regions, and contemporary regional and global issues. (45/0/0/0)

Global Studies (GLBS)

GLBS 2900 Global Studies Capstone 3 credits

Cumulative course that is intended to draw on previous coursework taken in the completion of a Global Studies program of study. Primary focus of the course will be on research and completion of a final project of significance that will be presented in a public format. Prerequisite: POLS 1600 AND BSAD 2250 OR AGRI 1290 (45/0/0/0)

Graphic Design (GCAD)

GCAD 1100 Typography 3 credits

This course is an introduction and study of the history, vocabulary, and principles of typography. Basic type identification, styles, and measurement will be discussed and practiced. The primary purpose of type as a means of communication combining readability and legibility will be reinforced. Design elements and principles will be presented in relation to designing with type. (45/0/0/0)

GCAD 1250 Drawing Logic I 3 credits

Fundamental principles of drawings and perspective based on observation and imagination. (30/30/0/0)

GCAD 1300 Design I 3 credits

Two-dimensional study of structural use of line, form, and color, including color theory. (30/30/0/0)

GCAD 1310 Cooperative Internship I 1 - 3 credits

A work study experience for students planned and supervised by the College in cooperation with employers. This cooperative experience will expand students' occupational knowledge and enhance students' employability. 2.0 GPA and permission of instructor required. (15/0/0/0)

GCAD 1450 Graphic Arts I 3 credits

A concentrated study of the design process using commercial computer applications to create graphic design images. The student will develop design principles and applications that provide a foundation for advanced graphic design course work. (30/30/0/0)

GCAD 1500 Layout and Design I 3 credits

An introductory level course using industry standard page layout software, with an emphasis toward developing expressive designs that communicate. Prerequisite: ARTS 1300 (MAY BE TAKEN CONCURRENTLY) OR GCAD 1300 (MAY BE TAKEN CONCURRENTLY) AND ARTS 1700 (MAY BE TAKEN CONCURRENTLY) OR GCAD 1700 (37.5/22.5/0/0)

GCAD 1600 Design II 3 credits

A continued investigation of spatial organization based on the principles of design. Exploration of art history will accent assignments. Individual interpretations of style and intent will develop. Prerequisite: ARTS 1300 OR GCAD 1300 (30/30/0/0)

GCAD 1700 Digital Photography 3 credits

This course is designed to introduce the student to digital photography as it relates to the graphic design industry. The student will use imaging hardware (cameras, scanners, computers), and photo manipulation software; alter, combine, create and recreate custom images to graphic design industry specifications. Class projects require specific knowledge and skill-set techniques. Group class critiques will be held to develop the student's professional level photography skills, visual aesthetic, and industry vocabulary. (30/30/0/0)

GCAD 2100 Digital Prepress 3 credits

This course is designed to familiarize students will multi-color reproduction theory and technique. Students completing the class will have a broad overview of multi-color printing processes so that they may effectively supervise or estimate printing operations, communicate technically with vendors or buyers, and design graphic products giving full consideration to the limitations inherent in multi-color printing processes. (37.5/22.5/0/0)

GCAD 2200 Typography II 3 credits

The course is a combination of hand-skill and digital / synthetic media projects taking students from where the basics (Typography 1 / GCAD 1100) left off; to more advanced studies in typographic solutions. Typographic lettering techniques from pen calligraphy and brush (hand/sign) lettering through digital typesetting will be explored. Students will create solutions for both traditional page, and digital media output/layout. Prerequisite: GCAD 1100 (45/0/0/0)

GCAD 2300 Package Design 3 credits

This course focuses on the development of three-dimensional designs, including the application of two-dimensional graphics as utilized in the corporate environment. The course stresses the use of visual and design concepts into corporate identity packaging. Prerequisite: GCAD 1500 AND GCAD 2500 (37.5/22.5/0/0)

GCAD 2450 Graphic Arts II 3 credits

Advanced application of graphic design principles and processes, as expressed through the development of advanced projects in advertising and product design, which incorporate the use of industry-standard software. Prerequisite: ARTS 1450 OR GCAD 1450 (30/30/0/0)

GCAD 2500 Layout and Design II 3 credits

Designed to develop proficiency in page layout and design by utilizing the latest desktop publishing software, including related work processing and graphic tools. The course emphasizes the successful completion of a publication by the student. Layout and Design II is intended to be a continuation of the work begun in Layout and Design I and concerns primarily the interaction of text forms and images into cohesive, clean designs. Prerequisite: GCAD 1500 (37.5/22.5/0/0)

GCAD 2610 Graphic Design Capstone 1 credit

This course is the culmination of The student's design career here at Northeast Community College. There are two goals to be met in this class. The first is the gathering, choosing, refining and preparation of the students best design work compiled into a professional level portfolio presentation format. The second goal of the class is to prepare the students for presenting that portfolio in search of employment. Prerequisite: GCAD 1500 AND GCAD 2500 (7.5/22.5/0/0)

Health Education (HLTH)

HLTH 1060 Comprehensive Medical Terminology 3 credits

This course establishes a solid foundation of prefixes, suffixes, word roots, abbreviations, medical terms and symbols. It emphasizes understanding the medical vocabulary as it applies to the anatomy, physiology, pathology, diagnostic, and therapeutic procedures of the human body. (45/0/0/0)

HLTH 1120 Medication Aide 3 credits

This course is designed to prepare the student to assume the role and responsibilities of a Medication Aide working in a nursing facility. This course includes information regarding medication administration, pharmacology rules and regulations, classification of drugs, orders, storage, abbreviations, and an overview of commonly used drugs and documentation. (45/0/0/0)

HLTH 1210 Community Health Worker 3 credits

This course is designed for members of the general public who want to be trained as Community Health Workers (CHW) to conduct safe and effective outreach to vulnerable populations for medical personnel or health care organizations. CHWs will implement programs in the community that promote, maintain, and improve individual and community health. The course is designed to meet the skills necessary for community health workers in a public health organization, health care facility or other health-related agency. CPR and First Aid Certification required. (45/0/0/0)

HLTH 1220 Introduction to Health Sciences 3 credits
Experience health careers at a personal level. Explore the essential skills necessary for success in a health career. Includes a review of the science courses needed, the healthcare industry, diseases and disorders, healthcare technology, health rules and regulations, and employability. (45/0/0/0)

HLTH 1710 First Aid 2 credits
Study and application of the principles and techniques involved in the administration of first aid. Deals with prevention of accidents and emergency care and treatment including CPR that can be given until the services of a doctor are available. (30/0/0/0)

HLTH 1720 CPR Instructors Course 1 credit
CPR instructor training for those currently qualified in basic life support. Includes background materials, teaching techniques and aids to enable individuals to instruct others in the knowledge of local emergency care systems, understanding of risk factors, signals and actions for survival and recognition of indications for life support and accurate performance of same. Must have current AHA BLS CPR card. (15/0/0/0)

HLTH 1730 Pediatric Basic Life Support and First Aid 0.5 credits
Designed to prepare students to perform Cardio Pulmonary Resuscitation on infants and children, relieve a foreign body airway obstruction from infants and children as well as basic first aid. The training meets the requirements of the American Heart Association for Cardio Pulmonary Resuscitation. (7.5/0/0/0)

HLTH 2600 Basic Coronary Care 2 credits
Course designed to help health care providers become more knowledgeable about basic arrhythmia detection and treatment. (30/0/0/0)

Health Information Management Systems (HIMS)

HIMS 1000 Introduction to Health Information Management 2 credits
This is an introductory course into the health information management profession. An overview of healthcare delivery systems and how the HIM profession relates to healthcare delivery will be explored. This course will also cover health information technology functions and various HIM personnel specializations. (30/0/0/0)

HIMS 1010 Electronic Health Records 2 credits
One of the most unifying practices of modern health care delivery is centered on the development of the electronic health record. This course builds, through practical experience, an understanding and a level of comfort with computerized health records that can be applied directly in the clinical setting. This course offers a broad foundation in legal policy perspectives, and strategies for mounting and managing organizational initiatives regarding the electronic health record. (30/0/0/0)

HIMS 1020 Health Care Delivery Systems 3 credits
This course is an overview of the American health care system. It includes study of the evolution and current state of health care services and insurance, health professionals, health policy, and health services financing. HMOs, PPOs, and POS plans will be reviewed. Additionally, managed care objectives, functions and contracting will be discussed (45/0/0/0)

HIMS 1110 Coding I 3 credits
This is an introduction to ICD-10 Coding. International Classification of Diseases is a statistical Classification system to categorize diseases and injuries for insurance claims. Every medical record coder must understand the basic principles behind a disease classification system in order to code effectively and appropriately. This class will focus

on appropriate use of the codebook and the principals of appropriate diagnosis and procedure code selection. Prerequisite: HLTH 1060 AND NURS 1220 OR HIMS 1220 (45/0/0/0)

HIMS 1120 Legal and Compliance Issues 3 credits
This course provides an in-depth review of the legal requirements regarding health records and an introduction to the health care regulatory environment, including a review of federal fraud and abuse laws, Anti-kickback, Stark, HIPAA, Sarbanes/Oxley, JCAHO and CMS standards. You will learn the essential elements of an effective compliance program and the tools necessary to implement and maintain a health care compliance program. Prerequisite: HIMS 1000 WITH MIN. GRADE OF C (45/0/0/0)

HIMS 1130 Disease Processes 3 credits
The study of the nature and cause of disease. This includes the study of the etiology, signs and symptoms, diagnostic evaluation procedures, complications, treatment, management, prognosis, and advanced medical terminology. Through class discussion and assigned case studies students apply the knowledge learned and utilize their critical thinking and problem solving abilities. Prerequisite: HLTH 1060 AND NURS 1220 OR HIMS 1220 (45/0/0/0)

HIMS 1220 Structure and Function of the Human Body 3 credits
Provides fundamental knowledge of the normal structure and functions of the cell, tissues, organs, organ systems and interrelationship among those systems. (45/0/0/0)

HIMS 2000 Medical Billing and Reimbursement 3 credits
This course will introduce policies, procedures, and laws that govern medical billing and reimbursement. A history of health insurance is presented as well as medical coding and claims processing guidelines. The reimbursement methods for clinics, hospitals, long-term care facilities, and home health agencies are also discussed. Prerequisite: HIMS 1110 WITH MIN. GRADE OF C (45/0/0/0)

HIMS 2010 Pharmacology and Drug Administration 3 credits
This course is designed to enhance the knowledge base of the student in the area of pharmacology and drug therapy. This course is designed to present basic knowledge of pharmacology for allied health professionals. Legal and ethical issues of medication administration are also covered. Prerequisite: HLTH 1060 AND NURS 1220 OR HIMS 1220 (45/0/0/0)

HIMS 2020 Coding II 3 credits
This course introduces the use of the Current Procedural Terminology (CPT) classification and applying CPT coding guidelines for appropriate procedure code and modifier selection. HCPCS Level II coding is also covered in course. Prerequisite: HIMS 1110 WITH MIN. GRADE OF C (45/0/0/0)

HIMS 2030 Health Information Management Applications 3 credits
This course discusses the content and structure, as well as the various functions of health records. This course also addresses topics such as storage and retrieval of information, indexes/registries, documentation requirements, accreditations and licensures, as well as utilizing the virtual lab for topics such as the master patient index and deficiency analysis. Prerequisite: HIMS 1000 WITH MIN. GRADE OF C AND HIMS 1010 WITH MIN. GRADE OF C AND HIMS 1110 WITH MIN. GRADE OF C (45/0/0/0)

HIMS 2040 Health Care Information Systems 3 credits

This introductory course provides an overview of health care computer information systems. Topics related to hardware, software and operating systems will be explored and discussed. In addition, students will examine high-level information related to data management, systems development, the application and integration of information technology and the management of computer systems in a health care setting. Prerequisite: HIMS 1010 WITH MIN. GRADE OF C (45/0/0/0)

HIMS 2100 Quality Management and Process Improvement 3 credits

Leading and sustaining effective change efforts is a primary responsibility of leaders. This course will provide students with the tools and techniques of leading continuous quality improvement (CQI) of clinical and organizational efforts within a facility. An emphasis on how to develop the processes of in-depth investigation of various areas of internal operations will be presented. Specific focus will be on skill development associated with selecting and implementing various CQI tools. Students will demonstrate correct usage on a specific organizational change effort within a health care organization. Prerequisite: HIMS 1020 WITH MIN. GRADE OF C AND HIMS 1120 WITH MIN. GRADE OF C AND HIMS 2000 WITH MIN. GRADE OF C (45/0/0/0)

HIMS 2110 Health Information Technology Assessment 1 credit

This assessment course is designed as a review for the RHIT certification exam. Through this course, you will register for and complete the RHIT certification exam through AHIMA's early testing option. Must have permission of program director to enroll in course. (15/0/0/0)

HIMS 2120 Professional Practice Experience 3 credits

This course is used to provide students an opportunity to practice the skills learned within the program curriculum. The course will be split into two distinct sections. Students will utilize the course as a lab course for the first six weeks and as a clinical course for the last portion of the semester. Students will gain experience in all types of health care settings. Prerequisite: HIMS 2030 WITH MIN. GRADE OF C (MAY BE TAKEN CONCURRENTLY) AND HIMS 2020 WITH MIN. GRADE OF C AND OFFT 1500 (30/0/45/0)

HIMS 2130 Coding III 3 credits

This course provides a detailed examination of coding systems across a continuum of health care settings. The student's comprehensive knowledge of coding, terminology, anatomy and physiology, disease process and pharmacology will come into play in identifying all services, supplies and conditions described in sample patient documentation. Prerequisite: HIMS 2020 WITH MIN. GRADE OF C (45/0/0/0)

Health, Phys Ed, Rec (HPER)

HPER 1060 Soccer I 1 credit

Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of soccer. Instructor permission is required for the registration of this course. (7.5/15/0/0)

HPER 1062 Soccer II 1 credit

Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of soccer. Instructor permission is required for the registration of this course. (7.5/15/0/0)

HPER 1070 Softball I 1 credit

Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of softball. Instructor permission is required for the registration of this course. (7.5/15/0/0)

HPER 1072 Softball II 1 credit

Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of softball. Instructor permission is required for the registration of this course. (7.5/15/0/0)

HPER 1090 Baseball I 1 credit

Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of baseball. Instructor permission is required for the registration of this course. (7.5/15/0/0)

HPER 1092 Baseball II 1 credit

Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of baseball. Instructor permission is required for the registration of this course. (7.5/15/0/0)

HPER 1100 Basketball I 1 credit

Intercollegiate competition. Instructor permission is required for this course. (7.5/15/0/0)

HPER 1102 Basketball II 1 credit

Intercollegiate competition. Designed to give the student advanced knowledge, skills, and experience in the sport of basketball. Instructor permission is required for the registration of this course. (7.5/15/0/0)

HPER 1130 Golf I 1 credit

Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of golf. Instructor permission is required for this course. (7.5/15/0/0)

HPER 1132 Golf II 1 credit

Intercollegiate competition. Designed to give the student advanced knowledge, skills, and experience in the sport of golf. Instructor permission is required for the registration of this course. (7.5/15/0/0)

HPER 1150 Sports Officiating 1 credit

Rules and interpretation and officiating of team sports. (15/0/0/0)

HPER 1160 Volleyball I 1 credit

Intercollegiate competition. Designed to give the student knowledge, skills, and experience in the sport of volleyball. Instructor permission is required for this course. (7.5/15/0/0)

HPER 1162 Volleyball II 1 credit

Intercollegiate competition. Designed to give the student advanced knowledge, skills, and experience in the sport of volleyball. Instructor permission is required for the registration of this course. (7.5/15/0/0)

HPER 1191 Spinning 1 credit

An activity class designed to give the student knowledge, skills, and experience in the exercise of spinning. (7.5/15/0/0)

HPER 1200 Archery 1 credit

An introduction to the sport of archery and related skills. (7.5/15/0/0)

HPER 1210 Badminton 1 credit

An introduction to the knowledge and skills utilized to participate in badminton. (7.5/15/0/0)

HPER 1220 Basketball 1 credit

An activity class designed to give the student knowledge, skills, and experience in the sport of basketball. (7.5/15/0/0)

HPER 1230 Bowling 1 credit

This course is designed to teach students the history of bowling, basic bowling fundamentals, and how to score by hand. (7.5/15/0/0)

HPER 1240 Circuit Training 1 credit

A fitness class designed to give the student knowledge of physical training utilizing a prescribed exercise circuit and-or stations. (7.5/15/0/0)

HPER 1245 Weight Management 1 credit
Designed to develop an understanding of the principles for weight management. The course will focus on ways to improve the student's ability to lose weight and inches and maintain those losses. The importance of exercise, daily calorie goals, food plan, and food portions are topics that will be covered. (15/0/0/0)

HPER 1260 Golf 1 credit
A study and practice of the fundamental skills, techniques, and rules of golf. (7.5/15/0/0)

HPER 1270 Aerobic Fitness 1 credit
This course provides an assortment of various aerobic activities designed primarily for cardiovascular health. Includes aerobic circuit training, interval cardiovascular workouts, introduction to cardiovascular machines, as well as total body exercises. (7.5/15/0/0)

HPER 1271 Fitness for the Aging Population 2 credits
Course designed to apply the principals necessary for providing exercise for the aging population. Course will focus on the importance of fitness as one ages, as well as a variety of exercises designed for the aging population, including cardiovascular, flexibility, balance, and strength. (30/0/0/0)

HPER 1272 Total Body Resistance Exercise TRX BOSU Training 1 credit
Course will provide resistance workout for the entry level exerciser through the advanced athlete. (15/0/0/0)

HPER 1280 Karate-Introduction to the Martial Arts 1 credit
Introduction to martial arts in general and karate specifically as a means of relaxation, physical activity, and self-defense. Students will develop blocking, kicking, and punching skills and learn two katas forms and one kiso kumite arranged sparring. (7.5/15/0/0)

HPER 1290 Racquetball 1 credit
An activity designed to give students knowledge, skills, and experience in the sport of racquetball. (7.5/15/0/0)

HPER 1310 Tennis 1 credit
An activity class designed to give the student knowledge, skills, and experience in the sport of tennis. (7.5/15/0/0)

HPER 1320 Water Aerobic Fitness 1 credit
A study and practice by which a person may achieve and/or maintain a high level of fitness through a water aerobics program. Increasing the student's knowledge of the components of fitness and having them gain an appreciation of water aerobics will be emphasized. (7.5/15/0/0)

HPER 1325 Introduction to Yoga 1 credit
An introduction to all types of yoga including: Hatha, Jnana, Karma, and Bakti with an emphasis on Raja. The student will gain physical flexibility, respiration control and control of the mind functions. Anatomy and physiology will be covered in respect to function of the nervous system as it affects all of the bodily functions. Students may register twice for this class. (7.5/15/0/0)

HPER 1326 Introduction to Pilates 1 credit
A study of the eight principles of Pilates including body awareness, posture, and muscle imbalances. Students may register twice for this class. (7.5/15/0/0)

HPER 1330 Volleyball 1 credit
An activity class designed to give the student knowledge, skills, and experience in the sport of volleyball. (7.5/15/0/0)

HPER 1350 Recreational Games 2 credits
An activity class designed to enhance the knowledge, skills, and active participation in lifelong recreational activities. Numerous outdoor and indoor activities are offered such as tennis, Frisbee golf, bocce, sand volleyball, power walking, badminton, table tennis, etc. (30/0/0/0)

HPER 1360 Body Conditioning 1 credit
Introduction to fitness and body conditioning as related to optimal healthy living. (7.5/15/0/0)

HPER 1510 Introduction to Physical Education 3 credits
Designed for the physical education student. Orientation to physical education, history, principles, objectives, careers, and a survey of the scope of activities in the physical education curriculum. (45/0/0/0)

HPER 1520 Nutrition for Fitness and Sport 3 credits
The purpose of this course is to investigate and clarify the relationship between nutrition and human performance. The focus will include a study of the following areas: nutrition, energy value of food, metabolic rates, calorimetry, body composition, aerobic and anaerobic power, physiological conditioning and nutritional requirements. (45/0/0/0)

HPER 1521 Nutrition for Aging Population 1 credit
Course will provide content on proper nutritional planning, food shopping, food safety, and energy balance for older adults, as well as practical tips that can be used to connect with senior citizens as it relates to a healthy diet. (15/0/0/0)

HPER 1550 Lifetime Wellness 3 credits
Designed to develop an understanding of the principles necessary for promoting lifetime wellness. Focus will be on a holistic approach to recognizing and evaluating oneself in order to improve one's own quality of life. Includes a study of critical issues which affect the individual, such as stress, nutrition, weight control, physical fitness, infectious and noninfectious diseases, alcohol and drug abuse, environmental health, and human sexuality. (45/0/0/0)

HPER 1700 Introduction to Athletic Training 3 credits
An introductory course outlining all aspects of the profession of athletic training. Current issues in athletic training are covered, as well as the history and development of the profession. Injury recognition, working with different levels of athletes, and global issues facing athletic trainers will be presented. (45/0/0/0)

HPER 2060 Weight Training 1 credit
Weight training and body conditioning with emphasis on power and Olympic weight lifting in a practical awareness participation class. (7.5/15/0/0)

HPER 2110 Individual and Dual Sports 3 credits
Introduction to the fundamental theory, techniques, and methods of teaching individual and dual sports. (45/0/0/0)

HPER 2160 Team Sports 3 credits
Introduction to the fundamental theory, techniques, and methods of teaching team sports. (45/0/0/0)

HPER 2200 First Aid and CPR for the Healthcare Provider 3 credits
Study and application of the principles and techniques involved in the administration of first aid and basic life support for healthcare providers. This course focuses on the students who provide healthcare to patients in a wide variety of settings including in-hospital and out of hospital settings. The course deals with prevention of accidents, emergency first aid care and treatment including CPR and AED for the healthcare provider that can be given until the services of emergency personnel are available. This course meets all standards for the American Heart Association Heartsaver First Aid and the BLS for Healthcare Providers CPR and AED training courses. (45/0/0/0)

HPER 2300 Stress Management 3 credits
Course designed to combine theory with practical applications necessary to manage stress and promote wellness. Topics include but are not limited to, communicating, thinking, feeling, playing and working, self-responsibility, breathing, sensing, eating, moving, and finding meaning. (45/0/0/0)

HPER 2310 Community Health 3 credits
This course is designed to develop an understanding of the principles of community health. Knowledge and techniques used in identifying and solving community health problems are emphasized. (45/0/0/0)

HPER 2400 Care and Prevention of Athletic Injuries 3 credits
Survey of common athletic injuries, including prevention, evaluation, care, rehabilitation, training methods, taping methods, reconditioning, and other therapeutic modalities. (45/0/0/0)

HPER 2510 Physical Education in the Elementary School I 3 credits
Designed for the prospective elementary teacher and the physical education student. Study of the curriculum and teaching of physical education to the elementary grades in relation to the needs and characteristics of the elementary school age child at various grade levels. (45/0/0/0)

Heating, Ventilation, Air Conditioning (HVAC)

HVAC 1010 Electricity for HVAC 2.5 credits
Introduction to electrical theory, electrical components, and DC and AC circuits. Solid state devices and their function in a circuit are covered along with circuit analysis, circuit diagrams, and the proper use of basic test equipment. (37.5/0/0/0)

HVAC 1020 Electricity for HVAC Lab 4 credits
Practical application in the use of electrical meters, wiring of simple electric circuits, analyzing the different components in a HVAC system and interpreting simple wiring diagrams. Corequisite: HVAC1010 (22.5/112.5/0/0)

HVAC 1110 Basic Refrigeration Principles 2.5 credits
Laws of physics and principles of chemistry that apply to refrigeration and air conditioning. Also, a study of refrigerators and freezers. (37.5/0/0/0)

HVAC 1120 Basic Refrigeration Principles Lab 4 credits
Practical application in the process of brazing-soldering different metals, study of different hand tools and specialty equipment used on HVAC-R systems and proper installation of a basic refrigeration system. Corequisite: HVAC1110 (22.5/112.5/0/0)

HVAC 1130 Sheet Metal 3 credits
Function, proper use, and safety of sheet metal equipment. Covers pattern drafting and fabrication of ducts and fittings for skill development and for use in projects, including ductwork sizing. (45/0/0/0)

HVAC 1210 HVAC Controls 3 credits
Introduction to electrical energy, electrical symbols, and wiring diagrams, including operation of relays, starters, and protectors. Prerequisite: HVAC 1010 (45/0/0/0)

HVAC 1220 HVAC Controls Lab 4 credits
Practical applications of motors and motor starting controls, repair of different HVAC controls and troubleshooting and reading of wiring diagrams to solve system problems. Prerequisite: HVAC 1020 Corequisite: HVAC1210 (22.5/112.5/0/0)

HVAC 1230 HVAC-R Refrigerant Certification Training 1 credit
This is a preparatory class for air conditioning and refrigeration service personnel to become certified in proper refrigerant handling techniques. This class covers section 608 Clean Air Act, stationary equipment, that includes small appliances, home and commercial air conditioners, refrigeration, and large tonnage chillers. This class is for all personnel who maintain, service, repair, or dispose of appliances that contain regulated refrigerants. (15/0/0/0)

HVAC 1250 Residential Air Conditioning 3 credits
Study of the construction, installation, and service of residential air conditioners including tools and service instruments used in residential refrigeration. Prerequisite: HVAC 1110 (45/0/0/0)

HVAC 1260 Residential Air Conditioning Lab 4 credits
This lab will provide experience in the operation and troubleshooting of room air conditioners along with the study of the construction, installation, and troubleshooting of residential air conditioning system. Prerequisite: HVAC 1220 (MAY BE TAKEN CONCURRENTLY) Corequisite: HVAC1250 (22.5/112.5/0/0)

HVAC 1300 Cooperative Internship I 1 - 6 credits
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and/or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Heating Ventilation and Air Conditioning program or permission of instructor. (0/0/0/360)

HVAC 2010 Heating Technology 2.5 credits
A study of the procedures used in servicing heating systems including gas fired and electric furnaces. Covers the combustion process in conventional and high efficiency heating appliances for residential and light commercial applications. Prerequisite: HVAC 1210 AND HVAC 1220 AND HVAC 1250 AND HVAC 1260 (37.5/0/0/0)

HVAC 2015 HVAC-R Refrigerant Certification Training 1 credit
This is a preparatory class for Air Conditioning and Refrigeration service personnel to become certified in proper refrigerant handling techniques. This class covers section 608 Clean Air Act, stationary equipment, that includes small appliances, home and commercial air conditioners, refrigeration, and large tonnage chillers. This class is for all personnel who maintain, service, repair, or dispose of appliances that contain regulated refrigerants. If prerequisite is not met must have permission of instructor to enroll. Prerequisite: HVAC 1110 (15/0/0/0)

HVAC 2020 Heating Technology Lab 4 credits
Practical application of residential heating systems, including installation and service procedures for gas combustion and electric furnaces using variable speed technology. Prerequisite: HVAC 1210 AND HVAC 1220 AND HVAC 1250 AND HVAC 1260 Corequisite: HVAC2010 (22.5/112.5/0/0)

HVAC 2110 Commercial Refrigeration 3 credits
Refrigeration applied to commercial fields, including compressors, condensers, receivers, and evaporators, and application and construction of refrigerant controls, water valves, refrigerant oils, and special equipment. Prerequisite: HVAC 1110 (45/0/0/0)

HVAC 2120 Commercial Refrigeration Lab 4 credits
Practical application of HVAC compressors, condensers, receivers, evaporators and construction of refrigerant controls, water valve, refrigerant oils, and special equipment required in service procedures. Prerequisite: HVAC 1120 Corequisite: HVAC2110 (22.5/112.5/0/0)

HVAC 2210 Heat Pump Technology 2.5 credits
This course covers the principles of air source and water source heat pumps. Emphasis is placed on safety, modes of operation, defrost systems, refrigerant charging, and system performance. Upon completion, students should be able to understand and analyze system performance and perform routine service procedures. Prerequisite: HVAC 1210 AND HVAC 1220 AND HVAC 1250 AND HVAC 1260 (37.5/0/0/0)

HVAC 2220 Heat Pump Technology Lab 4 credits
This course provides instruction on the principles, application, and operation of residential air source and water source heat pumps. Topics include: installation procedures, servicing procedures, electrical components, geothermal ground source energy supplies, dual fuel, troubleshooting, valves and safety. Prerequisite: HVAC 1210 AND HVAC 1220 AND HVAC 1250 AND HVAC 1260 Corequisite: HVAC2210 (22.5/112.5/0/0)

HVAC 2230 Physics of Building Science 2 credits
Study of basic principles of building science to assess energy efficiency in a home while also monitoring conditions that have a direct impact on human health and safety. Students will learn how to perform calculations to meet ventilation requirements and determine thermal efficiency. Students will also learn how to use diagnostic equipment to ensure systems are functioning together correctly to maximize home performance, comfort, energy efficiency, safety, and durability. (30/0/0/0)

HVAC 2310 Commercial Air Conditioning and Refrigeration 3 credits
Refrigeration pipe sizing, installation and soldering for a complete system layout with the necessary calculations. Various aspects of employer-employee relationships and responsibilities. Prerequisite: HVAC 2110 (MAY BE TAKEN CONCURRENTLY) (45/0/0/0)

HVAC 2320 Commercial Air Conditioning and Refrigeration Lab 4 credits
Practical application of the construction, installation, and service for commercial refrigeration and air conditioning coolers, ice machines, and piping layouts. Prerequisite: HVAC 2220 Corequisite: HVAC2310 (22.5/112.5/0/0)

History (HIST)

HIST 1030 European Civilization I 3 credits
Study of history that interprets and evaluates the contribution of civilizations from ancient times to 1600. (45/0/0/0)

HIST 1040 European Civilization II 3 credits
The development of European civilization since 1600, concluding with the peace settlements and national tensions that followed World War II. (45/0/0/0)

HIST 1050 World History I 3 credits
A chronological study of world civilizations giving an overall view of contributions made by these civilizations from ancient times to 1715. (45/0/0/0)

HIST 1060 World History II 3 credits
A chronological study of world civilizations giving an overall view of contributions made by these civilizations from 1715 to the present day. (45/0/0/0)

HIST 2010 American History I 3 credits
A survey of American History from the Age of Discovery through the Civil War and Reconstruction. Emphasis is on the political, economic, cultural, social, and technological issues that arise in the development of the American nation. (45/0/0/0)

HIST 2020 American History II 3 credits
A survey of American history from the end of the Civil War era to the present. Emphasis is on the political, economic, cultural, social, and technological issues that arise in America's development as a global power. (45/0/0/0)

Home Economics (HOEC)

HOEC 1050 Nutrition 3 credits
Study of the basic principles of nutrition in health and disease throughout the human life cycle. (45/0/0/0)

Horticulture and Golf Course Management (HORT)

HORT 1010 Horticulture Science 4 credits
The study of horticultural plant science concepts related to plant growth and development. Includes topics on cultural growing practices, propagation, and other metabolic processes. (60/0/0/0)

HORT 1020 Introduction to Turf Management I 2 credits
Introductory course in the care and culture of turf that provides knowledge on the principles of turf management. (30/0/0/0)

HORT 1025 Residential Turf Management 3 credits
An introduction to care and culture of residential turf that provides knowledge on the principles of proper turf management. (45/0/0/0)

HORT 1040 Introduction to Soil Science Lab 1 credit
This course will focus on "artificial" soils including turf and landscape soils, greenhouse and nursery soilless media mixes, and other urban soils. The compare and contrast of the physical, biological, and chemical processes between urban and rural soils will be taught. Corequisite: AGR1030 (0/45/0/0)

HORT 1050 Commercial Turf Management 3 credits
A turf course with emphasis on scientific principles of turf species adaptation in commercial settings. Corequisite: HORT1060 (45/0/0/0)

HORT 1060 Commercial Turf Management Lab 1 credit
Lab for HORT 1050, including hands-on emphasis on scientific principles of turf species adaptation in landscape and recreation. Corequisite: HORT1050 (0/45/0/0)

HORT 1070 Plant Propagation 2 credits
Principles and practices of sexual and asexual processes involved with the propagation of herbaceous and woody plants. Corequisite: HORT1080 (30/0/0/0)

HORT 1080 Plant Propagation Lab 1 credit
Lab for HORT 1070. Includes hands-on practice to gain experience in propagating herbaceous and woody plants using various methods. Corequisite: HORT1070 (0/45/0/0)

HORT 1090 Integrated Pest Management 2 credits
Identification of insects, plant pathogens, weeds, and nutritional disorders of horticultural crops. Pesticide selection, handling, and application will be demonstrated. (30/0/0/0)

HORT 1140 Golf Playability I 1 credit
This course is designed for the student to learn and improve the different techniques used in the golf swing and to allow the student to gain a better understanding and enjoyment of the game of golf. (7.5/22.5/0/0)

HORT 1150 Golf Playability II 1 credit
This course is designed for the student to fine tune, improve and begin to analyze their golf swing for the improvement and advancement of their individual golf game. (7.5/22.5/0/0)

HORT 1300 Cooperative Internship I 1 - 6 credits
Work-student program for in-depth instruction on the job. The college gives both related and vocational instruction before and/or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and employers so that each contributes to the student's education and employability. (0/0/0/360)

HORT 2000 Landscape History and Use 3 credits
An appreciation for the development and use of the landscape, from large to small, will be discussed. Large players in landscape perceptions world-wide will be explored as well as the ways in which people historically have interacted with the landscape. (45/0/0/0)

HORT 2020 Nursery and Greenhouse Management 4 credits

Principles and practices underlying nursery and greenhouse management and production. A portion of the course will deal with the economic aspect of running a retail or wholesale business. (60/0/0/0)

HORT 2045 Landscape Management 3 credits

The principles and practices of managing a residential or commercial landscape. Includes pruning, fertility, wildlife management, water relations, pest and disease management, and overall plant health. (45/0/0/0)

HORT 2055 Landscape Design 3 credits

Introduction to the process and elements of landscape design. Includes graphic and oral presentation techniques for landscape design. (45/0/0/0)

HORT 2060 Sports Turf Management 3 credits

An in-depth study of the specialized techniques in the maintenance practices of recreational turf sites such as sports complexes and parks. Corequisite: HORT2070 (45/0/0/0)

HORT 2070 Sports Turf Management Lab 1 credit

This lab is designed to give the students hands-on experience in the specialized and complex maintenance practices of recreational turf sites such as golf courses, sports complexes and parks. Corequisite: HORT2060 (0/45/0/0)

HORT 2080 Woody Plant Identification 3 credits

Identification using common and scientific names for woody plant species frequently found in Nebraska and the Upper Great Plains. Includes the management and environmental tolerances for these shrubs and trees. (45/0/0/0)

HORT 2090 Herbaceous Perennial Identification 3 credits

Identification using common and scientific names for herbaceous perennial plant species frequently found in Nebraska and the Upper Great Plains. Includes the management and environmental tolerances for these ornamental landscape plants. (45/0/0/0)

HORT 2100 Golf Course Management 3 credits

Students will learn basic construction, renovation, and restoration techniques for golf courses, sports fields, parks and landscaped areas. (45/0/0/0)

HORT 2140 Hydroponic Growing Systems 2 credits

A course in hydroponic plant production that provides the practical skills and scientific concepts of growing plants in soilless growing media. A focus on food production will allow students to design, build, and experiment with hydroponic systems. (30/0/0/0)

HORT 2150 Annual Flower Identification, Production and Care 2 credits

An introductory course in annual flower growing that provides the practical skills and scientific concepts involved in identification, production, and care of annual plants. (30/0/0/0)

HORT 2160 Vegetable Gardening and Farm Production 3 credits

A course in vegetable gardening that provides the practical skills and scientific concepts involved in vegetable production. Includes planning, preparation, seasonal care, and post-harvest handling and storage. Regenerative agricultural practices on soil health, water management, and plant fertility. (45/0/0/0)

HORT 2165 Value-Added Diversified Marketing 3 credits

A course in the basic planning and marketing of small-scale value-added products. This includes the inclusion of farmers markets, roadside-stands, and other small retail and wholesale operations. Focus will be on products that are considered niche. (45/0/0/0)

HORT 2170 Alternative Horticulture 2 credits

An introductory course on production methods in the field of horticulture that are not considered mainstream. This course will look at existing methods of creative production and the challenges each of these may encounter. A focus will also be made on understanding how production demand follows cultural needs. (30/0/0/0)

HORT 2180 Irrigation and Equipment 3 credits

Introduction to the management of horticultural irrigation systems. Includes water requirements, water resources, application methods, types and selection of irrigation equipment, application time and rates, irrigation well principles and operation, water rights and legal aspects, costs and returns. (45/0/0/0)

HORT 2890 Horticulture Capstone Experience 1 credit

The course will provide students with an opportunity to reflect on previous coursework, synthesize the content and merit of their program of study while strengthening their competency level to enter the workforce upon graduation. Students will improve critical thinking and communication skills through the development of professional presentations. Through a variety of examination and demonstration exercises, students will show competency in their subject areas. (15/0/0/0)

Human Services (HUSR)**HUSR 1010 Introduction to Human Services and Counseling 3 credits**

An introduction to the field of human services and counseling which includes the study and practice of theories, principles, and techniques of counseling. Helping skills that are discussed and practiced include at least four of the following: active listening, reflective feedback, summarizing, self-disclosing, displaying empathy, confronting, establishing rapport, and communicating at the client's comprehension level. The historical and current theories of counseling are also explored. Counseling theories include at least 4 of the following: Psychoanalytic, Adlerian, Cognitive-Behavioral, Existential, Person-Centered, Gestalt, Behavior, Feminist, Reality, Solution Focused Brief Therapy (SFBT), Narrative. (45/0/0/0)

HUSR 1220 Group Theory and Practice 3 credits

The study and practice of group theories, processes, dynamic, techniques, methods and group counseling and facilitation. Prerequisite: HUSR 1010 WITH MIN. GRADE OF C (45/0/0/0)

HUSR 1230 Multicultural Counseling 2 credits

This course focuses on cultural, social, lifestyle, spiritual, and economic factors as they affect diverse groups in counseling including but not limited to African Americans, Native Americans, Hispanics, and others. Attention is paid to multicultural barriers and to the impact of the counselor's own worldview on the counseling relationship. Adaptation of counseling techniques and theories will be examined in relation to multicultural counseling. Prerequisite: HUSR 1010 WITH MIN. GRADE OF C (30/0/0/0)

HUSR 2010 Introduction to Case Management and Professional Ethics 3 credits

This course will introduce students to professional ethics and issues, including standards of conduct and professional behavior expectations for counselors. Ethical standards to be studied may include confidentiality of client information and records, counselor values and conflicts, non-discrimination, responsibilities and integrity, competence, moral standards, client welfare, legal issues, client relationships and boundaries, inter-professional relationships, remuneration and societal obligations. It will also introduce students to the casework skills of human services and substance use counseling. These include, but are not limited to: the process of collecting client data for making decisions regarding alcohol/drug disorder diagnosis, alcohol/drug assessment summary writing, level of

care placement, treatment and referral assessment, interview techniques, treatment decisions and prioritizing client treatment goals, case presentation and reviews, collaborative team (multi-service) assessment and planning, confidentiality, referral and follow-up, treatment plans, progress notes, and discharge plans. Basic information on two or more objective screening instruments for alcohol/drug disorders, such as the Michigan Alcoholism Screening Test (MAST), Substance Abuse Subtle Screening Inventory (SASSI), Addiction Severity Index (ASI), Comprehensive Adolescent Severity Inventory (CASI), and others are studied. Prerequisite: HUSR 1010 WITH MIN. GRADE OF C (45/0/0/0)

HUSR 2020 Medical and Psycho-Social Aspects of Chemical Use 3 credits

This course is the study of physiological, psychological, and sociological aspects of chemical use, dependence, and abuse. Classification and basic pharmacology of drugs and their physiological effects; etiological, behavioral, cultural, demographic, and spiritual aspects and belief systems concerning alcohol/drug use; processes of dependence and addiction; and signs, symptoms, and behavioral patterns will be discussed. (45/0/0/0)

HUSR 2030 Treatment Issues in Chemical Dependency 2 credits

This course is designed to provide students with knowledge of treatment issues specific to chemical dependency such as denial, resistance, minimization, family dynamics, relapse, cross-addiction, co-occurring disorders, spirituality, and influences of self-help groups. It will include studying chemical dependency clinical treatment needs of individuals taking into consideration gender, culture, and lifestyle. (30/0/0/0)

HUSR 2040 Human Services Practicum 1 credit

Under supervision, students will work at selected sites and apply acquired skills and principles studied in the classroom. Students may register for this class two times. Prerequisite: HUSR 1010 WITH MIN. GRADE OF C (0/0/45/0)

Humanities (HUMS)

HUMS 1100 Introduction to Humanities 3 credits

This is a survey course focusing on art, music, theatre, film, dance, literature, architecture, and philosophy. It examines the unfolding of global humanistic traditions in order to reawaken our sense of wonder and curiosity about the meaning of life. The course gives the students criteria from which to evaluate their own times and situation in addition, enriches students' historical perspectives. It shows how the various arts intersect, influence and are influenced by their times. (45/0/0/0)

HUMS 2980 Global Study Experience 1 - 3 credits

Provides a structured cross-cultural experience, including pre-departure cultural orientation, in-country immersion experience and culminating project. Includes history, religion, geography, philosophy, literature, anthropology, culture, fine arts, food, language, and other relevant topics. Includes a short-term global study experience with additional fees for travel. (45/0/0/0)

Information Technology (INFO)

INFO 1000 Basic Computer Applications 2 credits

An introduction to basic computer operations using personal computers operating in a Windows environment. Students learn to use the computer to create and edit word processing and spreadsheet documents and use the Internet as a resource for information. (30/0/0/0)

INFO 1010 Fundamentals of Information Technology 3 credits

Overview of the basic concepts of information technology and computer systems of all sizes, including hardware, software, and processing methods. This course includes an

introduction to electronic spreadsheet, database management, presentation, and word processing software through the use of the Microsoft Office Suite. Basic keyboarding skills are essential. (45/0/0/0)

INFO 1020 Introduction to Information Technology 3 credits

This course provides an overview of information technology. Concepts to be covered include: digital evolution, social media, security, the latest technologies, computer hardware, computer software and careers. (45/0/0/0)

INFO 1030 Introduction to Computer Concepts 1 credit

Designed to introduce the beginning student to basic computer concepts, an overview of how the computer works and ways to customize the computer desktop. In addition, students will learn to work in the Microsoft Windows environment including starting and exiting software, creating, saving, retrieving, and renaming a file, how to manipulate a window, copying files, deleting files, creating and deleting folders, identifying the various locations to store files, and printing files. (15/0/0/0)

INFO 1100 Microcomputer Applications 3 credits

Covers the command and functions available on microcomputers including a word processor, a spreadsheet, and a database. Basic keyboarding skills are essential. (45/0/0/0)

INFO 1150 IBMi Control Language 3 credits

This course provides a working knowledge of the IBMi operating system and programming using IBMi control language. Topics include creating physical files and logical files, basic CL programming topics, message handling, database functions, and passing program parameters. (22.5/67.5/0/0)

INFO 1170 Operating Systems I 3 credits

This course provides an overview of operating systems from a network and administrative point of view. Topics include: operating system installation options, joining workgroups and domains, creating and maintaining user and group accounts and permissions, file sharing, configuring security, and configuring and installing printers. (45/0/0/0)

INFO 1400 Programming in Visual BASIC 4 credits

This course uses Visual BASIC to write computer programs to run in the Microsoft Windows environment. Includes writing, testing, and debugging of programs. (45/45/0/0)

INFO 1420 Introduction to Programming in C# 4 credits

This course uses C# to write computer programs to run in the Microsoft Windows environment. Includes writing, testing, and debugging of programs. (45/45/0/0)

INFO 1440 Advanced Programming in C# 3 credits

This course uses C# to write computer programs to run in the Microsoft Windows environment. Includes proper design and implementation of advanced programming concepts including database CRUD functions, ADO.Net, web forms, XAML, Xamarin, and LINQ. Prerequisite: INFO 1420 (45/0/0/0)

INFO 1450 Programming in RPG IV 5 credits

This course uses the RPG IV programming language to write programs which run in an IBMi operating environment. Students will design, code, test, and debug programs. Programs will be created using RDi (Rational Developer for i). Corequisite: INFO1150 (45/90/0/0)

INFO 1500 Interactive RPG and Subfiles 3 credits

This course will introduce screen formatting using IBMi display files. It will also introduce the use of subfiles to develop interactive programs for the IBMi computer system using the RPG IV programming language. Students will design, code, test, and debug programs. Prerequisite: INFO 1150 AND INFO 1450 (30/45/0/0)

INFO 1600 Personal Computer Systems Maintenance and Repair 3 credits
Introduction to the maintenance, upgrading, and repair of personal computer systems. This course prepares the student for taking CompTIA's A+ Core hardware certification test. Lecture and lab experience on system hardware such as mother boards and memory, hard disk drives, expansion boards, video circuits, printers, monitors, power supplies, and I/O devices. Corequisite: INFO1610 (45/0/0/0)

INFO 1610 Personal Computer Systems Maintenance and Repair Lab 1 credit
Lab experience for INFO 1600. (0/45/0/0)

INFO 1700 Introduction to Internet 1 credit
This course familiarizes the student with the basic uses of the Internet including sending email, attachments, searching for information, finding software, using newsgroups, and address books. Students will gain a basic knowledge about the history of the Internet and the latest trends and uses of the Internet. (15/0/0/0)

INFO 1710 Web Page Development 1 credit
The Web Page Development course is intended to show students what the basic HTML code is behind a web page and how to use HTML to construct a site. Topics covered include finding and using images, linking pages, making tables, frames, javascript, navigation, backgrounds, and design elements of a website. (15/0/0/0)

INFO 1725 HTML, CSS, and JavaScript 3 credits
This course provides a working knowledge of HTML, CSS, and JavaScript to gain the perspective and skills needed to develop professional web pages. Fundamentals of HTML and CSS standards, components and processes of web applications, and how JavaScript integrates into the web development process are included. Students will create web pages, learn how to use Javascript to enhance the web pages, and learn how to provide pages for mobile devices. (30/45/0/0)

INFO 1730 Dreamweaver and Fireworks 1 credit
This course provides a step-by-step guide for introductory to intermediate skills in Dreamweaver and Fireworks. Concepts to be covered include: how to create a Dreamweaver Website and use Fireworks, which is a graphics program that allows the user to create or enhance graphics specifically for the web. These skills will assist the user in creating vibrant websites. (15/0/0/0)

INFO 1735 Flash and Streaming Media 1 credit
This course provides a step-by-step guide for introductory skills in Flash and Streaming Media. Concepts to be covered include: how to utilize Flash software which is a developmental tool that allows the user to create interaction, often by using animation, and compare and contrast streaming media elements with static media elements, specifically for the web. These skills will assist the user in creating and maintaining dynamic interactive websites. (15/0/0/0)

INFO 1800 Microcomputer Applications II 3 credits
Covers more advanced features and switches utilized in word processing, spreadsheet, database, and email applications. Skills acquired will include customizing toolbars and menus, integrating applications, and automating tasks. Prerequisite: INFO 1100 (45/0/0/0)

INFO 1810 Advanced Internet 1 credit
This course is designed so that students can have hands-on experience learning more about the Internet including more efficient ways to navigate web pages, how data is transmitted, the tracert command, setting up mailing lists, filters, signatures, advanced searching; maintaining anti-virus software, understanding file transfer protocol, installing software downloaded from the Internet, identifying other Internet communication software, discuss the concept and future of e-commerce, discuss aspects of the Internet including hoaxes, video conferencing, white boards, electronic books and magazines, and Internet phones. (15/0/0/0)

INFO 1850 Operating Systems II 3 credits
This course provides students with the skills to acquire advanced knowledge in each of the stand-alone Microsoft Operating Systems and experience with the Linux and MAC operating systems. Topics include: network connectivity, installation, command line interface, registry editing, troubleshooting, security, recovery, and file systems. Prerequisite: INFO 1170 (45/0/0/0)

INFO 2010 Systems Analysis and Design I 1 - 5 credits
Involves the study of the Systems Development Life Cycle. Including study of present system, designing a more optimum system, and developing and establishing rules for systems documentation. Prerequisite: INFO 1400 OR INFO 1500 (45/90/0/0)

INFO 2020 Systems Analysis and Design 5 credits
Involves the study of the Systems Development Life Cycle. Including study of present system, designing a more optimum system, system development, implementation, and testing as well as creating systems documentation. Students will also prepare and present a project briefing. Prerequisite: INFO 1440 OR INFO 1500 (45/90/0/0)

INFO 2030 Systems Analysis and Design II 1 - 5 credits
Instruction includes continuation of theory from INFO 2010, as well as testing newly developed systems. Students will also prepare and present executive briefings for newly developed systems. Prerequisite: INFO 2010 (45/90/0/0)

INFO 2040 Project Management 3 credits
This course examines the organization, planning, and controlling of projects and provides practical knowledge on managing project scope, schedule, and resources as they relates to Information Technology. Topics include project life cycle, work breakdown structure and Gantt charts, network diagrams, scheduling techniques, and resource allocation decisions. Concepts are applied through team projects and tutorials using project management software. (45/0/0/0)

INFO 2100 Excel Spreadsheet Applications 3 credits
This course begins with entry-level techniques and quickly progresses into more advanced functions. Advanced topics of integrating database files into spreadsheets, how to write macros, Visual Basic code and graphic fundamentals will be presented. Basic keyboarding skills are essential. (45/0/0/0)

INFO 2110 Access Database Applications 3 credits
A hands-on introduction to microcomputer database applications. Topics include: database creation, maintenance, data rearrangement, search techniques, indexing, variables, arithmetic, data fields, reports, control breaks, labels, and multiple files. Basic keyboarding skills are essential. (45/0/0/0)

INFO 2230 Web Page Development II 3 credits
This course covers the use of graphics, animations, and multimedia in webpage design and production. Fundamentals of graphic production, layout design principles, animations, and the development principles of multimedia are included. A final project will incorporate graphics and multimedia. Prerequisite: INFO 1710 (30/30/0/0)

INFO 2250 Web Development using HTML and CSS 3 credits
This course provides a working knowledge of HTML (Hypertext Markup Language) and CSS (Cascading Style Sheets) to gain the essential concepts and skills needed to develop professional web pages. Fundamentals of HTML and CSS standards, the latest approaches to page layout, and Responsive Web Design are included. Students will create web pages and learn how to use HTML and CSS to provide a website with responsive web design. (45/0/0/0)

INFO 2300 Database Techniques 3 credits

A study of design and implementation in Microsoft Access with Visual BASIC. Programming will be done both with macros and Access BASIC. Programming topics include: standard and object variables, functions, methods, properties, flow-of-control commands, locking, menus, and arrays. Students will design, code, test and debug programs. Prerequisite: INFO 1100 Corequisite: INFO2310 (22.5/67.5/0/0)

INFO 2310 Database Concepts and Design 3 credits

This course is an introduction to database development and design. In this course, the basics of database design and manipulation will be covered. Topics include relationships, database normalization, integrity constraints, DBMS software and functions, and database administrative functions. Prerequisite: INFO 1100 Corequisite: INFO2300 (45/0/0/0)

INFO 2320 Introduction to Database 3 credits

A study of database theory, design and management through application, development, and implementation. Topics include: Database planning and organization, common database models, normalization, the total DBMS concept, logical and physical model design, program database strategies control and recovery, security and integrity, query application, and advanced database topics. Emphasis is placed on application assignments using SQL that encompass topics and concepts presented in the course. (45/0/0/0)

INFO 2330 Database Concepts, Design and Application 4 credits

A study of database theory, design and management through application, development and implementation. Topics include: Database planning and organization, common database models, normalization, the total DBMS concept, logical and physical model design, program database strategies control and recovery, security and integrity, query application, and advanced database topics. Emphasis is placed on application assignments using SQL that encompass topics and concepts presented in the course. (45/45/0/0)

INFO 2400 Advanced Web Programming 4 credits

Participants will create dynamic web pages, services, and applications using a variety of software tools. Emphasis will be placed upon proper construction and utilization of AJAX 2.0 technologies. Students will design, write, and debug programs. Prerequisite: INFO 1420 (45/45/0/0)

INFO 2450 Programming in COBOL 3 credits

An introductory study of programming in the COBOL language. Topics include: structured program design, divisions of a COBOL program, data item descriptions, record descriptions, arithmetic verbs, verbs to implement the three basic control structures, single and multiple control breaks, tables and arrays, basic screen I/O, data validation, file maintenance using indexed sequential files, modification of existing programs, writing pseudo code and use of the debugger. Students will design, code, test, and debug programs. Prerequisite: INFO 1150 (30/15/0/0)

INFO 2500 Programming in C++ 3 credits

A study of programming in the C++ language. Topics include: data types, arithmetic, text screen I/O, data conversions, statements to implement the three basic structures of programming, preprocessor, user-defined functions, scope and classes of variables, arrays, strings, structures, unions, memory allocation, disk files, classes, inheritance, and polymorphism. Students will design, code, test, and debug programs. (45/0/0/0)

INFO 2550 Programming in JAVA 4 credits

A study of programming in the JAVA language. Topics include fundamental data types, classes, applets, graphics, decisions, iterations, methods, objectives, input, testing and debugging, inheritance, interfaces, events, arrays, vectors, graphical user interfaces, streams, exceptions, object oriented design,

algorithms, introduction to data structures, linked lists, binary search trees, multithreading, animation, and SQL for JAVA. Students will design, code, test, and debug programs utilizing both PC Windows based and AS 400 operating systems. Prerequisite: INFO 1420 OR INFO 2500 (45/45/0/0)

INFO 2600 Data Communications 3 credits

This course provides students with the skills to acquire knowledge in Inter and Intranet technologies. Topics include: network fundamentals, applications, security, recovery, network components, and emerging topics. Prerequisite: INFO 1020 (45/0/0/0)

INFO 2610 Computer Support Technology 3 credits

This course develops advanced troubleshooting skills to prepare the student for industry certification. Students will learn DOS commands and Windows operating system installation and configuration, along with troubleshooting and connectivity of internal and external devices that are used in today's industry. Prerequisite: INFO 1600 AND INFO 1610 (30/15/0/0)

INFO 2650 Network Servers 3 credits

This course is an introduction to network server operating systems and their most commonly used roles, features, and services. Students will gain experience in server installation, configuration, and management. Specific areas of study include remote access, virtualization, directory services, DNS, file & print services, group policy, and DHCP. (45/0/0/0)

INFO 2700 Cisco Networking I 4 credits

This course is an introduction into computer networking. It uses Cisco's Networking Academy Program-CNAP curriculum and covers the first semester of the CNAP. The CNAP teaches networking basics and is intended to be a preparatory program for the Cisco Certified Network Associate-CCNA Exam. The concepts covered in this course are networking terminology and protocols, LAN basics, the OSI model layers, network cabling, network topologies, IP addressing, and basic networking standards. (45/15/0/0)

INFO 2710 Cisco Networking II 4 credits

This course is the second in a series of courses covering computer networking. It uses Cisco's Networking Academy Program-CNAP curriculum and covers the second semester of the CNAP. The CNAP teaches networking basics and is intended to be a preparatory program for the Cisco Certified Network Associate- CCNA Exam. The concepts covered in this course are introductory WAN concepts, basic router operation, router configuration, router components and IOS images, details of IP addressing, and routing protocols. Prerequisite: INFO 2700 (MAY BE TAKEN CONCURRENTLY) (45/15/0/0)

INFO 2720 Principles of Information Security 3 credits

This course presents an in-depth exposure of the current risks and threats to an organization's data. Methods of auditing and safeguarding critical electronic assets will be discussed. Historical background of various types of security breaches and theoretical vulnerabilities for information security in businesses will be included in the curriculum. (45/0/0/0)

INFO 2730 Information Security Lab 1 credit

This course allows students to apply the basics of their introductory security knowledge in a hands-on environment with detailed exercises using a computer operating system. Coverage includes scanning, operating system vulnerability analysis and resolution, firewalls, security maintenance, forensics, and more. Full versions of security software will be included with the course and training using this software will be provided. (0/45/0/0)

INFO 2750 Cisco Networking III 4 credits

This course is the third in a series of courses covering computer networking. It uses Cisco's Networking Academy Program-CNAP curriculum and covers semester 3 of the CNAP. The CNAP teaches networking basics and is intended to be a preparatory program for the Cisco Certified Networking Associate-CCNA Exam. The concepts covered in this course are the basics of classless routing, the intermediate level routing protocols, switch configuration, LAN design, Virtual LANs, and switch protocols. Prerequisite: INFO 2710 (45/30/0/0)

INFO 2760 Cisco Networking IV 4 credits

This course is the fourth in a series of courses covering computer networking. It uses Cisco's Networking Academy Program-CNAP curriculum and covers semesters 4 of the CNAP. The CNAP teaches networking basics and is intended to be a preparatory program for the Cisco Certified Networking Associate-CCNA exam. The concepts covered in this course are IP Address scaling using NAT; and also the standards and protocols of WANs such as PPP, ISDN, and Frame Relay. Network management issues are also discussed. Prerequisite: INFO 2750 (MAY BE TAKEN CONCURRENTLY) (45/30/0/0)

INFO 2800 CompTIA Security+ Certification 1 credit

This course will prepare students to pass the CompTIA Security+ certification. CompTIA Security+ not only ensures that candidates will apply knowledge of security concepts, tools, and procedures to react to security incidents; it ensures that security personnel are anticipating security risks and guarding against them. (15/0/0/0)

Journalism (JOUR)

JOUR 1010 Introduction to Mass Media 3 credits

An introduction to the history and technology of Mass Media. The history of print, radio, television, recorded music and the internet will be introduced along with a study of advertising, ethics, social impact, new technologies, government regulation and the future of media. Students are also introduced to audio and video editing tools in an effort to create projects such as podcasts and music videos. (45/0/0/0)

JOUR 1150 Applied Journalism I 3 credits

Students may receive one to three hours credit per semester as a member of the college newspaper staff, as arranged with the instructor. Prerequisite: JOUR 1200 (30/45/0/0)

JOUR 1160 Applied Journalism II 3 credits

Continuation of JOUR1150. Students may receive one to three hours of credit per semester as a member of the college newspaper staff, as arranged with the instructor. Prerequisite: JOUR 1150 WITH MIN. GRADE OF C (30/45/0/0)

JOUR 1200 Writing for Print and Digital Media 3 credits

Course provides instruction in the various writing styles and techniques required of mass media in the digital age. Students will gain experience in writing for broadcast, print and web media. Some specific areas of focus will be Associated Press Style guidelines, writing clear, precise and accurate news and feature copy, fundamental graphic design principles, copyright issues, and use of editing and layout software. (45/0/0/0)

JOUR 2170 Applied Journalism III 3 credits

Continuation of JOUR1160. Students may receive one to three hours of credit per semester as a member of the college newspaper staff, as arranged with the instructor. Prerequisite: JOUR 1160 WITH MIN. GRADE OF C (30/45/0/0)

JOUR 2180 Applied Journalism IV 3 credits

Continuation of JOUR 2170. Students may receive one to three hours of credit per semester as a member of the college newspaper staff, as arranged with the instructor. Prerequisite: JOUR 2170 WITH MIN. GRADE OF C (30/45/0/0)

Leadership (LEAD)

LEAD 1010 Introduction to Community Leadership 3 credits

The course provides an overview of core competencies for community leadership. Students will be introduced to a variety of topics and speakers thus enhancing their understanding of effective leadership, cultural dynamics, and the resources necessary to sustain and revitalize a community. Students will study effective techniques for framing ideas, how to build and use social capital, and how to mobilize resources. This course challenges each student to select a community and design a community engagement strategy. (45/0/0/0)

Learning Skills (LNSK)

LNSK 1000 Study Skills for College 1 credit

Presents techniques that foster success in academic life. Topics include learning styles; study strategies to improve reading, memory, note-taking and test-taking; time management and organization; and physical and emotional well-being. (15/0/0/0)

LNSK 1010 First Year Experience 2 credits

Successful transition to college happens by design, not accident. Increase your likelihood of attaining and maintaining academic personal, and career success in this engaging and rewarding class. Presents techniques that foster success in college and in life. (30/0/0/0)

Library Science (LIBR)

LIBR 1310 Library Orientation And Usage 1 credit

General course in the use of books and libraries for all college students. Emphasizes locating and using the automated card catalog, on-line databases, and reference materials. (15/0/0/0)

Machining and Manufacturing Automation (INDT)

INDT 1015 Introduction to Manufacturing 2 credits

Introduction to Manufacturing is a broad exploratory course that introduces students to 21st century manufacturing concepts. The course is designed to provide instruction in the commonalities of theory and skills associated with production basics in a variety of branches of the manufacturing industry. A strong sense of personal effectiveness and responsibility, team work, communication, and respect is emphasized. Shop floor etiquette, workplace cleanliness, safety and health, and common powered and non-powered hand tools will be covered. Students will further investigate career pathways and job searching techniques in relation to area employers. (30/0/0/0)

INDT 1025 Introduction to Industrial Safety 2 credits

This course covers OSHA policies, procedures, and standards, as well as general safety and health principles. Topics include the scope and application of the OSHA general industry standards. Special emphasis is placed on those topics that are required in the 10- hour program as well as on those that are the most hazardous, using OSHA standards as a guide. In addition, students will complete the AHA Heartsaver critical skills needed to respond to and manage a first aid, choking, or sudden cardiac arrest emergency through CPR and AED usage. (30/0/0/0)

INDT 1030 Boiler Fundamentals I 2 credits

This course provides familiarization and general operations of boilers. (30/0/0/0)

INDT 1035 Basic Boiler Fundamentals 1 credit

This course provides familiarization and general operations of boilers. (15/0/0/0)

INDT 1040 Industrial Process Dynamics 2 credits
This course is an introduction to the basic principles of industrial physics that are frequently encountered in the work place. Principles of mass, velocity, flow, temperature, pressure, heat, gases, liquids, solids, fluid systems, energy, work, power, torque and heat energy transfer are covered. (30/0/0/0)

INDT 1055 Print Reading for the Industrial Trades 2 credits
This introductory course will instruct students in the fundamentals of blueprint reading, piping and instrumentation diagrams (P&ID's) and basic electrical diagrams. The course introduces students to reading and interpreting machine shop symbols, welding blueprints, and working drawings used in the industrial trades. The course focuses on dimension, shape, fabrication, and assembly. (30/0/0/0)

INDT 1060 Machinist Fundamentals I 3 credits
Basic machinist theory required for simple lathe, milling machine, and grinding operations. Classroom theory on measuring and laying out metals, sawing, filing, drilling, reaming, threading, and grinding. (45/0/0/0)

INDT 1065 Manufacturing Technologies and Measurement 2 credits
This course will enable the student to apply basic measurement skills, system calibration skills, measurement system analysis, and become familiar with the various tools utilized in the manufacturing industry. Students will study manufacturing processes and properties of materials, the behavior of materials, and the advantages and disadvantages of types of materials in an industrial setting. (30/0/0/0)

INDT 1070 Introduction to Welding 3 credits
Introduction to arc stick and oxyacetylene welding, including study of arc filler metals, application, classification, and related arc processes. Theory of arc flat, vertical, horizontal and overhead welding positions and oxyacetylene cutting, brazing and fusion welding on pipe and mild steel. Corequisite: INDT1075 (45/0/0/0)

INDT 1075 Welding Fundamentals Lab 2 credits
Lab experience for INDT 1070. Extensive practice in arc welding on ferrous metals in all welding positions. Samples are prepared and inspected. Documentation via weld symbols is required. Safe use of oxy-acetylene torch will be practiced. Corequisite: INDT1070 (0/90/0/0)

INDT 1080 Precision Measurement 2 credits
The study of graduated measurement as it applies to manufacturing. Applications of instruments to determine size, distance, temperature, time, flow, moisture, and pressure. (30/0/0/0)

INDT 1085 Industrial Maintenance Fundamentals 3 credits
This course covers the introductory principles of operating and maintaining most types of equipment found in an industrial environment. Providing a sound foundation of basic knowledge, the course begins with a general introduction to hand tools, fasteners and basic mechanical principles-progressing through belt and chain drives, couplings and basic mechanical drive alignment. Emphasis will be placed on providing the technician with a thorough grounding in industrial mechanics and maintenance. (45/0/0/0)

INDT 1090 Introductory Machining 0.5 credits
This course introduces non-machinists to machining operations in the use of lathes, milling, surface grinding, cutting, drilling, and tapping. (7.5/0/0/0)

INDT 1095 Introductory Machining Lab 1 credit
This course exposes non-machinists to the procedures and hands-on use of lathes, milling, surface grinding, cutting, drilling, and tapping. Corequisite: INDT1090 (0/45/0/0)

INDT 1140 Metrology 2 credits
Studies the principles of measurement and calibration as applicable to quality assurance and quality control. Students will gain knowledge in determining appropriate levels of accuracy for inspection, understand datum identification, and gain skills in the interpretation of GT&D. (30/0/0/0)

INDT 1150 Machining Fundamentals 2 credits
This course provides a fundamental understanding of the concepts and applications of horizontal and vertical band saws, vertical knee mills, manual lathers, grinders/abrasives, and drill presses. Corequisite: INDT1160 (30/0/0/0)

INDT 1160 Machining Fundamentals Lab 2 credits
Practical application of horizontal and vertical band saws, vertical knee mills, manual lathers, grinders/abrasives, and drill presses. Corequisite: INDT1150 (0/90/0/0)

INDT 1170 Introduction to Total Quality Management 2 credits
This course introduces students to the concepts, tools, and techniques used in the management and measurement of quality, productivity, and competitiveness in an industrial environment. The course not only introduces students to the concepts of quality assurance and quality control, but also connects leadership, supplier-customer relationships, employee engagement, data collection and analysis, productivity, statistical process control, and other topics to quality and customer satisfaction. Students gain practical experience in decision-making and basic troubleshooting techniques in relation to quality. (30/0/0/0)

INDT 1180 Computerized Manufacturing Technologies Theory 1 credit
The Computerized Manufacturing Technologies Theory course introduces students to the high-tech, innovative nature of modern manufacturing by exposing students to the fundamentals of computerized manufacturing equipment. Students will gain a basic understanding of CNC equipment operation, tooling, and introductory programming. Students will further be introduced to robotics and its use for materials handling and assembly operations. Prerequisite: INDT 1150 Corequisite: INDT1190 (15/0/0/0)

INDT 1190 Computerized Manufacturing Technologies Lab 1 credit
This hands-on course provides training in the setup, operation, and basic programming of computer numerical control (CNC) machines and robotic systems. Students will apply knowledge in tool selection, using G codes to program the equipment, and establish speed and feed rates for differing applications and materials. Students will further be introduced to the functionality, operation, and troubleshooting of robotic systems. Prerequisite: INDT 1160 Corequisite: INDT1180 (0/45/0/0)

INDT 1200 Fabrication Fundamentals Lab 1 credit
The course introduces basic metal fabrication principles and practices. Students gain practical experience in the identification, maintenance, setup, and use of precision measuring tools, fasteners, hand tools, power tools, as well as forming, cutting, and finishing equipment used in metal fabrication. (0/45/0/0)

INDT 1230 Manufacturing Technology Applications 1 credit
This is a lab applications course designed to instruct students in the use of advanced technology applications. This course will address the interface of CAD-CAM (computer design – computer aided manufacturing) with CNC machining (computerized numerical control machining), the applications of 4th Axis programming and machining, and robotic integration applications with CNC machines. (0/45/0/0)

INDT 2030 SMAW Pipe Welding and Fitting Theory 1 credit
Theory class to explain approach to lab objectives instructed in INDT 2040. Extensive practice in SMAW arc welding on ferrous pipe in all welding positions. Coupons are prepared and inspected. Safe use of oxy-acetylene torch will be practiced. Focus on preparation for 6G Qualification. (15/0/0/0)

INDT 2040 SMAW Pipe Welding and Fitting Lab 2 credits
Extensive practice in SMAW arc welding on ferrous pipe in all welding positions. Coupons are prepared and inspected. Safe use of oxy-acetylene torch will be practiced. Focus on preparation for 6G Qualification. Corequisite: INDT2030 (0/90/0/0)

Mathematics (MATH)

MATH 0900 Prescriptive Mathematics I 1 - 2 credits
Provides a survey and review of necessary mathematics skills. Any student can take the course, for it meets two distinct needs. The course could provide arithmetic skills necessary for success in other math courses, or it could provide the student with a survey of mathematics topics of his or her interest. The course is presented on an individualized basis; an Individual Educational Plan is developed for each student. Prerequisite: APPROPRIATE PLACEMENT SCORE (30/0/0/0)

MATH 0910 Prescriptive Mathematics II 1 - 2 credits
This course is a continuation of MATH 0900. It provides a survey and review of mathematics skills necessary for success in another math course, or it could provide the student with a survey of mathematics topics of his or her interest. The course is presented on an individual basis; and Individual Educational Plan is developed for each student. Prerequisite: MATH 0900 (30/0/0/0)

MATH 0930 Individualized Mathematics I 1 - 2 credits
This course provides academic support to the student. The student must be enrolled in a mathematics-based course or have permission from the instructor. (30/0/0/0)

MATH 0935 Individualized Mathematics II 1 - 2 credits
This course is a continuation of MATH 0930. It provides academic support to the student. The student must be enrolled in a mathematics-based course or have permission from the instructor. Prerequisite: MATH 0930 (30/0/0/0)

MATH 0940 Pre-Algebra 3 credits
Begins to develop pre-algebra skills necessary for success in specific fields and course of study. The topics covered include numeration, measurement and geometry, ratios and proportions, percentages, signed numbers, and an introduction to algebra. Prerequisite: APPROPRIATE PLACEMENT SCORE (45/0/0/0)

MATH 0975 Math Literacy Support 2 credits
Math Literacy Co-Requisite examines the prerequisite topics that are needed to support student success in the Math Literacy course. Topics covered will include numeracy, proportional reasoning, algebraic reasoning, probabilistic reasoning, and quantitative reasoning in personal finance and civic life. Corequisite: MATH1075 (30/0/0/0)

MATH 1010 Math for Elementary Teachers 3 credits
Designed for the elementary education major. Covers general development of the real number system, number systems other than base ten, set theory, introductory algebra, and elementary probability and statistics. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 1045 WITH MIN. GRADE OF C (45/0/0/0)

MATH 1015 Geometry for Elementary Teachers 3 credits
Designed for students in elementary education. Covers development of geometry including reasoning and proof, construction, lines, angles, polygons, area, volume,

Pythagorean theorem, basic trigonometry, measurement and transformations, as well as probability and data analysis. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 1045 WITH MIN. GRADE OF C (45/0/0/0)

MATH 1020 Technical Mathematics I 3 credits
This course provides the math skills required in career/technical fields. The course includes a review of arithmetic operations, exponents, algebraic operations, and right triangle trigonometry with emphasis placed applications. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 0940 WITH MIN. GRADE OF C (45/0/0/0)

MATH 1025 Math for Health Care Professionals 3 credits
Designed for nursing and health care profession majors. Covers general development of skills involving computations of fractions, decimals, ratios, percents, and basic algebra equations. Basic systems of measurement are used to calculate dosages between metric, apothecary and household systems. Basic mathematical computations are used to reconstitute medications and prepare irrigating solutions. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 0940 WITH MIN. GRADE OF C (45/0/0/0)

MATH 1045 Elementary Algebra 3 credits
This course begins to develop algebra skills used to simplify expressions, solve equations and inequalities, solve systems of equations, graph equations, perform operations with polynomials, factor polynomials, and simplify rational and radical expressions. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 0940 WITH MIN. GRADE OF C (45/0/0/0)

MATH 1060 Technical Mathematics II 3 credits
Continuation of MATH 1020 developing skills in algebra, geometry, and trigonometry for success in specific vocational and technical fields. Numerical methods presented in MATH 1020 are supplemented by geometric methods. Use of a scientific calculator still plays a prominent role in the course. The topics to be covered include algebraic operations and properties, equations and formulas, graphing, geometry and constructions, and trigonometry. Prerequisite: MATH 1020 (45/0/0/0)

MATH 1075 Math Literacy 4 credits
Math Literacy is a one semester course for non-math and non-science majors integrating numeracy, proportional reasoning, algebraic reasoning and functions. Students will develop conceptual and procedural tools that support the use of key mathematical concepts in a variety of contexts. Throughout the course, college success content will be integrated with mathematical topics. Credit earned does not count toward any degree, nor does it transfer. Upon successful completion of the course, students may take Foundations of Math, Statistics, or Intermediate Algebra. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 0940 WITH MIN. GRADE OF C (60/0/0/0)

MATH 1100 Topics and Ideas In Mathematics 3 credits
This course is designed to give the students a survey of mathematics topics including set theory, logic, voting methods, financial calculations and management graph theory, probability and statistics. Main emphasis will be the application of problem solving methods while studying topics. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 1045 WITH MIN. GRADE OF C (45/0/0/0)

MATH 1140 Intermediate Algebra 4 credits
Development of the real numbers as a working replacement set for equations and expressions. Main emphasis is placed on algebraic operations related to polynomials, rational expressions and equations, radical expressions and equations, exponential expressions, and logarithmic expressions. Concepts of relations and functions are introduced allowing for further study in math. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 1045 WITH MIN. GRADE OF C (60/0/0/0)

MATH 1150 College Algebra 3 credits

This course is the study of relations, functions and their graphs, equations and inequalities, polynomial and rational functions, exponential and logarithmic functions, systems of equations and inequalities. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 1140 WITH MIN. GRADE OF C (45/0/0/0)

MATH 1220 Trigonometry 3 credits

Study of circular and trigonometric functions, trigonometric identities, trigonometric equations, solutions of triangles, inverse trigonometric functions, graphs, complex numbers. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 1140 WITH MIN. GRADE OF C (45/0/0/0)

MATH 1600 Analytic Geometry and Calculus I 5 credits

This course is a study of analytical geometry and single variable calculus. Topics includes limits, continuity, derivatives, applications of derivatives, integrals, and applications of integrals. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 1150 WITH MIN. GRADE OF C AND MATH 1220 WITH MIN. GRADE OF C OR MATH 1200 WITH MIN. GRADE OF C (75/0/0/0)

MATH 2005 Calculator Calculus 0.5 credits

Covers basic operation of TI-84+ Silver family graphing calculator as needed for Calculus. Topics to include basic graphing, setting windows, zooming, tracing, table function, evaluating functions, memory retrieval, use of various menus and some programming. (7.5/0/0/0)

MATH 2010 Analytic Geometry and Calculus II 5 credits

Covers differentiation and integration of inverse trigonometric and hyperbolic functions. It also looks at techniques of integration, infinite series, select topics from analytic geometry, and polar coordinates. Prerequisite: MATH 1600 WITH MIN. GRADE OF C OR MATH 2000 WITH MIN. GRADE OF C (75/0/0/0)

MATH 2020 Analytic Geometry and Calculus III 5 credits

Covers multivariate and vector calculus, with an introduction to differential equations. Prerequisite: MATH 2010 WITH MIN. GRADE OF C (75/0/0/0)

MATH 2050 Applied Business Calculus 3 credits

A realistic approach to calculus that will have an impact on the managerial, social, or life science student presenting the fundamentals of calculus intuitively, not theoretically. Emphasis is on examples and applications. Major topics are functions, derivatives, techniques of differentiation, exponential and logarithmic functions, integration, and techniques of integration. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 1150 WITH MIN. GRADE OF C OR MATH 1200 WITH MIN. GRADE OF C (45/0/0/0)

MATH 2100 Ordinary Differential Equations 3 credits

This course covers first-order and second-order methods for ordinary differential equations, separation of variables, homogeneous equations, power series methods, Laplace transforms, and linear differential equations. The course also covers matrix methods and makes use of a Computer Algebra System. Prerequisite: MATH 2010 WITH MIN. GRADE OF C (45/0/0/0)

MATH 2170 Applied Statistics 3 credits

The course is an introduction to basic probability and statistical methods that are used in a wide variety of disciplines. Topics include descriptive statistics, probability distributions, sampling distributions, methods of statistical inference and bivariate relationships. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 1140 WITH MIN. GRADE OF C OR MATH 1075 WITH MIN. GRADE OF C (45/0/0/0)

Music (MUSC)

MUSC 1010 Introduction to Music 3 credits

An introduction and overview of the history of Western art music, from the middle ages to modern times. Includes the elements of music, historical style periods, major composers, and selected works. (45/0/0/0)

MUSC 1030 Improvisational Techniques I Brass 1 credit

Individual or group instruction in brass. Structured for the learning and performance of jazz and related styles. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1031 Improvisational Techniques I Guitar and Strings 1 credit

Individual or group instruction in guitar and strings. Structured for the learning and performance of jazz and related styles. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1032 Improvisational Techniques I Percussion 1 credit

Individual or group instruction in percussion. Structured for the learning and performance of jazz and related styles. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1033 Improvisational Techniques I Piano 1 credit

Individual or group instruction in piano. Structured for the learning and performance of jazz and related styles. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1034 Improvisational Techniques I Voice 1 credit

Individual or group instruction in voice. Structured for the learning and performance of jazz and related styles. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1035 Improvisational Techniques I Woodwinds 1 credit

Individual or group instruction in woodwinds. Structured for the learning and performance of jazz and related styles. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1040 Improvisational Techniques II Brass 1 credit

Continued development of improvisational skills in brass. Students may register for this class four times. Prerequisite: MUSC 1030 (15/0/0/0)

MUSC 1041 Improvisational Techniques II Guitar and Strings 1 credit

Continued development of improvisational skills in guitar and strings. Students may register for this class four times. Prerequisite: MUSC 1031 (15/0/0/0)

MUSC 1042 Improvisational Techniques II Percussion 1 credit

Continued development of improvisational skills in percussion. Students may register for this class four times. Prerequisite: MUSC 1032 (15/0/0/0)

MUSC 1043 Improvisational Techniques II Piano 1 credit

Continued development of improvisational skills in piano. Students may register for this class four times. Prerequisite: MUSC 1033 (15/0/0/0)

MUSC 1044 Improvisational Techniques II Voice 1 credit

Continued development of improvisational skills in voice. Students may register for this class four times. Prerequisite: MUSC 1034 (15/0/0/0)

MUSC 1045 Improvisational Techniques II Woodwinds 1 credit
Continued development of improvisational skills in woodwinds. Students may register for this class four times. Prerequisite: MUSC 1035 (15/0/0/0)

MUSC 1051 Applied Music Basics I Brass 1 credit
Individual instruction in brass. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1052 Applied Music Basics I Percussion 1 credit
Individual instruction in percussion. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1053 Applied Music Basics I Piano 1 credit
Individual instruction in piano. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1054 Applied Music Basics I Strings 1 credit
Individual instruction in strings. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1055 Applied Music Basics I Voice 1 credit
Individual instruction in voice. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1056 Applied Music Basics I Woodwinds 1 credit
Individual instruction in woodwinds. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Permission of instructor required. (15/0/0/0)

MUSC 1061 Applied Music Basics II Brass 1 credit
A more advanced individual instruction in brass. Structured for the beginning student. Class includes fundamental performance techniques and methods for the discipline. Students may register for this class four times. Prerequisite: MUSC 1051 (15/0/0/0)

MUSC 1062 Applied Music Basics II Percussion 1 credit
Individual instruction in percussion. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Prerequisite: MUSC 1052 (15/0/0/0)

MUSC 1063 Applied Music Basics II Piano 1 credit
Individual instruction in piano. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Prerequisite: MUSC 1053 (15/0/0/0)

MUSC 1064 Applied Music Basics II Strings 1 credit
Individual instruction in strings. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Prerequisite: MUSC 1054 (15/0/0/0)

MUSC 1065 Applied Music Basics II Voice 1 credit
Individual instruction in voice. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Prerequisite: MUSC 1055 (15/0/0/0)

MUSC 1066 Applied Music Basics II Woodwinds 1 credit
Individual instruction in woodwinds. Structured for the beginning student. Class includes performance techniques and methods for the discipline. Students may register for this class four times. Prerequisite: MUSC 1056 (15/0/0/0)

MUSC 1070 Individual Music Lessons I Baritone and Tuba 1 credit
Individual instruction in baritone and tuba. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1071 Individual Music Lessons I Clarinet 1 credit
Individual instruction in clarinet. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1072 Individual Music Lessons I Flute 1 credit
Individual instruction in flute. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1073 Individual Music Lessons I French Horn 1 credit
Individual instruction in French horn. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1074 Individual Music Lessons I Guitar 1 credit
Individual instruction in guitar. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1075 Individual Music Lessons I Oboe and Bassoon 1 credit
Individual instruction in oboe and bassoon. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1076 Individual Music Lessons I Percussion 1 credit
Individual instruction in percussion. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1077 Individual Music Lessons I Piano 1 credit
Individual instruction in piano. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1078 Individual Music Lessons I Saxophone 1 credit
Individual instruction in saxophone. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1079 Individual Music Lessons I Strings 1 credit
Individual instruction in strings. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1080 Individual Music Lessons I Trombone 1 credit
Individual instruction in trombone. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1081 Individual Music Lessons I Trumpet 1 credit
Individual instruction in trumpet. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1082 Individual Music Lessons I Voice 1 credit
Individual instruction in voice. Structured to meet the needs of students. Learning performance oriented. Students may register for this class four times. (15/0/0/0)

MUSC 1110 Individual Music Lessons II Baritone and Tuba 1 credit
Continued development of individual performance skills in baritone and tuba. Students may register for this class four times. Prerequisite: MUSC 1070 (15/0/0/0)

MUSC 1111 Individual Music Lessons II Clarinet 1 credit
Continued development of individual performance skills in clarinet. Student may register for this class four times. Prerequisite: MUSC 1071 (15/0/0/0)

MUSC 1112 Individual Music Lessons II Flute 1 credit
Continued development of individual performance skills in flute. Student may register for this class four times. Prerequisite: MUSC 1072 (15/0/0/0)

MUSC 1113 Individual Music Lessons II French Horn 1 credit
Continued development of individual performance skills in French horn. Student may register for this class four times. Prerequisite: MUSC 1073 (15/0/0/0)

MUSC 1114 Individual Music Lessons II Guitar 1 credit
Continued development of individual performance skills in guitar. Student may register for this class four times. Prerequisite: MUSC 1074 (15/0/0/0)

MUSC 1115 Individual Music Lessons II Oboe and Bassoon 1 credit
Continued development of individual performance skills in oboe and bassoon. Student may register for this class four times. Prerequisite: MUSC 1075 (15/0/0/0)

MUSC 1116 Individual Music Lessons II Percussion 1 credit
Continued development of individual performance skills in percussion. Student may register for this class four times. Prerequisite: MUSC 1076 (15/0/0/0)

MUSC 1117 Individual Music Lessons II Piano 1 credit
Continued development of individual performance skills in piano. Student may register for this class four times. Prerequisite: MUSC 1077 (15/0/0/0)

MUSC 1118 Individual Music Lessons II Saxophone 1 credit
Continued development of individual performance skills in saxophone. Student may register for this class four times. Prerequisite: MUSC 1078 (15/0/0/0)

MUSC 1119 Individual Music Lessons II Strings 1 credit
Continued development of individual performance skills in strings. Student may register for this class four times. Prerequisite: MUSC 1079 (15/0/0/0)

MUSC 1120 Individual Music Lessons II Trombone 1 credit
Continued development of individual performance skills in trombone. Student may register for this class four times. Prerequisite: MUSC 1080 (15/0/0/0)

MUSC 1121 Individual Music Lessons II Trumpet 1 credit
Continued development of individual performance skills in trumpet. Student may register for this class four times. Prerequisite: MUSC 1081 (15/0/0/0)

MUSC 1122 Individual Music Lessons II Voice 1 credit
Continued development of individual performance skills in voice. Student may register for this class four times. Prerequisite: MUSC 1082 (15/0/0/0)

MUSC 1130 College Chorus 1 credit
Mixed vocal ensemble singing traditional to modern music. Studio recording, soloists, and special features included. Performs for a variety of on-campus and off-campus events. Tours as scheduled. Open registration. Students may register for this class four times. (0/30/0/0)

MUSC 1140 Swing Choir 1 credit
Select mixed vocal group singing all popular music forms. Studio recording, soloists, and special selections included. Performs for a variety of on-campus and off-campus performances, and tours are scheduled. Students may register

for this class four times. Audition and permission of instructor required. Student must also enroll in individual voice lessons. (0/30/0/0)

MUSC 1150 Vocal Ensemble 1 credit
Singing groups designed to meet the needs and abilities of the students. Music chosen according to the level and function of the group. Studio recording, on-campus and off-campus performances, and tours as scheduled. Students may register for this class four times. Audition and permission of instructor required. Student must also enroll in individual voice lessons. (0/30/0/0)

MUSC 1160 Jazz Band I 1 credit
Select jazz band playing all popular music forms. Professional arrangements. Studio recording, soloists, special features included. Performs for a variety of on-campus and off-campus events. Tours scheduled. Students may register for this class four times. Audition and permission of instructor required. Student must also enroll in individual instrumental lessons or improvisational techniques. (0/30/0/0)

MUSC 1170 Jazz Band II 1 credit
Instrumental groups and jazz bands designed to meet the needs and abilities of students. Studio recording, soloists, special features included. Performs for a variety of on-campus and off-campus events. Tours scheduled. Students may register for this class four times. Audition and permission of instructor required. (0/30/0/0)

MUSC 1180 College and Community Concert Band 1 credit
Performs traditional to modern music. Studio recording, soloists, and special features included. Performs for a variety of on-campus and off-campus events. Tours as scheduled. Open registration. Students may register for this class four times. (0/30/0/0)

MUSC 1190 College and Community Orchestra 1 credit
Instrumental group designed to meet the needs and abilities of the students. Music chosen according to the level and ability of the group. The group will perform for a variety of on-campus and off-campus events as designated by the instructor. Students may register for this class four times. (0/30/0/0)

MUSC 1195 Men's Ensemble 1 credit
A men's vocal ensemble singing traditional to modern music. Studio recording, soloists, and special features included. Performs a variety of on-campus and off-campus events. Tours as scheduled. Students may register for this class four times. Permission of instructor required. Student must also enroll in individual voice lessons. Corequisite: MUSC1130 (0/30/0/0)

MUSC 1196 Women's Ensemble 1 credit
A women's vocal ensemble singing traditional to modern music. Studio recording, soloists, and special features included. Performs a variety of on-campus and off-campus events. Tours as scheduled. Students may register for this class four times. Permission of instructor required. Student must also enroll in individual voice lessons. Corequisite: MUSC1130 (0/30/0/0)

MUSC 1200 Foundations of Music Theory 3 credits
Introduction to basic music writing skills. A learning experience that applies to all types and styles of music. (45/0/0/0)

MUSC 1220 Music Theory I 3 credits
Beginning development of music writing skills. A learning experience with background needed in composing, arranging, and understanding music construction. Applies to all types of music. Corequisite: MUSC1250 (45/0/0/0)

MUSC 1225 Introduction to Music Technology 2 credits
An introduction to music technology software with emphasis on its use in music education and music production. Prerequisite: MUSC 1200 (30/0/0/0)

MUSC 1230 Music Theory II 3 credits
Continued development of music theory skills. Prerequisite: MUSC 1220 WITH MIN. GRADE OF C AND MUSC 1250 WITH MIN. GRADE OF C Corequisite: MUSC1260 (45/0/0/0)

MUSC 1250 Ear Training I and Sight Singing 2 credits
Beginning the development of music performance and analysis skills. A learning experience with background needed in performance, understanding, and creation of music. Applied to all types of music. Corequisite: MUSC1220 (30/0/0/0)

MUSC 1260 Ear Training II and Sight Singing 2 credits
Continued development of music performance and analysis skills. Prerequisite: MUSC 1250 WITH MIN. GRADE OF C Corequisite: MUSC1230 (30/0/0/0)

MUSC 1940 Jazz Literature and Performance I 1 credit
Highly select jazz band playing all the popular jazz styles. Professional arrangements. Group and solo performance and individual development stressed. Performs for a variety of professional events and studio recordings. Tours as scheduled. Associated with the Northeast Area Jazz Ensemble. Audition and permission of instructor required. (15/0/0/0)

MUSC 1950 Jazz Literature and Performance II 1 credit
Continued individual development and performance and membership in the Northeast Area Jazz Ensemble. Permission of instructor required. Prerequisite: MUSC 1940 (15/0/0/0)

MUSC 2030 Improvisational Techniques III Brass 1 credit
Continued development of individual improvisational skills in brass. Students may register for this class four times. Prerequisite: MUSC 1040 (15/0/0/0)

MUSC 2031 Improvisational Techniques III Guitar and Strings 1 credit
Continued development of individual improvisational skills in guitar and strings. Students may register for this class four times. Prerequisite: MUSC 1041 (15/0/0/0)

MUSC 2032 Improvisational Techniques III Percussion 1 credit
Continued development of individual improvisational skills in percussion. Students may register for this class four times. Prerequisite: MUSC 1042 (15/0/0/0)

MUSC 2033 Improvisational Techniques III Piano 1 credit
Continued development of individual improvisational skills in piano. Students may register for this class four times. Prerequisite: MUSC 1043 (15/0/0/0)

MUSC 2034 Improvisational Techniques III Voice 1 credit
Continued development of individual improvisational skills in voice. Students may register for this class four times. Prerequisite: MUSC 1044 (15/0/0/0)

MUSC 2035 Improvisational Techniques III Woodwinds 1 credit
Continued development of individual improvisational skills in woodwinds. Students may register for this class four times. Prerequisite: MUSC 1045 (15/0/0/0)

MUSC 2040 Improvisational Techniques IV Brass 1 credit
Continued development of individual improvisational skills in brass. Students may register for this class four times. Prerequisite: MUSC 2030 (15/0/0/0)

MUSC 2041 Improvisational Techniques IV Guitar and Strings 1 credit
Continued development of individual improvisational skills in guitar and strings. Students may register for this class four times. Prerequisite: MUSC 2031 (15/0/0/0)

MUSC 2042 Improvisational Techniques IV Percussion 1 credit
Continued development of individual improvisational skills in percussion. Students may register for this class four times. Prerequisite: MUSC 2032 (15/0/0/0)

MUSC 2043 Improvisational Techniques IV Piano 1 credit
Continued development of individual improvisational skills in piano. Students may register for this class four times. Prerequisite: MUSC 2033 (15/0/0/0)

MUSC 2044 Improvisational Techniques IV Voice 1 credit
Continued development of individual improvisational skills in voice. Students may register for this class four times. Prerequisite: MUSC 2034 (15/0/0/0)

MUSC 2045 Improvisational Techniques Woodwinds 1 credit
Continued development of individual improvisational skills in woodwinds. Students may register for this class four times. Prerequisite: MUSC 2035 (15/0/0/0)

MUSC 2070 Individual Music Lessons III Baritone and Tuba 1 credit
Continued development of individual performance skills in baritone and tuba. Students may register for this class four times. Prerequisite: MUSC 1110 (15/0/0/0)

MUSC 2071 Individual Music Lessons III Clarinet 1 credit
Continued development of individual performance skills in clarinet. Students may register for this class four times. Prerequisite: MUSC 1111 (15/0/0/0)

MUSC 2072 Individual Music Lessons III Flute 1 credit
Continued development of individual performance skills in flute. Students may register for this class four times. Prerequisite: MUSC 1112 (15/0/0/0)

MUSC 2073 Individual Music Lessons III French Horn 1 credit
Continued development of individual performance skills in French horn. Students may register for this class four times. Prerequisite: MUSC 1113 (15/0/0/0)

MUSC 2074 Individual Music Lessons III Guitar 1 credit
Continued development of individual performance skills in guitar. Students may register for this class four times. Prerequisite: MUSC 1114 (15/0/0/0)

MUSC 2075 Individual Music Lessons III Oboe and Bassoon 1 credit
Continued development of individual performance skills in oboe and bassoon. Students may register for this class four times. Prerequisite: MUSC 1115 (15/0/0/0)

MUSC 2076 Individual Music Lesson III Percussion 1 credit
Continued development of individual performance skills in percussion. Students may register for this class four times. Prerequisite: MUSC 1116 (15/0/0/0)

MUSC 2077 Individual Music Lessons III Piano 1 credit
Continued development of individual performance skills in piano. Students may register for this class four times. Prerequisite: MUSC 1117 (15/0/0/0)

MUSC 2078 Individual Music Lessons III Saxophone 1 credit
Continued development of individual performance skills in saxophone. Students may register for this class four times. Prerequisite: MUSC 1118 (15/0/0/0)

MUSC 2079 Individual Music Lessons III Strings 1 credit
Continued development of individual performance skills in strings. Students may register for this class four times. Prerequisite: MUSC 1119 (15/0/0/0)

MUSC 2080 Individual Music Lessons III Trombone 1 credit

Continued development of individual performance skills in trombone. Students may register for this class four times. Prerequisite: MUSC 1120 (15/0/0/0)

MUSC 2081 Individual Music Lessons III Trumpet 1 credit

Continued development of individual performance skills in trumpet. Students may register for this class four times. Prerequisite: MUSC 1121 (15/0/0/0)

MUSC 2082 Individual Music Lessons III Voice 1 credit

Continued development of individual performance skills in voice. Students may register for this class four times. Prerequisite: MUSC 1122 (15/0/0/0)

MUSC 2110 Individual Music Lessons IV Baritone and Tuba 1 credit

Continued development of individual performance skills in baritone and tuba. Students may register for this class four times. Prerequisite: MUSC 2070 (15/0/0/0)

MUSC 2111 Individual Music Lessons IV Clarinet 1 credit

Continued development of individual improvisational skills in clarinet. Students may register for this class four times. Prerequisite: MUSC 2071 (15/0/0/0)

MUSC 2112 Individual Music Lessons IV Flute 1 credit

Continued development of individual improvisational skills in flute. Students may register for this class four times. Prerequisite: MUSC 2072 (15/0/0/0)

MUSC 2113 Individual Music Lessons IV French Horn 1 credit

Continued development of individual improvisational skills in French horn. Students may register for this class four times. Prerequisite: MUSC 2073 (15/0/0/0)

MUSC 2114 Individual Music Lessons IV Guitar 1 credit

Continued development of individual improvisational skills in guitar. Students may register for this class four times. Prerequisite: MUSC 2074 (15/0/0/0)

MUSC 2115 Individual Music Lessons IV Oboe and Bassoon 1 credit

Continued development of individual improvisational skills in oboe and bassoon. Students may register for this class four times. Prerequisite: MUSC 2075 (15/0/0/0)

MUSC 2116 Individual Music Lessons IV Percussion 1 credit

Continued development of individual performance skills in percussion. Students may register for this class four times. Prerequisite: MUSC 2076 (15/0/0/0)

MUSC 2117 Individual Music Lessons IV Piano 1 credit

Continued development of individual performance skills in piano. Students may register for this class four times. Prerequisite: MUSC 2077 (15/0/0/0)

MUSC 2118 Individual Music Lessons IV Saxophone 1 credit

Continued development of individual performance skills in saxophone. Students may register for this class four times. Prerequisite: MUSC 2078 (15/0/0/0)

MUSC 2119 Individual Music Lessons IV Strings 1 credit

Continued development of individual performance skills in strings. Students may register for this class four times. Prerequisite: MUSC 2079 (15/0/0/0)

MUSC 2120 Individual Music Lessons IV Trombone 1 credit

Continued development of individual performance skills in trombone. Students may register for this class four times. Prerequisite: MUSC 2080 (15/0/0/0)

MUSC 2121 Individual Music Lessons IV Trumpet 1 credit

Continued development of individual performance skills in trumpet. Students may register for this class four times. Prerequisite: MUSC 2081 (15/0/0/0)

MUSC 2122 Individual Music Lessons IV Voice 1 credit

Continued development of individual improvisational skills in voice. Students may register for this class four times. Prerequisite: MUSC 2082 (15/0/0/0)

MUSC 2130 College Chorus II 1 credit

Continued study in mixed vocal ensemble singing traditional to modern music. Studio recording, soloists and special features included. Performs for a variety of on-campus and off-campus events. Tours as scheduled. Students may register for this class four times. Permission of instructor required. Prerequisite: MUSC 1130 (0/30/0/0)

MUSC 2140 Swing Choir II 1 credit

Continued study in select mixed vocal group singing of all popular music forms. Studio recording, soloists, and special selections included. Performs for a variety of on-campus and off-campus events. Tours are scheduled. Students may register for this class four times. Audition and permission of instructor required. Student must also enroll in individual voice lessons. Prerequisite: MUSC 1140 Corequisite: MUSC2130 (0/30/0/0)

MUSC 2150 Vocal Ensemble II 1 credit

Continued study in singing groups designed to meet the needs and abilities of the students. Music chosen according to the level and functions of the group. Studio recording, on-campus and off-campus performances, and tours are scheduled. Students may register for this class four times. Audition and permission of instructor required. Student must also enroll in individual voice lessons. Prerequisite: MUSC 1150 Corequisite: MUSC2130 (0/30/0/0)

MUSC 2160 Jazz Band III 1 credit

Continued study in select jazz band playing all popular music forms. Professional arrangements. Studio recording, soloists, special features included. Performs for a variety of on-campus and off-campus events. Tours scheduled. Students may register for this class four times. Audition and permission of instructor required. Student must also enroll in individual instrumental lessons or improvisational techniques. Prerequisite: MUSC 1160 (0/30/0/0)

MUSC 2170 Jazz Band IV 1 credit

Continued study in instrumental groups and jazz bands designed to meet the needs and abilities of students. Studio recording, soloists, special features included. Performs for a variety of on-campus and off-campus events. Tours scheduled. Students may register for this class four times. Audition and permission of instructor required. Prerequisite: MUSC 1170 (0/30/0/0)

MUSC 2180 College and Community Concert Band II 1 credit

Continued studies of performing traditional to modern music. Studio recording, soloists, and special features included. Performs for a variety of on-campus and off-campus events. Tours are scheduled. Students may register for this class four times. Permission of instructor required. Prerequisite: MUSC 1180 (0/30/0/0)

MUSC 2220 Music Theory III 3 credits
Includes the development of music writing and analysis skills as they pertain to all types of music arranging and composition including the use of altered chords, modulations and unconventional harmonies and melodies. Prerequisite: MUSC 1230 WITH MIN. GRADE OF C AND MUSC 1260 WITH MIN. GRADE OF C Corequisite: MUSC2250 (45/0/0/0)

MUSC 2230 Music Theory IV 3 credits
Includes development and use of melodic and harmonic composition skills in all forms of music, complete in-depth structural and harmonic analysis and development of personal creativity. Prerequisite: MUSC 2220 WITH MIN. GRADE OF C AND MUSC 2250 WITH MIN. GRADE OF C Corequisite: MUSC2260 (45/0/0/0)

MUSC 2250 Ear Training III and Sight Singing 2 credits
Includes sight singing in the treble, bass, alto and tenor clefs; major and minor modes; and melodies with the harmonic backgrounds of the principal chords. Study of singing modulations to related keys and modal melodies. Includes aural and keyboard study of superimposition, compound intervals, melodic and harmonic modulations. Also covers aural study of beats and their divisions and subdivisions. Prerequisite: MUSC 1230 WITH MIN. GRADE OF C AND MUSC 1260 WITH MIN. GRADE OF C Corequisite: MUSC2220 (30/0/0/0)

MUSC 2260 Ear Training IV and Sight Singing 2 credits
Includes vocal, aural and keyboard study of unusual and mixed meters, remote modulations, altered chords and ninth, eleventh, and thirteenth chords. Prerequisite: MUSC 2220 WITH MIN. GRADE OF C AND MUSC 2250 WITH MIN. GRADE OF C Corequisite: MUSC2230 (30/0/0/0)

MUSC 2350 Elementary School Music 3 credits
Development of creative skills and methods of teaching music in elementary schools. Five hours of volunteer service learning required. Prerequisite: EDUC 1110 WITH MIN. GRADE OF C (45/0/0/0)

MUSC 2940 Jazz Literature and Performance III 1 credit
Advanced individual development and membership in Northeast Area Jazz Ensemble. Permission of instructor required. Prerequisite: MUSC 1950 (15/0/0/0)

MUSC 2950 Jazz Literature and Performance IV 1 credit
Continued advanced individual development and membership in Northeast Area Jazz Ensemble. Permission of instructor required. Prerequisite: MUSC 2940 (15/0/0/0)

Nurse Aide (NURA)

NURA 1110 Nurse Aide 3 credits
This course is designed to meet the Nebraska Health and Human Services System training requirements for nurse aide certification and employment in long-term care facilities. The course combines classroom lecture and laboratory application for the development of basic skills needed to provide safe, effective, and caring services to the elderly or chronically ill patient of any age, in a long-term care facility. Upon completion of this course, the student is eligible to take the state written and practical skills exam. After successfully passing this examination and completing the application procedure, the students name will be placed on the basic nurse aide registry at the Nebraska Health and Human Services Regulation and Licensure, Credentialing Division. (30/45/0/0)

Nursing (NURS)

NURS 1010 Nursing Process and Critical Thinking I 3 credits
The course provides an overview of nursing concepts and theories focusing on meeting basic human needs across the lifespan based on the wellness-illness continuum within the practical nurse scope of practice. Theoretical concepts focus on caring for the well client, elderly client, and clients with selected physiological, psychological, and mental health problems. Emphasis is on the role of the practical nurse as a competent practitioner who contributes to the nursing plan of care while utilizing established nursing diagnoses. Focus is on the development of safe clinical judgment and appropriate communication related to nursing care of clients in acute, long term, and community settings. Prerequisite: NURS 1060 WITH MIN. GRADE OF B (MAY BE TAKEN CONCURRENTLY) AND NURS 1110 WITH MIN. GRADE OF B (MAY BE TAKEN CONCURRENTLY) AND NURS 1120 WITH MIN. GRADE OF B (MAY BE TAKEN CONCURRENTLY) AND NURS 1180 W Corequisite: NURS1100 (45/0/0/0)

NURS 1050 Nutrition 3 credits
Study of the basic principles of nutrition in health and disease throughout the human life cycle. (45/0/0/0)

NURS 1060 Pathophysiology of Disease Processes I 1.5 credits
This course provides the student with an understanding of common, chronic disease conditions encountered in clinical practice. Comprehension of pathophysiology provides the foundation for competency and clinical judgment in nursing practice. Topics include etiology, manifestations, and the physical and psychological reactions to common, chronic diseases and injury. These are discussed in order for the nurse to recognize and communicate client needs. Prerequisite: BIOS 2250 WITH MIN. GRADE OF C (MAY BE TAKEN CONCURRENTLY) OR BIOS 2110 WITH MIN. GRADE OF C (MAY BE TAKEN CONCURRENTLY) (22.5/0/0/0)

NURS 1070 Pathophysiology of Disease Processes II 1.5 credits
This course provides the student with an understanding of acute, complex disease conditions encountered in clinical practice. Comprehension of pathophysiology provides the foundation for competency and clinical judgment in nursing practice. Topics include etiology, manifestations, and the physical and psychological reactions to acute, complex diseases and injury. These are discussed in order for the nurse to recognize, interpret, and communicate client needs. Prerequisite: BIOS 2250 WITH MIN. GRADE OF C OR BIOS 2110 WITH MIN. GRADE OF C AND NURS 1060 WITH MIN. GRADE OF B AND BIOS 2120 WITH MIN. GRADE OF C (MAY BE TAKEN CONCURRENTLY) OR BIOS 2260 WITH MIN. (22.5/0/0/0)

NURS 1100 Nursing Science I 3 credits
The course focuses on the development of caring and clinical competency in the performance of selected nursing skills and procedures. Participation in the care of clients during alterations in health provides opportunities for the student to develop professional communication and clinical judgment. Clinical experiences include lab based, long term care, and community based settings. Holistic nursing concepts and theories are presented and related to health promotion, illness prevention, and health restoration of individuals. Prerequisite: NURS 1060 WITH MIN. GRADE OF B (MAY BE TAKEN CONCURRENTLY) AND NURS 1110 WITH MIN. GRADE OF B (MAY BE TAKEN CONCURRENTLY) AND NURS 1120 WITH MIN. GRADE OF B (MAY BE TAKEN CONCURRENTLY) AND NURS 1180 W Corequisite: NURS1010 (0/45/67.5/0)

NURS 1110 Health Assessment and Health Promotion I 2 credits

The focus of this course is on basic health assessment, history taking skills, effective communication, health promotion and illness prevention by using holistic nursing assessments for well clients. Using a developmental perspective, the course will provide the student with the opportunity to develop beginning knowledge and skills necessary to assess and care for the health status of the client by collecting health history, performing a physical assessment on well clients across the lifespan while using appropriate clinical judgment. The content builds upon the student's knowledge of sciences and humanities, as related to the holistic aspects of health. Assessment will focus primarily on recognizing normal, with some introduction to deviation of normal findings. The course provides supervised practice in the laboratory setting to assist the student with developing a foundation of skills, caring, and competence in the clinical setting. (15/30/0/0)

NURS 1120 Pharmacology and Nursing Practice I 1.5 credits

This course provides the student with an in-depth working knowledge of the appropriate use of medications. Emphasis is placed on the nurse understanding the principles of drug actions, interactions, side effects, and adverse effects in relation to respiratory analgesics, gastrointestinal, and psychiatric medications. Medication administration principles are incorporated into the nursing process, providing the student with a framework for accountable medication administration. Dosage calculation concepts are integrated within the course to promote safe medication administration. This course emphasizes the importance of appropriate clinical decision making that considers the human needs of the client and appropriate client teaching and communication that addresses the impact of medications on the health of the individual. Prerequisite: MATH 1025 WITH MIN. GRADE OF C (MAY BE TAKEN CONCURRENTLY) (22.5/0/0/0)

NURS 1125 Pharmacology and Nursing Practice II 1.5 credits

This course provides the student with an in-depth working knowledge of the need for appropriate use of medications. Emphasis is placed on the nurse understanding drug actions, interactions, side effects, and adverse reactions in relation to cardiovascular, hematological, endocrine, and neurological medications. This course emphasizes the importance of appropriate clinical decision making that considers the human needs of the client and appropriate client teaching and communication that addresses the impact of medication on the health of the individual. Prerequisite: NURS 1120 WITH MIN. GRADE OF B (22.5/0/0/0)

NURS 1130 Nursing Process and Critical Thinking II 3 credits

The course is focused on nursing concepts and theories to meet basic human needs across the life span based on the wellness-illness continuum. Theoretical concepts focus on the care of adult, perinatal and pediatric clients with selected alterations in health. Emphasis is on utilization of the nursing process and critical thinking related to nursing care of clients in acute, long term, and community settings. This course emphasizes the importance of the licensed practical nurse as being competent, utilizing appropriate clinical judgment, as well as, caring and with therapeutic communication skills. Prerequisite: NURS 1010 WITH MIN. GRADE OF B AND NURS 1100 WITH MIN. GRADE OF P AND NURS 1110 WITH MIN. GRADE OF B AND NURS 1180 WITH MIN. GRADE OF B AND NURS 1070 WITH MIN. GRADE OF B MAY BE TAKEN CONCU Corequisite: NURS1140 AND NURS1185 (45/0/0/0)

NURS 1140 Nursing Science II 3 credits

This course focuses on application of nursing concepts and theories related to health of individuals and families with stable and predictable basic human needs. It provides opportunities for continuing development of clinical competency in the performance of selected, increasingly

complex nursing skills and procedures while caring for clients across the life span. The course provides for clinical practice experiences to facilitate development of clinical judgment while caring for clients in an acute medical surgical, long term care, maternal-child, and pediatric acute care settings. The student will focus on acute and chronic alterations of human needs. The student will be given opportunities to enhance communication skills, while learning to prioritize patient needs, identify legal and ethical implications for care, and learn how to appropriately design patient care assignments for unlicensed personnel. Prerequisite: NURS 1010 WITH MIN. GRADE OF B AND NURS 1100 WITH MIN. GRADE OF P AND NURS 1110 WITH MIN. GRADE OF B AND NURS 1180 WITH MIN. GRADE OF B AND NURS 1070 WITH MIN. GRADE OF B MAY BE TAKEN CONCU Corequisite: NURS1130 AND NURS1185 (0/0/135/0)

NURS 1150 Intravenous Therapy for Practical Nursing 1 credit

This course focuses on safe intravenous therapy (IV) including the administration of intravenous solutions and medications appropriate within the scope of practice of the Licensed Practical Nurse (LPN) in the state of Nebraska. Students will learn to apply the principles of observing, initiating, monitoring, discontinuing, maintaining, regulating, adjusting, documenting, assessing, planning, intervening, and evaluating intravenous therapy as an LPN. Psychomotor skills related to peripheral intravenous line insertion in an upper extremity, as well as maintenance, and administration of approved IV medications in an adult client is addressed in a lab experience. Limitations related to central intravenous therapy and pediatric therapy will be investigated. This course emphasizes the importance of safe and appropriate clinical decision making of the medically stable client receiving intravenous therapy. Appropriate client teaching and communication techniques that address the diverse client needs are emphasized. Prerequisite: MATH 1025 WITH MIN. GRADE OF C AND NURS 1010 WITH MIN. GRADE OF B AND NURS 1060 WITH MIN. GRADE OF B AND NURS 1070 WITH MIN. GRADE OF B (MAY BE TAKEN CONCURRENTLY) AND NURS 1100 WITH MIN. G Corequisite: NURS1130 AND NURS1140 AND NURS1185 (10/15/0/0)

NURS 1180 Nursing's Role I 1 credit

This course provides an overview of the role of the practical nurse with an emphasis on the transition from nursing assistant to practical nurse. It includes a focus on the core values of communication, caring, competence, and clinical judgment within Northeast's Nursing Program, nursing history, ethical, legal and practice standards, scope of practice, and communication skills. It focuses on the concepts and skills required of the practical nurse, including study skills and test taking skills. Prerequisite: NURS 1010 WITH MIN. GRADE OF B (MAY BE TAKEN CONCURRENTLY) AND NURS 1060 WITH MIN. GRADE OF B (MAY BE TAKEN CONCURRENTLY) AND NURS 1100 WITH MIN. GRADE OF P (MAY BE TAKEN CONCURRENTLY) AND NURS 1110 WITH MIN. GRADE OF B (MAY BE TAKEN CONCURRENTLY) AND N (15/0/0/0)

NURS 1185 Nursing's Role II 1 credit

This course provides an in-depth look at the role of the practical nurse with an emphasis on preparation to enter practice. It includes a focus on the course values of communication, caring, competence, and clinical judgment in Northeast's nursing program, as they apply to professional behavior, working with others, dealing with conflict and change, as well as maintaining a license. It focuses on assigning and directing care, teamwork, and leadership. Prerequisite: NURS 1010 WITH MIN. GRADE OF B AND NURS 1100 WITH MIN. GRADE OF P AND NURS 1110 WITH MIN. GRADE OF B AND NURS 1180 WITH MIN. GRADE OF B AND NURS 1070 WITH MIN. GRADE OF B MAY BE TAKEN CONCU Corequisite: NURS1130 AND NURS1140 (15/0/0/0)

NURS 1220 Structure and Function of the Human Body 3 credits

Provides fundamental knowledge of the normal structure and functions of the cell, tissues, organs, organ systems and interrelationship among those systems. (45/0/0/0)

NURS 2050 LPN Certification 4 credits

This course is designed to prepare the LPN to perform those duties consistent with the expanded Scope of Practice as outlined in Title 172, Chapter 102. Upon successful completion of this course, the LPN will be eligible for examination for certification by the Bureau of Examining Boards, Department of Health, State of Nebraska. (52.5/15/0/0)

NURS 2100 Health Care Ethics 3 credits

This course focuses on contemporary ethical issues that affect health care practice. A review of the major theories related to ethics and sound ethical decision making in health care are discussed. Major topics of discussion include social, cultural, spiritual, gender, end-of-life, professional, and health delivery issues. This course prepares students to incorporate the concepts and principles of ethics within health care practice. (45/0/0/0)

NURS 2120 Pharmacology and Nursing Practice III 1 credit

This course focuses on drug mechanism of actions, expected effects, side effects, adverse effects, contraindications, drug interactions, and nursing responsibilities in drug administration (for medically complex clients). Emphasis is placed on the importance of applying the principles of drug actions, intended effects, potential interactions, side effects and adverse reactions, and nursing responsibilities for intravenous anti-infective, antineoplastic, and cardiac medications. This course emphasizes the importance of safe and appropriate clinical decision making of the medically complex client receiving drug therapy. Appropriate client teaching and communication that addresses the impact of medications on the health of the individual is emphasized. Prerequisite: NURS 1125 WITH MIN. GRADE OF B AND NURS 2165 WITH MIN. GRADE OF B (MAY BE TAKEN CONCURRENTLY) Corequisite: NURS2150 AND NURS2160 (15/0/0/0)

NURS 2150 Nursing Process and Critical Thinking III 4 credits

This course focuses on meeting complex health and wellness needs of clients across the lifespan within the scope of practice of a registered nurse. Emphasis is on the development of safe clinical judgment and appropriate communication related to nursing care of high risk perinatal clients, and chronically and/or acutely ill clients with alterations in health involving multiple systems. There is a focus on the role of the registered nurse as a caring, competent practitioner while addressing client needs from a human needs perspective. Prerequisite: NURS 1130 WITH MIN. GRADE OF B AND NURS 1140 WITH MIN. GRADE OF P AND NURS 1185 WITH MIN. GRADE OF B Corequisite: NURS2120 AND NURS2160 (60/0/0/0)

NURS 2160 Nursing Science III 5 credits

This course focuses on application of holistic nursing care to meet the complex health-wellness needs of acutely and/or chronically ill clients and high risk clients with multiple system alterations in health, including high risk perinatal and adult clients. This course provides clinical opportunities in acute care and community settings to develop therapeutic communication while caring for clients across the lifespan. An emphasis is on the development of a safe and competent nurse functioning within the registered nurse's scope of practice. A focus on safe clinical judgment is the centerpiece of both direct care provision and care plan development in a variety of acute care and community settings. Prerequisite: NURS 1130 WITH MIN. GRADE OF B AND NURS 1140 WITH MIN. GRADE OF P AND NURS 1185 WITH MIN. GRADE OF B Corequisite: NURS2120 AND NURS2150 (0/0/225/0)

NURS 2165 Nursing's Role III 1 credit

This course provides an overview of the role of the registered nurse with an emphasis on the transition from practical nurse to associate degree registered nurse. It includes a focus on the core values of communication, caring, competence, and clinical judgment within Northeast's Nursing Program, and includes content on evidence based practice decision making, nursing history, developing and maintaining quality in nursing practice, RN scope of practice, and team communication skills. It focuses on the concepts and skills required of the associate degree nursing student, including study skills and test taking skills. Prerequisite: NURS 1130 WITH MIN. GRADE OF B AND NURS 1140 WITH MIN. GRADE OF P AND NURS 1185 WITH MIN. GRADE OF B (15/0/0/0)

NURS 2170 Nursing Process and Critical Thinking IV 4 credits

This course focuses on the role of the registered nurse in developing appropriate clinical judgment and effective communication that is necessary when prioritizing, managing, and caring for clients in diverse health care settings. Emphasis is on providing competent nursing care for clients with acute pediatric illnesses, acute mental health alterations, and adult clients with complex, unstable health needs using a human needs approach to care delivery. Prerequisite: NURS 2120 WITH MIN. GRADE OF B AND NURS 2150 WITH MIN. GRADE OF B AND NURS 2160 WITH MIN. GRADE OF P AND NURS 2165 WITH MIN. GRADE OF B Corequisite: NURS2180 AND NURS2185 (60/0/0/0)

NURS 2180 Nursing Science IV 4 credits

This course focuses on the application of nursing care aimed at meeting the complex human needs of the critically ill, clinically unstable, and high risk clients with alterations in health using a human needs model. This course provides for clinical practice experiences with adult and pediatric clients, families and small groups of clients in a variety of acute, mental health, and urgent care settings. An emphasis is on the development of a safe, caring, and competent nurse functioning within the scope of practice of a registered nurse. This course facilitates the development of effective communication, appropriate management skills, and prioritization of care for patient groups through sound clinical judgment. Prerequisite: NURS 2120 WITH MIN. GRADE OF B AND NURS 2150 WITH MIN. GRADE OF B AND NURS 2160 WITH MIN. GRADE OF P AND NURS 2165 WITH MIN. GRADE OF B Corequisite: NURS2170 AND NURS2185 (0/0/180/0)

NURS 2185 Nursing's Role IV 3 credits

This course provides an overview of roles in nursing with emphasis on development of professional practice as a registered nurse. It includes a focus on the core values of communication, caring, competence, and clinical judgment in the Northeast Community College Nursing Program, and includes content on nursing roles, leadership, power and policy, and managing quality in health care. It focuses on the concepts and skills required of the registered nurse, including application of all the facets of prior learning via preceptor experience. Prerequisite: NURS 2120 WITH MIN. GRADE OF B AND NURS 2150 WITH MIN. GRADE OF B AND NURS 2160 WITH MIN. GRADE OF P AND NURS 2165 WITH MIN. GRADE OF B Corequisite: NURS2170 AND NURS2180 (22.5/0/68/0)

Paramedic (EMTL)

EMTL 1410 Emergency Medical Technician Refresher 1.5 credits

This course successfully meets the Nebraska Department of Health and Human Services requirements for competency renewal of Nebraska Licensed EMTs and for those seeking reinstatement of their Nebraska EMT license. (15/15/0/0)

EMTL 1515 Emergency Medical Responder 3.5 credits
This course is dedicated to the study and application of the knowledge and skills necessary to become an Emergency Medical Responder. The curriculum is based on the National Standards set forth by the National Registry of Emergency Medical Technicians. The course will include applications/skills needed to qualify for the Emergency Medical Responder certification in the State of Nebraska. Passing the Cognitive examination and Practical Skills examination of the National Registry of Emergency Medical Technicians is required for certification. Student must have current CPR certification, American Heart Association-Healthcare Provider Level or equivalent. (45/15/0/0)

EMTL 1525 Emergency Medical Responder to Emergency Medical Technician 7.5 credits
This course is dedicated to the study and application of the knowledge and skills necessary for an individual to become an Emergency Medical Technician and provide emergency medical care at a basic life support level with an ambulance service or other specialized service. The course will include all applications/skills needed to apply for a Nebraska EMT license. After successful completion of this course, the individual must pass both the written and practical skills examinations of the National Registry of Emergency Medical Technicians (NREMT) before he/she can apply to obtain a Nebraska certificate of competency to practice in Nebraska. Must hold a current EMR license. (97.5/30/0/0)

EMTL 1825 Pre-hospital Emergency Care for Nurses 3 credits
Designed for an existing Registered Nurse or Licensed Practical Nurse who wishes to act as an EMT provider on a volunteer or paid rescue or transport service according to rules and regulations from Nebraska Health and Human Services Regulation and Licensure-EMS Division. Must be a current RN or LPN. (37.5/15/0/0)

EMTL 1840 Emergency Medical Technician Part 1 4.5 credits
This course is dedicated to the study and application of the knowledge and skills necessary for an individual to become an Emergency Medical Technician and provide emergency medical care at a basic life support level with an ambulance service or other specialized service. The course will include the first half of the applications/skills needed to apply for licensure as an EMT in the State of Nebraska. After successful completion of this course and EMTL-1845 the student will be eligible to apply to test for the National Registry of Emergency Medical Technicians (NREMT) cognitive examination. Once the student has passed both the cognitive and practical skills examinations of the NREMT he/she can apply to obtain an EMT license in the State of Nebraska. This class contains the current information found in the National EMS Education Standards as outlined by the National Highway Traffic Safety Administration. Student must have current CPR certification, American Heart Association-Healthcare Provider Level or equivalent. (60/15/0/0)

EMTL 1845 Emergency Medical Technician-Part 2 5 credits
This course is dedicated to the study and application of the knowledge and skills necessary for an individual to become an Emergency Medical Technician and provide emergency medical care at a basic life support level with an ambulance service or other specialized service. The course will include the first half of the applications/skills needed to apply for licensure as an EMT in the State of Nebraska. After successful completion of this course and EMTL 1840 the student will be eligible to apply to test for the National Registry of Emergency Medical Technicians cognitive examination. Once the student has passed both the cognitive and practical skills examinations of the National Registry of Emergency Medical Technicians (NREMT) he/she can apply to obtain an EMT license in the State of Nebraska. This class contains the current information found in the National EMS Education Standards as outlined

by the National Highway Traffic Safety Administration. Student must have CPR certification, American Heart Association-Healthcare Provider Level or equivalent. Prerequisite: EMTL 1840 WITH MIN. GRADE OF C (67.5/15/0/0)

EMTL 1870 Pre-hospital Trauma Life Support 1 credit
This course includes certification in Pre-hospital Trauma Life Support and covers techniques of rapid patient assessment, airway management, shock recognition and management, spinal immobilization, stabilization of fractures, kinematics, rapid extrication, geriatric trauma, pediatric trauma, thoracic and abdominal trauma, soft tissue trauma, trauma with pregnancy patients, burns, crime scenes and air medical transport. PHTLS is a continuing education course that is recognized by the National Registry of Emergency Medical Technicians (NREMT) and by the Continuing Education Certification Board for Emergency Medical Services (CECBEMS). A NAEMT certification card is provided upon successful completion. Prerequisite: License or certification in one of the following fields: EMT, paramedic, nurse, physician assistant, nurse practitioner or physician. (15/0/0/0)

EMTL 1880 Advanced Medical Life Support 1 credit
Advanced Medical Life Support (AMLS) is the gold standard of education for emergency medical assessment and treatment. Endorsed by the National Association of EMS Physicians, AMLS emphasizes the use of the AMLS Assessment Pathway, a systematic tool for assessing and managing common medical conditions with urgent accuracy. The course offers an initial assessment-based approach that progresses to a diagnostic-based approach to quickly develop the best treatment plan. Students learn to recognize and manage common medical crises through realistic case-based scenarios that challenge students to apply their knowledge to highly critical patients. The course emphasizes the use of scene size-up, history, interactive group discussion on potential treatment strategies, and physical examination to systematically rule out and consider possibilities and probabilities in treating patients' medical crises. AMLS is a continuing education course that is recognized by the National Registry of Emergency Medical Technicians (NREMT) and by the Continuing Education Certification Board for Emergency Medical Services (CECBEMS). A NAEMT certification card is provided upon successful completion. Prerequisite: License or certification in one of the following fields: EMT, paramedic, nurse, physician assistant, nurse practitioner or physician. (15/0/0/0)

EMTL 2641 Paramedic I 5 credits
Upon completion of this course the student will be able to integrate a comprehensive knowledge of the EMS System, safety/well-being of the paramedic, and medical/legal and ethical issues which are intended to improve the health of EMS personnel, patients and the community. The student will be able to integrate knowledge of human anatomy, physiology, pathophysiology and life span development in a variety of human systems. The student will learn to take a proper history, perform advanced physical assessments and communicate those findings. The student will then begin to formulate a field impression and begin to develop a treatment plan. The student will also begin to learn advanced airway management techniques while focusing on respiratory emergencies. Student must have current national registry EMT certification or EMT state license and admission into the paramedic program. Corequisite: EMTL2651 AND EMTL2661 (45/60/0/0)

EMTL 2642 Paramedic II 5 credits

Upon completion of this course the paramedic student will be able to identify cardiac rhythms and arrhythmias, obtain and interpret 12-lead EKGs. The student will integrate comprehensive knowledge of causes and pathophysiology into the management of adult and pediatric cardiac arrest and pre-arrest states. PALS and ACLS certification are a part of this course. The student will also formulate a field impression and implement treatment for both obstetric and neonatal patients including neonatal resuscitation. Prerequisite: EMTL 2641 AND EMTL 2651 AND EMTL 2661 Corequisite: EMTL2652 AND EMTL2662 (45/60/0/0)

EMTL 2643 Paramedic III 5 credits

Upon completion of this course the paramedic student will be able to formulate a field impression and implement a treatment plan including pharmacology interventions, EKG interpretation and airway interventions as appropriate for medical diseases involving neurology, cardiac, respiratory, endocrine, abdominal, gynecology, immunology, hematology, behavioral, toxicology, renal and infectious organisms. This course also will begin to discuss the principles of kinematics to enhance the patient assessment and predict the likelihood of injuries based on the patient's mechanism of injury. This course will also discuss traumatic injuries related to soft tissue, burns and injuries of the face, neck, head and spine. Students rotate through a variety of scenarios designed to help them better prepare for the patient at the paramedic skill level. Prerequisite: EMTL 2642 AND EMTL 2652 AND EMTL 2662 Corequisite: EMTL2653 AND EMTL2663 (45/60/0/0)

EMTL 2644 Paramedic IV 5 credits

Upon completion of this course, the student will be able to integrate pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for the patient with traumatic or environmental injuries. Principles in ambulance operations, extrication, hazardous material management, crime scene, terrorism and mass casualty response will also be discussed. The student will also understand how to adjust their assessment and care for special needs patients with medical or traumatic emergencies. The student will utilize critical thinking skills and their knowledge of pathophysiology to assess, formulate an impression, prioritize and implement treatment plans for patients with multiple problems. Students rotate through a variety of increasingly complicated patient scenarios designed to help them better prepare for the patient at the paramedic skill level. Prerequisite: EMTL 2643 AND EMTL 2653 AND EMTL 2663 Corequisite: EMTL2654 AND EMTL2664 (45/60/0/0)

EMTL 2651 Paramedic Clinical Practicum I 1.5 credits

This course supports the didactic components of Paramedic I. Students rotate through a variety of clinical settings including but not limited to emergency departments, operating rooms, respiratory therapy and critical care units. There is an emphasis on gaining an understanding of the hospital and how paramedics from pre-hospital services or transfer services interact with this environment. There is also an emphasis on developing skills including patient assessment, advanced airway management, intravenous cannulation and medication administration via multiple routes and more. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Corequisite: EMTL2641 AND EMTL2661 (0/0/67.5/0)

EMTL 2652 Paramedic Clinical Practicum II 1.5 credits

Rotations through clinical settings continues with exposure to more advanced care situations assisting the student with broad exposure to understanding of the total operation of the clinical setting and their assistive role as an emergency provider. An emphasis on skills including patient assessment, airway management, endotracheal intubation, medication administration, and intravenous cannulation is practiced at a level of advanced competence above the initial Clinical Practicum I experience. The student may also begin to utilize

cardiac monitoring, 12 lead acquisition, ACLS, PALS skills. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisite: EMTL 2641 AND EMTL 2651 AND EMTL 2661 Corequisite: EMTL2642 AND EMTL2662 (0/0/67.5/0)

EMTL 2653 Paramedic Clinical Practicum III 2 credits

Rotations through clinical settings continues with exposure to advanced care situations assisting the student with broad exposure to understanding of the total operation of the clinical setting and their role as an emergency provider. An emphasis on skills including patient assessment, airway management, endotracheal intubation, medication administration, intravenous cannulation, cardiac monitoring, 12 lead acquisition, ACLS, PALS is practiced at a level of advanced competence above the initial Clinical Practicum I and II experience. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisite: EMTL 2642 AND EMTL 2652 AND EMTL 2662 Corequisite: EMTL2643 AND EMTL2663 (0/0/90/0)

EMTL 2654 Paramedic Clinical Practicum IV 2 credits

Students rotate through a variety of clinical settings including, emergency departments, Rotations through clinical settings continues with exposure to more advanced care situations assisting the student with complete understanding of the total operation of the clinical setting and their assistive role as an emergency provider. An advanced skill level emphasis on demonstration of skills including patient assessment, airway management, endotracheal intubation, medication administration, and intravenous cannulation is practiced at a level of advanced competence above the initial Clinical Practicum III experience. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisite: EMTL 2643 AND EMTL 2653 AND EMTL 2663 Corequisite: EMTL2644 AND EMTL2664 (0/0/90/0)

EMTL 2661 Paramedic Field Practicum I 1 credit

This practicum is the first in a series of five progressive practicum experiences. Each practicum session builds on the knowledge gained in previous classroom and lab sessions. Field practicum experiences will consist of ride a long for medical assistance with an ambulance service, as an observer. As the student progresses through the semester the student will start to move from observer to paramedic trainee role. During classroom and lab sessions the student will be introduced to various Advanced Life Support (ALS) skills. As the student shows satisfactory understanding of an ALS skill they will be allowed to start to perform the skill in the field. The student will be expected to build and develop knowledge of people/patient care skills such as interacting with patients and family members, working as a team member on an ambulance, and working with other various medical personnel in the treatment of patients. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Corequisite: EMTL2641 AND EMTL2651 (0/0/45/0)

EMTL 2662 Paramedic Field Practicum II 1 credit

This practicum is the second in a series of five progressive practicum experiences. Each practicum session builds on the knowledge gained in previous classroom sessions. The 8 weeks of instruction in the classroom will tie all previous teaching of skills together for advanced knowledge and mastery of the information learned to this point. The student will be able to complete the skills performed initially in Practicum I and the student will move from observer to trainee level for all Practicum I skills. The student should be able to perform these skills with very little prompting by preceptors. During classroom sessions the student will be introduced to additional Advanced Life Support (ALS) skills including Cardiac Monitoring, ACLS, PALS and 12-Lead EKG Interpretation. As the student shows satisfactory understanding of an ALS skill they will be allowed to start to perform these skills in the field. The student will be expected to continue to build and develop knowledge of people/patient care skills such as interacting with patients and family members, working as a team member on an ambulance, and working with other various medical personnel in the treatment of patients. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisite: EMTL 2641 AND EMTL 2651 AND EMTL 2661 Corequisite: EMTL2642 AND EMTL2652 (0/0/45/0)

EMTL 2663 Paramedic Field Practicum III 1 credit

Practicum III builds on the knowledge and experience that the student gained in Field Practicum II. This 8-week session of instruction in the classroom will tie all previous teaching of skills together for advanced knowledge and mastery of the information learned to this point. The student will be able to complete the skills performed initially in Practicum I at the team member level. The student will be able to perform these skills with very little to no prompting by preceptors. Skills the student initially performed in Practicum II have moved the student completely out of the observer role and into the trainee role. In the trainee role the student will be completing ALS skills and continue to receive advice and direction on a regular basis from a preceptor. During this cumulative practicum the student refines developed patient and people skills to demonstrate professionalism as a paramedic. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisite: EMTL 2642 AND EMTL 2652 AND EMTL 2662 Corequisite: EMTL2643 AND EMTL2653 (0/0/45/0)

EMTL 2664 Paramedic Field Practicum IV 1 credit

Practicum IV builds on the knowledge and experience that the student gained in Field Practicum III. This final semester of instruction in the classroom will tie all previous teaching of skills together for advanced knowledge and mastery of the information learned to this point in the field. The student will be able to complete the skills performed initially in Practicum I at the team member level. The student will be able to perform these skills with very little to no prompting by preceptors. Skills the student initially performed in Practicum II & III have moved the student completely out of the observer role and into the trainee role. At the conclusion of this practicum the student should be able to perform all skills at a team member role. During this cumulative practicum the student refines developed patient and people skills to demonstrate professionalism as a paramedic. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisite: EMTL 2643 AND EMTL 2653 AND EMTL 2663 Corequisite: EMTL2644 AND EMTL2654 (0/0/45/0)

EMTL 2760 Paramedic Lab I 1 credit

Students rotate through a variety of scenarios designed to help them better prepare for the patient at the paramedic skill level. The stations will include, but not be limited to, advanced airway, controlling bleeding wounds and shock, IV cannulation, securing patients to a long board, splinting, and cardiac rhythm recognition at a beginning knowledge level. Corequisite: EMTL2641 AND EMTL2651 AND EMTL2661 (0/30/0/0)

EMTL 2761 Paramedic Lab II 1 credit

Students rotate through a variety of scenarios designed to help them better prepare for care of the patient at the paramedic skill level. Stations will include, but not be limited to, advanced airway, controlling bleeding wounds and shock, IV cannulation, securing patients demonstrating competence of lab I knowledge level. Prerequisite: EMTL 2760 Corequisite: EMTL2642 AND EMTL2652 AND EMTL2662 (0/30/0/0)

EMTL 2852 Paramedic Field Internship 4.25 credits

The capstone field internship is designed to give the paramedic student an opportunity to apply the skills and knowledge from previous didactic and classroom trainings in the field. Student mastery and competency will be demonstrated and evaluated through a series of thorough patient assessments, formulation of proper treatment plans for each situation encountered, and administration of patient care under the preceptor's guidance at the Advanced Life Support skill level. The student must have a current American Heart Association Basic Life Support CPR card or equivalent. Prerequisite: EMTL 2644 AND EMTL 2654 AND EMTL 2664 (0/0/192/0)

EMTL 2860 Paramedic Lab III 1 credit

Students rotate through a variety of scenarios designed to help them better prepare for the patient at the paramedic skill level. The stations will include, but not be limited to, advanced airway, controlling bleeding wounds and shock, IV cannulation, securing patients to a long board, splinting, and cardiac rhythm recognition demonstrating competence of lab II knowledge level mastery. Prerequisite: EMTL 2761 Corequisite: EMTL2643 AND EMTL2653 AND EMTL2663 (0/30/0/0)

EMTL 2861 Paramedic Lab IV 1 credit

Students rotate through a variety of scenarios designed to help them better prepare for the patient at the paramedic skill level. The stations will include, but not be limited to, advanced airway, controlling bleeding wounds and shock, IV cannulation, securing patients to a long board, splinting, and cardiac rhythm recognition demonstrating competence of lab III knowledge level mastery. Prerequisite: EMTL 2860 Corequisite: EMTL2644 AND EMTL2654 AND EMTL2664 (0/30/0/0)

EMTL 2880 Paramedic Medical and Special Considerations 8 credits

Upon completion of this course, the paramedic student will be able to integrate Pathophysiological principles and assessment findings to formulate a field impression and implement a treatment plan for patients with medical problems. The paramedic student will be able to integrate principles and assessment findings to implement a treatment plan for a variety of patients. Treatment plans and field impressions will be formulated for the neonatal, pediatric and geriatric patients. They will also be able to formulate a field impression for patients who have sustained or suffer from abuse, assault, acute deterioration, chronic care and coercive behavior. Students will also learn about operating in hazardous situations and on crime scenes. Prerequisite: EMTL 2870 Corequisite: EMTL2841 AND EMTL2851 AND EMTL2861 (120/0/0/0)

Personal Training (PRTR)**PRTR 2210 Introduction to Personal Training 4 credits**

Introductory course designed to develop an understanding of the principals necessary for providing personal training. Topics include components of fitness, general nutrition principles including weight management, functional anatomy and physiology, biomechanics, pre-exercise screening, assessment of physical fitness, exercise programming components, flexibility assessment and programming, and cardiovascular fitness programming Prerequisite: HPER 1550 (MAY BE TAKEN CONCURRENTLY) (45/30/0/0)

PRTR 2410 Advanced Personal Training 4 credits

Advanced course designed to apply the principals necessary for providing personal training. Topics include anaerobic training, resistance training technique, functional training concepts, creating an exercise program, working with special populations, ethics and professionalism, wellness marketing, and group exercise instruction. Prerequisite: PRTR 2210 AND BIOS 2250 (MAY BE TAKEN CONCURRENTLY) AND HPER 1520 (MAY BE TAKEN CONCURRENTLY) OR HOEC 1050 MAY BE T (30/60/0/0)

PRTR 2800 Personal Training Practicum 3 credits

Practicum designed to give students the opportunity to lead and develop wellness programs, adult exercise programs, and personal training instruction. Prerequisite: PRTR 2400 AND HPER 1520 (MAY BE TAKEN CONCURRENTLY) OR HOEC 1050 (MAY BE TAKEN CONCURRENTLY) (15/60/0/0)

Philosophy (PHIL)

PHIL 2610 Comparative Religions 3 credits

This course will offer a cross-cultural introduction to the world's major religious and philosophical traditions or faith systems through a comparison of historical origins, rituals, beliefs, practices, world views, original religious texts, and other important sources. Interdisciplinary approach to study of religious systems are a part of the world religions traditions. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C (45/0/0/0)

Physical Therapist Assistant (PTAS)

PTAS 1010 Medical Terminology for Physical Therapist Assistants 1.5 credits

This course introduces the basic Greek and Latin roots including pronunciation, spelling, usage, and interpretation. The emphasis of physical therapy terminology and medical abbreviations utilized in healthcare will be integrated throughout the course. (22.5/0/0/0)

PTAS 1020 Introduction to Physical Therapy 1 credit

This course is designed to assist the student in the decision making process and development of becoming a physical therapist or physical therapist assistant. It introduces the student to the role of the Physical Therapist and the Physical Therapist Assistant in the practice of physical therapy. The course explores the profession of physical therapy, including the historical overview, the professional organization, culture, ethnicity, and branches of physical therapy. (15/0/0/0)

PTAS 2520 Introduction to Clinical Management 1 credit

This course introduces the student to various elements of a professional healthcare provider in order to prepare the student for clinical setting. The student will learn how to: utilize basic time management strategies, understand the expectations of a professional healthcare provider, build an effective patient rapport, utilize basic physical therapy billing procedures, and identify the components of basic physical therapy documentation. (15/0/0/0)

PTAS 2550 Basic Physical Therapy Procedures 2 credits

This course will introduce the student to basic patient care techniques. Topics emphasized during this course include: bed mobility training, transfer training, gait training, assistive device use, wheelchair use and management of complex medical patients. Corequisite: PTAS2551 (30/0/0/0)

PTAS 2551 Basic Physical Therapy Procedures Lab 2 credits

This course will introduce the student to basic patient care and documentation activities. Individualized techniques are integrated into a clinical application scenario. Techniques demonstrated during this course will include: bed mobility training, transfer training, gait training, assistive device use, wheelchair use and management of complex medical patients. Corequisite: PTAS2550 (0/60/0/0)

PTAS 2570 Exercise Principles 2 credits

This course introduces students to fundamental functional anatomy and kinesiology skills. Students learn about structure and function of bones, joints and skeletal muscles. Basic exercise principles, range of motion, stretching, balance and manual resistive exercise will be taught as well as basic proprioceptive neuromuscular facilitation techniques. Practical application of course content will be applied through laboratory study. Students taking this course are advised that the capability to exercise may be necessary. Corequisite: PTAS2571 (30/0/0/0)

PTAS 2571 Exercise Principles Lab 1 credit

This course introduces students to fundamental functional anatomy and kinesiology skills. Students learn palpation of bones, joints and skeletal muscles. Application of basic exercise principles, range of motion, stretching, balance, basic proprioceptive neuromuscular facilitation techniques, and manual resistive exercise will be covered as well. Corequisite: PTAS2570 (0/30/0/0)

PTAS 2620 Clinical Management 3 credits

This course applies and integrates the various elements of a professional healthcare provider in order to prepare the student for the clinical setting that were introduced in PTAS 2520 Introduction to Clinical Management. The following elements will be introduced and implemented into this course- the Guide to Physical Therapy Practice, the Physical Therapy Nebraska Practice Act and Evidence Based Practice. Prerequisite: PTAS 2520 WITH MIN. GRADE OF C AND PTAS 2550 WITH MIN. GRADE OF C AND PTAS 2570 WITH MIN. GRADE OF C (45/0/0/0)

PTAS 2650 Physical Agents 2 credits

This course introduces the student to the principles and theories of pain, pain management, and properties of tissue inflammation and repair. An understanding of the following agents will be developed: thermal, mechanical and electromagnetic. Students will learn when each modality is indicated and contraindicated. Prerequisite: PTAS 2520 WITH MIN. GRADE OF C AND PTAS 2550 WITH MIN. GRADE OF C AND PTAS 2570 WITH MIN. GRADE OF C Corequisite: PTAS2651 (30/0/0/0)

PTAS 2651 Physical Agents Lab 2 credits

During this course the student will apply the following agents: thermal, mechanical and electromagnetic. Students will learn when each modality is indicated and contraindicated. Corequisite: PTAS2650 (0/60/0/0)

PTAS 2670 Orthopedic Assessment and Intervention I 3.5 credits

This course will provide the student with the opportunity to understand the musculoskeletal structure and function of each major joint of the lower extremity and spine. The student will assess movement and strength through goniometry and manual muscle testing. The student will also learn application of interventions for specific orthopedic and surgical conditions for the lower extremity and spine. Prerequisite: PTAS 2520 WITH MIN. GRADE OF C AND PTAS 2550 WITH MIN. GRADE OF C AND PTAS 2570 WITH MIN. GRADE OF C Corequisite: PTAS2671 (52.5/0/0/0)

PTAS 2671 Orthopedic Assessment and Intervention I Lab 2.5 credits

This course will provide the student with the opportunity to understand the musculoskeletal structure and function of each major joint of the lower extremity and spine. The student will assess movement and strength through goniometry and manual muscle testing. The student will also learn application of interventions for specific orthopedic and surgical conditions for the lower extremity and spine. Corequisite: PTAS2670 (0/75/0/0)

PTAS 2690 Clinical Pathophysiology 3.5 credits

This course introduces the student to the pathophysiology, etiology, clinical signs and symptoms, and medical treatment of the pathological conditions most commonly encountered in the physical therapy field. An emphasis is placed on recognizing and problem solving how each condition may affect the physical therapy plan of care and interventions
Prerequisite: PTAS 2520 WITH MIN. GRADE OF C AND PTAS 2550 WITH MIN. GRADE OF C AND PTAS 2570 WITH MIN. GRADE OF C Corequisite: PTAS2691 (52.5/0/0)

PTAS 2691 Clinical Pathophysiology Lab 0.5 credits

This course introduces the student to cardiac, pulmonary, and wound assessment and treatment techniques utilized in rehabilitation. The student will demonstrate competency in assessment and treatment techniques used for cardiopulmonary and wound pathologies common to physical therapy. An emphasis is placed on critical thinking and problem solving how different conditions may affect the physical therapy plan of care and interventions. Corequisite: PTAS2690 (0/15/0/0)

PTAS 2700 Clinical Affiliation I 3.5 credits

This course will consist of a four-week clinical affiliation occurring during the middle of the second semester of the sophomore year. The student performs basic patient skills as well as newly acquired patient care activities under the immediate supervision of the clinical instructor. Prerequisite: PTAS 2620 WITH MIN. GRADE OF C AND PTAS 2650 WITH MIN. GRADE OF C AND PTAS 2670 WITH MIN. GRADE OF C AND PTAS 2690 WITH MIN. GRADE OF C Corequisite: PTAS2720 (0/0/157.5/0)

PTAS 2720 Advanced Clinical Management 0.5 credits

This course applies the various elements of a professional healthcare provider while in the clinical setting that were introduced in PTAS 2520 Introduction to Clinical Management and PTAS 2620 Clinical Management Corequisite: PTAS2700 (7.5/0/0/0)

PTAS 2770 Orthopedic Assessment and Intervention II 2.5 credits

This course will provide the student with the opportunity to understand the musculoskeletal structure and function of each major joint of the upper extremity. The student will assess movement and strength through goniometry and manual muscle testing. The student will also learn application of interventions for specific orthopedic and surgical conditions for the upper extremity. Prerequisite: PTAS 2620 WITH MIN. GRADE OF C AND PTAS 2650 WITH MIN. GRADE OF C AND PTAS 2670 WITH MIN. GRADE OF C AND PTAS 2690 WITH MIN. GRADE OF C Corequisite: PTAS2771 (37.5/0/0/0)

PTAS 2771 Orthopedic Assessment and Intervention II Lab 1.5 credits

This course will provide the student with the opportunity to understand the musculoskeletal structure and function of each major joint of the upper extremity. The student will assess movement and strength through goniometry and manual muscle testing. The student will also learn application of interventions for specific orthopedic and surgical conditions for the upper extremity. Corequisite: PTAS2770 (0/45/0/0)

PTAS 2790 Neurologic Rehabilitation 3 credits

This course will advance the student's knowledge in the areas of theory and treatment utilized in the rehabilitation of pediatric and adult populations with neurologic pathologies common to physical therapy. The student will learn about interventions used to influence normal and abnormal motor behaviors. This course will also introduce a neurologic treatment approach for amputee rehabilitation, as well as basic treatment techniques for balance and vestibular disorders. At the conclusion of this course, the student will have attained entry level knowledge and skills needed to work with clients with neurologic disorders Prerequisite: PTAS 2620 WITH MIN. GRADE OF C AND PTAS 2650 WITH MIN. GRADE OF C AND PTAS 2670 WITH MIN. GRADE OF C AND PTAS 2690 WITH MIN. GRADE OF C Corequisite: PTAS2791 (45/0/0/0)

PTAS 2791 Neurologic Rehabilitation Lab 2 credits

This course will introduce the student to neurologic assessment and treatment techniques common to physical therapy. The student will demonstrate neurologic techniques used to facilitate normal motor behaviors and inhibit abnormal motor behaviors. The student will also demonstrate interventions utilized in amputee rehabilitation. Corequisite: PTAS2790 (0/60/0/0)

PTAS 2800 Clinical Affiliation II 5 credits

This clinical education course will be the second of three experiences for the student. It will consist of 6 weeks in a clinical setting. The student will have the opportunity to pursue a specific clinical practice area, i.e. pediatrics, geriatrics, or orthopedics, etc. The student performs advanced skills with immediate to moderate supervision of the clinical instructor. The student works towards full development of competency and proficiency as a PTA. Prerequisite: PTAS 2700 WITH MIN. GRADE OF P AND PTAS 2770 WITH MIN. GRADE OF C AND PTAS 2790 WITH MIN. GRADE OF C (0/0/225/0)

PTAS 2900 Clinical Affiliation III 5 credits

This clinical education course will be the final of the three clinical experiences for the student. It will consist of 6 weeks in a clinical setting. The student will have the opportunity to pursue a specific clinical practice area, i.e. pediatrics, geriatrics, orthopedics, etc. The student performs advanced skills with immediate to moderate supervision of the clinical instructor. The student works towards full development of competency and proficiency as a PTA. Prerequisite: PTAS 2800 WITH MIN. GRADE OF P (0/0/225/0)

Physics (PHYS)

PHYS 1030 Technical Physics I 2 credits

Study and application of basic electricity, hydraulics and pneumatics. (15/45/0/0)

PHYS 1040 Technical Physics II 2 credits

Theory and experiments in atomic structure, density, specific gravity, elasticity, coefficient of friction, and other properties of matter. (15/45/0/0)

PHYS 1070 Applied Physics for Allied Health 4 credits

General study of mechanics, heat, energy, electricity, and wave interaction for allied health professions. (45/30/0/0)

PHYS 1100 Physical Science 4 credits

A survey course in the physical sciences with emphasis on scientific processes and problem solving. Areas of study will include selected topics in physics, chemistry, astronomy, geology and meteorology. A scheduled laboratory will supplement classroom activities. (45/30/0/0)

PHYS 1410 Elementary General Physics I with Algebra and Trigonometry 5 credits

Detailed algebra and trigonometry study of one and two dimensional motion. Topics will include kinematics, Newton's Laws, energy, momentum, and rotational motion. Additional topics from the areas of oscillations and waves, fluids, and thermal physics may also be covered. Prerequisite: MATH 1220 (60/30/0/0)

PHYS 1420 Elementary General Physics II with Algebra and Trigonometry 5 credits

Detailed algebra and trigonometry continuation of Elementary General Physics I. Topics covered will include electricity, magnetism, and optics. Additional topics from the areas of thermal physics, waves, and modern physics may also be covered. Prerequisite: PHYS 1410 (60/30/0/0)

PHYS 2050 Modern Physics 4 credits

A general study of relativistic physics, wave and particle physics, nuclear physics, and molecular and solid-state physics. Prerequisite: PHYS 2120 (60/0/0/0)

PHYS 2110 General Physics I with Calculus 5 credits

Detailed calculus-based study of one and two dimensional motion. Topics will include kinematics, Newton's Laws, energy, momentum, and rotational motion. Additional topics from the areas of oscillations and waves, fluids, and heat may also be covered. Prerequisite: MATH 1600 (MAY BE TAKEN CONCURRENTLY) (60/30/0/0)

PHYS 2120 General Physics II with Calculus 5 credits

Detailed calculus-based continuation of General Physics I. Topics covered will include electricity, magnetism, and optics. Additional topics from the areas of waves and modern physics may also be covered. Prerequisite: PHYS 2110 (60/30/0/0)

PHYS 2150 Structural Analysis 3 credits

Survey of mechanics, heat, sound and electromagnetism and their applications in the design and building of structures. Prerequisite: MATH 1060 OR MATH 1220 (45/0/0/0)

PHYS 2200 Statics 3 credits

The study of stationary bodies in equilibrium. Requires a general knowledge of Vector Algebra and Calculus. Two and three dimensional force systems are studied. Trusses, frames and machines, beams, and friction are discussed along with centroids and moments of inertia. Prerequisite: PHYS 2110 (45/0/0/0)

PHYS 2300 Dynamics 3 credits

The study of bodies in motion. Requires a general knowledge of Vector Algebra and Calculus. The course evaluates Newton's laws of motion as applied to particles and rigid bodies. Additional topics include absolute and relative motion, force, mass, and acceleration, work and energy, and impulse and momentum. Prerequisite: PHYS 2200 (45/0/0/0)

Plumbing (PLMB)

PLMB 1010 Electricity and Mechanics for Plumbers 3 credits

This course introduces fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers electrical measurement with emphasis on circuit analysis using Ohm's Law, circuit testing equipment, and the use of each instrument. Corequisite: PLMB1020 (45/0/0/0)

PLMB 1020 Electricity and Mechanics for Plumbers Lab 2 credits

This course introduces fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers electrical measurement with emphasis on circuit analysis using Ohm's Law, circuit testing equipment, and the use of each instrument. Corequisite: PLMB1010 (0/90/0/0)

PLMB 1025 Plumbing Safety 2 credits

This course covers OSHA policies, procedures, and standards, as well as general safety and health principles as applicable to the plumbing trades. Topics include the scope and application of the OSHA general industry standards. Special emphasis is placed on those topics that are required in the 10-hour general industry program as well as those applicable to the plumbing trade. In addition, students will complete the AHA Heartsaver critical skills needed to respond to and manage a first aid, choking, or sudden cardiac arrest emergency through CPR and AED usage. (30/0/0/0)

PLMB 1030 Plumbing Code and Print Reading 2 credits

This course presents in-depth coverage of plumbing codes and standards, including acceptable installation practices and acceptable materials. The course further introduces students to the basic drawing tools, measuring tools, lettering, drawings, and symbols commonly found on drawings and blueprints associated with the plumbing and pipe fitting industry. (30/0/0/0)

PLMB 1040 Plumbing and Pipefitting Fundamentals 3 credits

This course provides the student the ability to identify common pipe and fittings used for plumbing installations. Terminology of design, construction and sizing, as well as approved uses of different materials will be taught including potable water systems. Pipe joining, valves, venting, backflow prevention, and water quality are also addressed Corequisite: PLMB1050 (45/0/0/0)

PLMB 1050 Plumbing and Pipefitting Fundamentals Lab 5 credits

This course provides hands-on experiences in basic plumbing and pipefitting. Students will gain practice in pipe joining techniques, pipefitting procedures and sizing, materials selection, leak testing, and basic troubleshooting Corequisite: PLMB1040 (0/225/0/0)

PLMB 1060 Plumbing Tools and Processes 2 credits

The course provides students with the knowledge and insight into material handling, scope of work, and tool operations. The course emphasizes the proper use, care, and maintenance of hand and power tools, and proper working practices both in the shop and in the field. (30/0/0/0)

PLMB 1070 Trenching and Shoring 1 credit

This course is for employees working in trenching and excavation. This course addresses the requirements for working with and around trenches by ensuring individuals are knowledgeable in soil analysis, protective systems, access and egress, and regulatory requirements. (15/0/0/0)

PLMB 1110 Advanced Plumbing and Pipefitting 3 credits

This course further expands the student's knowledge of plumbing systems design and installation. Students further their skills in troubleshooting and repair of piping, fixtures, and appliances, as well as pump systems design. Indirect waste piping, receptors, and special wastes will also be discussed. Prerequisite: PLMB 1040 Corequisite: PLMB1120 (45/0/0/0)

PLMB 1120 Advanced Plumbing and Pipefitting Lab 3 credits

This course provides practical experience in all aspects of plumbing installations in a residential setting. Students will plan, design, and install a plumbing drain, a waste and vent system, plumbing fixtures, water distribution systems, and associated piping in accordance with state and local plumbing codes. Prerequisite: PLMB 1050 Corequisite: PLMB1110 (0/135/0/0)

PLMB 1130 Gas Operations and Maintenance 2 credits

This course introduces techniques for safe handling of natural gas, liquefied petroleum gas, and fuel oil. The course reviews fuel gas and fuel oil safety precautions and potential hazards, applications, systems installations, and testing. Corequisite: PLMB1140 (30/0/0/0)

PLMB 1140 Gas Operations and Maintenance Lab 2 credits

This course provides experience in the safe handling of natural gas, liquefied petroleum gas, and fuel oil containing systems. The course enables students to gain hands-on experience in fuel gas and fuel oil safety precautions, potential hazards, applications, systems installations, and testing. Corequisite: PLMB1130 (0/90/0/0)

Political Science (POLS)

POLS 1000 American Government 3 credits

A study of the functioning of the American political system through an analysis and application of its underlying theories. (45/0/0/0)

POLS 1200 Introduction to Political Science 3 credits

Introduction to the academic discipline of political science. Focuses attention on the nature and scope of political science, the political process, and interrelationship of various elements of a political system. (45/0/0/0)

POLS 1600 International Relations 3 credits
A survey of the actors, institutions, processes, and theories of international relations including a study of contemporary global issues. (45/0/0/0)

Pre-Engineering (ENGR)

ENGR 1010 Introduction to Engineering Design 3 credits
Introduction to the engineering profession, engineering problem solving and engineering design with an emphasis on current topics. Course material will be presented using projects and group learning activities. (45/0/0/0)

ENGR 1020 Programming and Problem Solving 3 credits
This is a computer programming course that teaches structured programming and problem solving using computers. Consists of a sequence of programming assignments that require students to write programs to solve engineering problems. Proficiency with Windows Operating System and word processing software required. Student must receive a grade of C or better to transfer. Prerequisite: APPROPRIATE PLACEMENT SCORE OR MATH 1200 WITH MIN. GRADE OF C (45/0/0/0)

ENGR 2010 Introduction to Circuits and Electronics 4 credits
Basic circuit analysis for engineers including direct and alternating currents and operational amplifiers, digital signals and circuits. Prerequisite: PHYS 2120 (45/30/0/0)

ENGR 2020 Engineering Statics 3 credits
Action of forces on engineering structures and machines. Force systems, static equilibrium of frames and machines. Friction, center of gravity, moment of inertia, vector algebra. Prerequisite: PHYS 2110 WITH MIN. GRADE OF C AND MATH 2010 WITH MIN. GRADE OF C (45/0/0/0)

Psychology (PSYC)

PSYC 1000 Human Relations 2 credits
Exposure to practical information from psychology for use in everyday human relations and to improve communication skills. (30/0/0/0)

PSYC 1810 Introduction to Psychology 3 credits
An introduction to the science of behavior and mental processes including the application of critical thinking to the study of learning theory, memory, personality, growth and development, biological and neurological aspects, abnormal behavior, therapies, intelligence, motivation, emotion, sensation, perception, and theoretical perspectives. (45/0/0/0)

PSYC 2110 Child and Adolescent Psychology 3 credits
This course emphasizes the biosocial, cognitive, and psychosocial development of childhood through adolescence by examination of theories, behaviors, and terminology. Prerequisite: PSYC 1810 WITH MIN. GRADE OF C (45/0/0/0)

PSYC 2200 Lifespan Psychology 3 credits
Study of human development from conception to death. Emphasizes physical, cognitive, personality, and social changes that occur throughout life. Discusses universal and individual influences on development. Prerequisite: PSYC 1810 WITH MIN. GRADE OF C OR HUSR 1010 WITH MIN. GRADE OF C (45/0/0/0)

PSYC 2300 Psychology of Learning 3 credits
Study of the psychological aspects of learning, thinking, and problem solving. Surveys theories, explores the teaching-learning process, and suggests strategies for maximizing cognitive development. Includes conditioning, cognition, information processing, decision making, motivation, measurement, and language development. Prerequisite: PSYC 1810 WITH MIN. GRADE OF C (45/0/0/0)

PSYC 2500 Social Psychology 3 credits
An examination of the scientific field that seeks to understand the nature and causes of individual behavior and thought in social situations. Prerequisite: PSYC 1810 WITH MIN. GRADE OF C (45/0/0/0)

PSYC 2800 Abnormal Psychology 3 credits
An examination of historical and contemporary views and issues of abnormal psychology to include explanations, diagnosis, and treatment of abnormal behavior. Prerequisite: PSYC 1810 WITH MIN. GRADE OF C (45/0/0/0)

Renewable Fuels (RNEW)

RNEW 1100 Process Dynamics 3 credits
An introduction to the basic principles of industrial physics that are frequently encountered in an operating plant environment. Principles of flow, temperature, pressure, heat, gases, liquids, solids, fluid systems, process dynamics, and heat transfer are covered. (45/0/0/0)

RNEW 1101 Ethanol Process Fundamentals 2 credits
Covers in detail the overall fundamental process of ethanol production. A Process Flow Diagram of a typical ethanol plant will be used to examine the sequence of operation, including residence times, pressures, and temperatures seen in various stages of production. The course will explain the rationale for feedstock and additives used in ethanol processing as well as product and co-product production and use. (30/0/0/0)

RNEW 1105 OSHA and Safety 1 credit
Regulatory information about the OSHA CFR Standards for General Industry, along with practical applications toward work place safety will be covered in this course. Hazards that exist in ethanol plants will be discussed with an emphasis towards creating and maintaining a safe working environment. (15/0/0/0)

RNEW 1110 Mechanical and Fluid Fundamentals 3 credits
This course presents a basic understanding of fluid fundamentals with emphasis on electronic and pneumatic control systems. Identification of pumps, valves, heat exchangers, cooling towers, compressors, refrigeration principles, and boiler systems will be presented. Start-up, shutdown, operation, and troubleshooting for each of these mechanical systems will be studied at an introductory level. (45/0/0/0)

RNEW 1125 Piping and Instrumentation Diagrams 0.5 credits
This course will cover the symbols and diagrams commonly used on piping and instrumentation diagrams, or P and IDs, and electrical one-line diagrams. Focus will be on identifying the types of diagrams, identifying instrument symbols and line symbols used on P and IDs, understanding the types of information typically found on a legend, using a P and ID to locate the components of a system, identification of symbols used on electrical one-line diagrams, and reading a flow diagram to trace the flow paths of a system. (7.5/0/0/0)

RNEW 1130 Pollution Control Fundamentals 2 credits
This course will cover the fundamentals of pollution control and environmental compliance requirements governing the protection of the air, water, and land resources. Topics include the Clean Air Act, Clean Water Act, Resource Conservation and Recovery Act, Spill Prevention and Counter Control Measures and additional regulatory requirements affecting the ethanol industry. (30/0/0/0)

RNEW 1135 Distillation and Evaporation Theory 3 credits
This course will provide a comprehensive study of distillation, evaporation, and dehydration principles and how they are utilized and interrelated in ethanol production. Students will learn how to troubleshoot common operational problems and will become familiar with safety procedures. (45/0/0/0)

RNEW 1140 Process Plant Chemistry 2 credits

This course is designed to overview the relationship of science, technology, and management areas in regards to agricultural processing plant operations. The course has a strong emphasis on the product, operational, and business aspects of agricultural processing plants. (30/0/0/0)

RNEW 1155 Process Operations and Control 3 credits

This course explores the principles and practices related to the production of ethanol through the utilization of an ethanol process simulator. Students will navigate the start-up, shutdown, and clean-in-place processing steps necessary for ethanol production. Emphasis will be placed on report generating and interpreting data using real-life examples. (45/0/0/0)

RNEW 1160 Instrumentation and Control 3 credits

This course will provide a study of the fundamental concepts of programmable logic controls: hardware identification and application, and system testing. The course will also cover the calibration and troubleshooting of equipment used to measure flow rate, pressure, temperature, and pH. Corequisite: RNEW1165 (45/0/0/0)

RNEW 1165 Instrumentation and Control Lab 1 credit

This laboratory will provide application of what is learned in the Instrumentation and Control Theory course through the use of process control trainers. Corequisite: RNEW1160 (0/45/0/0)

RNEW 1170 Microbial Ecology 2 credits

This course will provide an introduction to the structure, classification, and ecology of microorganisms as they relate to an industrial processing plant. Corequisite: RNEW1172 (30/0/0/0)

RNEW 1172 Microbial Ecology Lab 1 credit

Lab activities will use demonstration and inquiry techniques learned in the Microbial Ecology course. Corequisite: RNEW1170 (0/45/0/0)

RNEW 1175 Industrial Water Treatment 2 credits

This course covers the basic understanding of primary water treatment systems as they pertain to industrial processes. Students will be able to describe problems caused by impurities in water and explain how they can be removed physically and chemically. (30/0/0/0)

RNEW 1190 Industrial Supervisory and Management Principles 3 credits

This course presents a repertoire of interpersonal skilled behaviors for successful management and supervision within rapidly changing industrial technologies. The course will empower supervisors to maximize communications, promote teamwork, benefit from change while managing time, and evaluate oneself as well as others, thus enhancing employee productivity. (45/0/0/0)

RNEW 1300 Cooperative Internship I 6 - 8 credits

Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and/or during this period, including seminars, directly related to work experience. These experiences are supervised by the college and employers so that each contributes to the student's education and employability. Minimum 2.0 GPA after completing freshman year of program required. (0/0/0/480)

Sign Language (SIGN)**SIGN 1000 Conversational Sign Language 1 - 2 credits**

An introduction to sign language, including elements of ASL and SEE II. This course emphasizes the development of receptive and expressive skills in the use of the manual alphabet, numbers, and basic signs. (30/0/0/0)

Social Work (SOWK)**SOWK 2000 Introduction to Social Work 3 credits**

A basic introduction to the history, development, and current status of social welfare institutions and issues related to them. In addition, the course will review the profession of social work, to include the purposes, values, and skill base of the profession, the organization and functions of public and private social agencies, and the social service delivery system. The course will also address human needs and rights, the impact of social problems on individuals, families, and/or communities, and the response to them. (45/0/0/0)

SOWK 2100 Social Work Ethics and Skills 3 credits

The course prepares students with a working knowledge of the social work field. They will develop a keen understanding of the values and ethics of social work and be oriented into social work environments so they can analyze, evaluate, and respond to diverse individuals functioning in challenging social situations. Emphasis will be on skill building and interpersonal communications. Prerequisite: SOWK 2000 WITH MIN. GRADE OF C (45/0/0/0)

SOWK 2110 Social Work Practicum 1 credit

Under supervision, students will work at selected sites and apply acquired skills and principles studied in the classroom. Prerequisite: SOWK 2000 WITH MIN. GRADE OF C AND SOWK 2100 WITH MIN. GRADE OF C (MAY BE TAKEN CONCURRENTLY) (0/0/45/0)

Sociology (SOCI)**SOCI 1010 Introduction to Sociology 3 credits**

Introduction to the basic principles of sociology, including the study of sociological research, theoretical perspectives, culture, socialization, social structure, social institutions, deviance, social inequalities, stratification, demography, and population. (45/0/0/0)

SOCI 1100 Introduction to Family Living 3 credits

Study of basic social unit historically and culturally. Examines the socialization process, gender roles, love, conflict, marriage, divorce, relationships, parenting and alternate forms of family. (45/0/0/0)

SOCI 2150 Issues of Unity and Diversity 3 credits

This course will help students increase awareness and sensitivity of commonalities and differences among people and acquire knowledge of minority group issues and challenges. The course will prepare students to more critically, actively, and effectively participate in an increasingly diverse and global society. (45/0/0/0)

SOCI 2200 Criminology 3 credits

Examines crime and criminology from a broad social perspective. Emphasizes the nature and causes of crimes, investigation and prosecution, and treatment and prevention. (45/0/0/0)

SOCI 2300 Sociology of Deviant Behavior 3 credits

Theoretical analysis of the relation of deviant behavior including crime, vice, innovation, individual pathology, and deviant subgroups to community standards of conventional behavior as expressed in law and norms. (45/0/0/0)

SOCI 2320 Social Problems 3 credits

This course is designed to give students an appreciation for the possibilities and difficulties inherent in a wide variety of social problems, to include economic inequality and poverty, work and unemployment, race and ethnicity, gender inequality and issues in sexual orientation, and crime and drugs. Problems related to the family, education, health care, and political institutions, violence, terrorism, population, and the environment will also be discussed. Prerequisite: SOCI 1010 (45/0/0/0)

Spanish (SPAN)

SPAN 1000 Essential Conversational Spanish 1 - 2 credits
An introduction to the conversational study of the Spanish language for various professional groups. (30/0/0/0)

SPAN 1200 Elementary Spanish I 4 credits
An introduction to the grammatical and conversational study of the Spanish language. Emphasis on the history and culture of the Spanish speaking world. (60/0/0/0)

SPAN 1210 Elementary Spanish II 4 credits
A continuation of the grammatical and conversational study of the Spanish language. Emphasis on reading Spanish at a literary level. Prerequisite: SPAN 1200 (60/0/0/0)

SPAN 2100 Intermediate Spanish I 4 credits
A grammar review and advanced presentation of the structure of the Spanish language. Emphasis on aural, conversational skills, reading and writing. Prerequisite: SPAN 1210 (60/0/0/0)

Speech (SPCH)

SPCH 1010 Fundamentals of Communication 3 credits
This course stresses the correlation of effective communication common to interpersonal, small group, and public speaking contexts. Theory and application are incorporated into a variety of classroom activities. Students gain experience in public speaking through the delivery of informative, persuasive, and other various types of speeches. (45/0/0/0)

SPCH 1050 Career Communication 1 - 3 credits
Provides a wide range of oral activities related to potential situations in career areas. Includes persuasive speaking, informative speaking, and group organization and participation. (45/0/0/0)

SPCH 1100 Small Group Communication 3 credits
Study of the processes and techniques of purposeful, problem-solving communication in small, face-to-face groups. (45/0/0/0)

SPCH 1110 Public Speaking 3 credits
This course will enable students to master the skills required of speaking in today's workplace and society. This course will focus on the organization, preparation, research, and evidence needed for a presentation that is tailored to fit the audience. This course will also enhance the students' active and critical listening skills. (45/0/0/0)

SPCH 2010 Interpersonal Communication 3 credits
This course addresses the theories and models of interpersonal communication. Understanding these areas will allow students to develop and improve their own interpersonal communication skills. The course addresses listening skills, relationship and conflict management, gender communication, intercultural differences and the connection between intrapersonal and interpersonal communication. Students will participate in projects and activities that enhance verbal and nonverbal interpersonal communication skills. (45/0/0/0)

SPCH 2200 Public Relations 3 credits
Students will study the application of public relations in corporations, politics, national and international government, non-profit organizations, entertainment, sports, and travel. Topics include the role of ethics, gender and cultural differences, internal and external communications, and conflict management. (45/0/0/0)

SPCH 2300 Intercultural Communications 3 credits
This course will demonstrate the need for intercultural communication in today's world and present strategies and methods needed to be an effective intercultural communicator. (45/0/0/0)

Theatre (THEA)

THEA 1010 Introduction to Theatre 3 credits
An introduction to the forms and functions of the dramatic arts within a historical perspective. Includes an introduction to basic theatre skills as well as an introduction to a range of dramatic literature. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

THEA 1100 Theatre I 1 credit
Techniques and study in acting, rehearsal, performance, and stage production. (0/30/0/0)

THEA 1110 Theatre II 1 credit
Continuation of THEA 1100. Prerequisite: THEA 1100 (0/30/0/0)

THEA 1200 Play Production 2 credits
This course informs students on the design and planning process necessary to produce a play. Included topics are light design and application, scenic design and application, sound design and application, and costume design and application. The course culminates in the production of the college's annual student play. Prerequisite: THEA 1100 (MAY BE TAKEN CONCURRENTLY) OR THEA 1110 (MAY BE TAKEN CONCURRENTLY) OR THEA 2120 (MAY BE TAKEN CONCURRENTLY) OR THEA 2130 WITH (30/0/0/0)

THEA 1340 Introduction to Acting 3 credits
An introductory course on the art of acting, which lays the foundation for the acting process. This course introduces the student to methods for analyzing theatrical works, methods for developing physical and vocal techniques, ways to build a deeper awareness of character and characterization, and theories related to exploring techniques which help an actor prepare for performance. (45/0/0/0)

THEA 2120 Theatre III 1 credit
Continuation of THEA 1110. Prerequisite: THEA 1110 AND THEA 1200 (0/30/0/0)

THEA 2130 Theatre IV 1 credit
Continuation of THEA 2120. Prerequisite: THEA 1200 AND THEA 2120 (0/30/0/0)

THEA 2140 Introduction to Shakespeare 3 credits
Focus is on an examination of the plays by William Shakespeare and the history that influenced the major themes of his canon. Students will study several of his plays from the three major divisions of his work as a playwright: the tragedies, history plays, and the comedies. Prerequisite: ENGL 1010 WITH MIN. GRADE OF C OR ENGL 2070 WITH MIN. GRADE OF C (45/0/0/0)

THEA 2150 Introduction to Directing 3 credits
Introduction to various aspects of directing and staging techniques, including fundamentals of blocking, script analysis, and performance as they apply in theory, real-world examples, and practical application. Prerequisite: THEA 1100 (MAY BE TAKEN CONCURRENTLY) OR THEA 1110 (MAY BE TAKEN CONCURRENTLY) OR THEA 2120 (MAY BE TAKEN CONCURRENTLY) OR THEA 2130 WITH (22.5/45/0/0)

Utility Line (UTIL)

UTIL 1010 Concepts of Electricity I 4 credits
Fundamentals of electrical theory and electrical components in DC circuits. Includes explanation and understanding of resistive circuit analysis using Ohm's law, circuit diagrams, and the proper operation of basic test equipment. Corequisite: UTIL1020 (60/0/0/0)

UTIL 1020 Concepts of Electricity I Lab 1 credit

Application of the fundamentals of electrical theory and electrical components in DC circuits. Lab includes demonstration and explanation of resistive loads in DC circuits, proper use of electrical test equipment, safety rules and procedures when working with electricity, and following circuit diagrams. Corequisite: UTIL1010 (0/45/0/0)

UTIL 1030 Line Construction I 4 credits

Study of the use of equipment, materials, and specifications for construction of various distribution systems. Proper and safe climbing techniques are a major element in the application of line construction. Corequisite: UTIL1040 (60/0/0/0)

UTIL 1040 Line Construction I Lab 3 credits

Application of fundamentals learned in the classroom regarding pole climbing, digger derrick set-up and operation, single phase overhead line construction including pole setting, plumbing, tamping, and learning basic tools of the trade. Corequisite: UTIL1030 (0/135/0/0)

UTIL 1100 Commercial Drivers License 1 credit

Includes all aspects of classroom instruction pertaining to the written portion of the commercial drivers license test as is now required by the electrical utility industry for those operating utility-owned trucks on public roadways and to meet state and federal requirements. Valid drivers license required. UTIL majors only or permission of instructor. (15/0/0/0)

UTIL 1110 Commercial Drivers License Lab 1 credit

Lab experience for UTIL 1100. Involves the practical application of driving tractor trailer to meet the requirements of the State of Nebraska DOT Class A or A-O restriction CDL. Upon completion of this course, state testing for a commercial drivers license Class A will be done. Valid drivers license and CDL learners permit required. UTIL majors only or permission of instructor. (0/45/0/0)

UTIL 1120 Powerline Transformer Theory 2 credits

Fundamentals of powerline transformer components, operation, and installation. Prerequisite: UTIL 1010 Corequisite: UTIL1240 (30/0/0/0)

UTIL 1140 Line Construction II 4 credits

Advanced study of the use of equipment, materials and specifications for the construction of various distribution systems. Proper, safe and advanced climbing techniques are a major element in the application of advanced line construction. Prerequisite: UTIL 1010 WITH MIN. GRADE OF C AND UTIL 1030 WITH MIN. GRADE OF C AND MATH 1020 Corequisite: UTIL1150 (60/0/0/0)

UTIL 1150 Line Construction II Lab 3 credits

Application of the fundamentals learned in the classroom of single phase and three phase line construction. Lab includes setting poles, attaching hardware, guying and anchoring, underground electrical systems both primary and secondary, conductors, and single phase transformer installation. Prerequisite: UTIL 1020 WITH MIN. GRADE OF C AND UTIL 1040 WITH MIN. GRADE OF C Corequisite: UTIL1140 (0/135/0/0)

UTIL 1240 Concepts of Electricity II 4 credits

Fundamentals of electrical theory and electrical components in AC circuits. Includes explanation and understanding of resistors, capacitors, inductors and transformers and how they affect the flow of alternating current. Prerequisite: UTIL 1010 WITH MIN. GRADE OF C AND UTIL 1030 WITH MIN. GRADE OF C AND MATH 1020 Corequisite: UTIL1250 (60/0/0/0)

UTIL 1250 Concepts of Electricity II Lab 1 credit

Application of the fundamentals of electrical theory and electrical components in DC and AC circuits. Lab includes demonstration and experiments containing resistors, inductors, capacitors, and transformers in both AC and DC circuits, proper use of electrical test equipment, safety rules and procedures when working with electricity, and following circuit diagrams. Prerequisite: UTIL 1020 WITH MIN. GRADE OF C AND UTIL 1040 WITH MIN. GRADE OF C Corequisite: UTIL1240 (0/45/0/0)

UTIL 1260 Ropes and Riggings 1 credit

Proper use and handling of ropes and related hardware in line construction. Includes care of ropes, determination of strengths and types, and knots. UTIL majors only. (15/0/0/0)

UTIL 1280 Computer Literacy 2 credits

An introduction to basic computer operations using personal computers with Windows operating system. Students learn to use the computer to create and edit word processing and spreadsheet documents. UTIL majors only. (30/0/0/0)

UTIL 1300 Cooperative Internship I 1 - 6 credits

Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and/or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and employers so that each contributes to the student's education and employability. Satisfactory completion of first year Utility Line program with all required classes and a minimum 2.0 GPA. Must have and maintain a valid Class A-O Restriction Commercial Drivers License. Prerequisite: UTIL 1140 WITH MIN. GRADE OF C AND UTIL 1150 WITH MIN. GRADE OF C AND UTIL 1240 WITH MIN. GRADE OF C AND UTIL 1250 WITH MIN. GRADE OF C AND UTIL 1260 AND UTIL 1120 (0/0/0/360)

UTIL 1500 Rural Electric Job Training and Safety 1.5 credits

To educate employees in the safe working procedures and maintenance of equipment to provide a safe work environment in the rural electric industry. (22.5/0/0/0)

UTIL 1510 Electrical Job Training and Safety 2 credits

Course covers safe work practices and maintenance of equipment for electrical workers. (30/0/0/0)

UTIL 1520 Rural Electrical Job Training and Safety 2.5 credits

To educate employees in the safe working procedures and maintenance of equipment in the rural electric industry. (37.5/0/0/0)

UTIL 2200 Electrical Apparatus Theory 6 credits

The theory, operation, application and safety of electrical equipment throughout the distribution system will be presented. Prerequisite: UTIL 1300 WITH MIN. GRADE OF P Corequisite: UTIL2210 (90/0/0/0)

UTIL 2210 Electrical Apparatus Lab 6 credits

Practical field experience in the construction and maintenance of a distribution system including the installation of electrical equipment commencing at the substation and terminating at the customer's premises. Prerequisite: UTIL 1300 WITH MIN. GRADE OF P Corequisite: UTIL2200 (0/270/0/0)

UTIL 2240 Utility Occupational Procedures 1 credit

Safety of personnel, record keeping procedures, and conducting safety meetings for a safe and efficient operation of an electric utility will be implemented. Prerequisite: UTIL 1300 WITH MIN. GRADE OF P (15/0/0/0)

UTIL 2400 National Electric Safety Code 2 credits

Advanced record keeping which will include accident investigation and reporting, operation practices, customer relations, and safety meetings will be utilized for a safe and efficient operation of a utility. Prerequisite: UTIL 1300 WITH MIN. GRADE OF P (30/0/0/0)

UTIL 2420 Line Construction III 5 credits

Advanced theory and techniques of line construction and maintenance requirements will be presented. Techniques and theory of high voltage tools and equipment as well as application of rubber gloving techniques for working on energized high voltage lines will be presented and discussed. Theory and development for the use of primary and secondary underground cable as well as underground specifications are presented, and also theory and techniques of field engineering. Prerequisite: UTIL 1300 WITH MIN. GRADE OF P Corequisite: UTIL2430 (75/0/0/0)

UTIL 2430 Line Construction III Lab 6 credits

Extensive practical field experience in the use of high voltage tools and equipment, rubber gloving procedures and equipment, along with use of digger and aerial trucks for the construction and maintenance requirement of high voltage power lines. Practical field experience will be gained in the construction and maintenance of overhead and underground transmission and distribution systems. Trencher and backhoe equipment will be used for the installation of primary and secondary underground cable in a field situation. Prerequisite: UTIL 1300 WITH MIN. GRADE OF P Corequisite: UTIL2420 (0/270/0/0)

Veterinary Technician (VTEC)

VTEC 1000 Animal Husbandry and Restraint 3 credits

Introductory course to help students learn the proper husbandry, feeding, breeds and restraint techniques of the common domestic animals seen in a veterinary clinic. (45/0/0/0)

VTEC 1110 Veterinary Terminology 2 credits

The veterinary technician student will be instructed in writing, speaking, and understanding medical terminology. (30/0/0/0)

VTEC 1120 Anatomy and Physiology of Domestic Animals I 3 credits

A systems approach to studying the anatomy and physiology of domestic animals will be used. Students will learn the normal physiology of the tissues, skeletal, nervous, cardiovascular, blood, respiratory, and urinary systems. Species differences will be introduced. (45/0/0/0)

VTEC 1121 Anatomy and Physiology of Domestic Animals II 3 credits

This course is a continuation of VTEC 1120. A systems approach to studying the anatomy and physiology of domestic animals will be used. Students will learn the normal physiology of the integument, muscle, digestive, endocrine, reproductive, and special senses systems. Species differences will be introduced. (45/0/0/0)

VTEC 1123 Anatomy and Physiology of Domestic Animals Lab 1 credit

A systems approach to studying the anatomy and physiology of domestic animals will be used. Students will learn the normal physiology of each organ system as well as the gross and microscopic anatomy. Species differences will be introduced. (0/45/0/0)

VTEC 1211 Laboratory Techniques I Lab 1 credit

This laboratory will include the demonstration and use of many diagnostic tests used in the veterinary clinic. Knowledge from VTEC 1210 will be used by the student to understand the basis of these tests. The diagnostic tests will include CBC, hematocrit, differentials urinalysis, and preparation for cytology. The student should gain an appreciation for the limits of each test, safety and quality control, and interpretation of the results. (0/45/0/0)

VTEC 1212 Laboratory Techniques I 3 credits

Students will explore the areas of hematology, cytology, and urology. They will learn basic diagnostic tests commonly used in veterinary clinics. Laboratory safety and quality control will be covered. Common diseases affecting laboratory results in large, small, and exotic species will be discussed. (45/0/0/0)

VTEC 1220 Pharmacology 3 credits

Provides the student with a working knowledge of the need for appropriate use and dispensing of medication in all levels in veterinary medicine. Emphasis is placed on the veterinary technician role as the student learns the principles of drug actions, drug groups, inventory management, dosage calculation, dispensing, adverse drug reactions, and proper storage and disposal. (45/0/0/0)

VTEC 1321 Radiology and Ultrasonography Lab 1 credit

Students will expand upon knowledge gained in VTEC 1320. Students will demonstrate safety, positioning animals correctly for x-rays, and taking good quality x-rays. Students will also develop a technique chart and figure exposure factors and will demonstrate how to use and maintain the ultrasound machine. (0/45/0/0)

VTEC 1322 Radiology and Ultrasonography 3 credits

Students will be instructed on x-ray production and ultrasonography imaging, radiation safety and how to produce quality radiographs. Other subject areas include film processing, developing technique charts, exposure factors, and appreciate clinical indications for performing ultrasound. Must be 18 years or older and meet special conditions for course. (45/0/0/0)

VTEC 1410 Clinical Nursing of Companion Animals 3 credits

Students will learn various restraint techniques, nursing skills, and common diseases associated with small animals. Students will become acquainted with how to restrain small animals, recognize common clinical signs of ill animals, common tests used for diagnosis, treatments, and how to medicate small animals. Students will also learn how to provide assistance to the veterinarian, and safety will be emphasized. (45/0/0/0)

VTEC 1411 Clinical Nursing of Companion Animals Lab 1 credit

The student will expand upon the knowledge gained in VTEC 1410. The student will demonstrate the ability to restrain patients, recognize clinical signs of ill patients, deliver medication, place and maintain catheters, perform diagnostic tests, monitor patients, and many other nursing techniques. Emphasis will be placed on safety, good medical communication and patient comfort. (0/45/0/0)

VTEC 1440 Lab Animal Science 2 credits

This class will acquaint the student with basic principles of animal research. Basic lab animal husbandry, handling, and regulations will be the major topics of discussion. (30/0/0/0)

VTEC 2200 Veterinary Office Practices 3 credits

This course presents material that will help the veterinary technician learn about veterinary practice management. Students will learn about the care and maintenance of the veterinary practice, administrative duties, computer software, interpersonal communication, customer service, and financial matters of a veterinary practice. (45/0/0/0)

VTEC 2520 Clinical Nursing of Large Animals 3 credits

The student will learn various restraining techniques, nursing skills, and common diseases associated with large animals. The student will become acquainted with how to handle large animals, recognize common clinical signs of ill animals, common tests used for diagnosis, treatments and how to medicate large animals. (45/0/0/0)

VTEC 2521 Clinical Nursing of Large Animals Lab 1 credit

The student will expand upon the knowledge gained in VTEC 2520. The student will demonstrate various methods of restraint, recognize clinical signs of ill patients, deliver medication, catheter placement, sample collection, perform diagnostic tests, monitoring patients, and many other nursing techniques. Emphasis will be on safety, good medical communication and patient comfort. (0/45/0/0)

VTEC 2561 Laboratory Techniques II Lab 1 credit

This laboratory will build on the knowledge gained from VTEC 2560. Diagnostic tests covered in this lab include fecals, eggs count, parasite identification, identification of bacteria, ELISA tests, and blood chemistries. The student should gain an appreciation for the limits of each test, safety and quality control and interpretation of the tests results. (0/45/0/0)

VTEC 2562 Laboratory Techniques II 3 credits

A continuation of VTEC 1212. Students will be exposed to the areas of parasitology, microbiology, and clinical chemistries. The students will learn common diagnostic tests that are used in veterinary clinics. Common disease processes will be discussed. Laboratory safety and quality control will be emphasized. (45/0/0/0)

VTEC 2570 Laboratory Techniques III 2 credits

In VTEC 2570 the student will cover the subject areas of microbiology as it pertains to veterinary medicine. The student will learn the common laboratory practices used to identify bacterial agents. The student will also learn about the common bacteria groups found in veterinary medicine and their impact on the animals they infect. (30/0/0/0)

VTEC 2571 Laboratory Techniques III Lab 1 credit

In VTEC 2571 the student will learn proper laboratory techniques to prevent contamination and zoonosis. The student will learn how to identify different bacteria through the use of agars, staining techniques, metabolic tests, and other methods. The student will also learn about the common bacteria groups found in veterinary medicine and their impact on the animals they infect. (0/45/0/0)

VTEC 2611 Principles of Veterinary Surgical Nursing and Dentistry Lab 1 credit

Prepares the student to participate as an integral part of the surgical team. The student will be able to prepare equipment and supplies for surgery as well as assist the veterinarian during surgical procedures. The student will be trained in anesthetic procedures and will exercise proper safety measures to prevent injury to patient and staff. Prerequisite: VTEC 2622 WITH MIN. GRADE OF C AND VTEC 2621 WITH MIN. GRADE OF C (0/45/0/0)

VTEC 2612 Principles of Veterinary Surgical Nursing 3 credits

Prepares the student to participate as an integral part of the surgical team. Material presented will assist the student in understanding the theory on surgical assisting and surgical nursing. The student will review proper safety measures pertaining to animal handling, OSHA, Zoonosis, and personal safety. (45/0/0/0)

VTEC 2621 Anesthesia for Veterinary Technician Lab 1 credit

VTEC 2621 will prepare the student to participate as an integral part of the surgical team. Material presented will assist the student in understanding the theory on anesthesia. The student will review machine function and maintenance, correct monitoring options, how to recognize emergency situations and appropriate steps to correct situation, advanced procedures used in both anesthesia and analgesia. (0/45/0/0)

VTEC 2622 Anesthesia for Veterinary Technicians 3 credits

VTEC 2622 will prepare the student to participate as an integral part of the surgical team. Material presented will assist the student in understanding the theory on anesthesia and dentistry. The student will review proper safety measures pertaining to animal handling, OSHA, Zoonosis, and personal safety. (45/0/0/0)

VTEC 2630 Clinical Nursing of Avian and Exotics 2 credits

The course is designed to introduce the student to the care of exotic animals. The student will learn various restraint techniques, nursing skills and common diseases associated with exotics. The student will become acquainted with how to handle exotics, recognize common clinical signs of the ill exotics, common tests used for diagnosis, treatments, and how to medicate exotic animals. (30/0/0/0)

VTEC 2660 Internship 6 credits

Allows the student hands-on experience in the veterinary clinic. The student will work under the supervision of the veterinarian to gain and hone their skills as a veterinary technician. This internship is completed during the last semester of the Veterinary Technology Program. At the end of this internship, the student will take a major comprehensive exam of all material presented in the veterinary technology curriculum. (0/0/360/0)

VTEC 2680 Veterinary Technician National Exam Review 1 credit

VTEC 2680 is a review course that will help students review material from the veterinary technology program and prepare to take the Veterinary Technician National Exam. Emphasis will be placed on the seven domains of the VTNE. Students will be required to pass a comprehensive exam at the end of the course. (15/0/0/0)

VTEC 2700 Topics in Large Animal Nursing 1 credit

This course is designed for the student who wants to advance their skill level in large animal nursing. Students will select the topics that will be covered from the areas of anesthesia, radiology and ultrasound, reproductive management, and nursing skills. (7.5/22.5/0/0)

VTEC 2888 Topics in Small Animal Nursing 1 credit

Topics in Small Animal Nursing is designed for the student who wants to advance their skill level in small animal nursing. Topics that will be covered include: anesthesia, emergency and critical care, toxicology, advanced nursing skills, nutrition, rehabilitation, chemotherapy and dentistry. Must be sophomore standing in Veterinary Technology Program. Prerequisite: VTEC 1410 AND VTEC 1411 AND VTEC 2620 AND VTEC 2622 (7.5/22.5/0/0)

Welding (WELD)**WELD 1010 Related Welding 0.5 credits**

Basic welding fundamentals for vocational programs other than welding. Emphasizes shielded metallic arc welding and oxyacetylene welding. Corequisite: WELD1020 (7.5/0/0/0)

WELD 1020 Related Welding Lab 1 credit

Lab experience for WELD 1010. Emphasizes shielded metallic arc welding and oxyacetylene welding. Corequisite: WELD1010 (0/45/0/0)

WELD 1030 Shielded Metal Arc Welding Basic Theory (SMAW) 1.5 credits

Provides student with a technical understanding of arc welding, welding safety, power sources, electrode classifications and selection. It also provides theory to make quality shielded metal arc welds in all positions on various thicknesses of material using selected electrodes on AC and DC currents. Corequisite: WELD1035 (22.5/0/0/0)

WELD 1035 Shielded Metal Arc Welding Basic Lab 3 credits

Provides student with a technical understanding of arc welding, welding safety, power sources, electrode classifications and selection. It also provides training to develop skill to make quality welds in all positions on mild steel from thin to thick material, single and multiple passes using selected electrodes and current. Course also provides training to develop skill to produce quality multi-pass groove welds with backing in all positions. Related information about welder qualification is provided. Corequisite: WELD1030 (0/135/0/0)

WELD 1040 Gas Metal and Flux Cored Arc Welding Theory 1.5 credits

Provides student with a technical understanding of welding safety using gas metal arc and flux cored arc welding, equipment adjustments, metal transfer and shielding gases. It also illustrates problems associated with welding situations and provides corrective information. Corequisite: WELD1045 (22.5/0/0/0)

WELD 1045 Gas Metal Arc and Flux Cored Arc Welding Lab 3 credits

Provides student with the training to develop the skill to make gas metal arc and flux cored arc welds in all positions on mild steel and materials with various thicknesses. Single and multiple pass welds using select modes of transfer will be used to produce welds on fillet and groove welds. Corequisite: WELD1040 (0/135/0/0)

WELD 1050 Gas Tungsten Arc Welding Theory 1.5 credits

Course provides the student with a technical understanding of gas tungsten arc welding, arc characteristics and welding safety. It prepares students with a technical understanding to make welds on gage material using mild steel, stainless steel and aluminum and provides preparation for welding pipe. Prerequisite: WELD 1035 AND WELD 1045 Corequisite: WELD1055 (22.5/0/0/0)

WELD 1055 Gas Tungsten Arc Welding Lab 3 credits

Course provides a technical understanding of gas tungsten arc welding, arc characteristics and welding safety. It provides training to develop the skill to make welds on mild steel, stainless steel and aluminum gage material. It also develops skill to produce groove welds on plate and pipe material in various positions. Student must reach a skill level on gage material and plate prior to getting on pipe. Prerequisite: WELD 1035 AND WELD 1045 Corequisite: WELD1050 (0/135/0/0)

WELD 1060 Pipe Applications Theory 1.5 credits

This course provides the student with an understanding of pipe welding and weld quality plus information about the pipe welding industry. It also provides information about the different pipe welding positions and codes and how multiple processes can be used to weld out pipe. Prerequisite: WELD 1055 (MAY BE TAKEN CONCURRENTLY) Corequisite: WELD1065 (22.5/0/0/0)

WELD 1065 Pipe Applications Lab 3 credits

Course provides the student with an understanding of pipe welding and weld quality. This course helps to develop the welding skills necessary to produce welds on pipe in various positions using one or more processes to complete the weld. Prerequisite: WELD 1055 (MAY BE TAKEN CONCURRENTLY) Corequisite: WELD1060 (0/135/0/0)

WELD 1110 Introduction to Metallurgy 2 credits

Will provide instruction and information on the basic principles of metallurgy as it relates to welding. It also covers why welds and welders are tested and why quality, reliability and strength are critical in weldments. (30/0/0/0)

WELD 1140 Print Reading and Symbols 2 credits

Provides student with a technical understanding to develop skills necessary to interpret working sketches and prints common to the welding field. Once the learner is familiar with the basic concepts and components of drawings, the American Welding Society standard weld symbols are introduced as well as pipe welding symbols and nondestructive examination symbols. (30/0/0/0)

WELD 1155 Fabrication Equipment and Operation Lab 2 credits

Course will provide student the information to identify, maintain, setup and safely use precision measuring tools, hand and power tools and other lab equipment related to the welding field. Metal forming, cutting and finishing equipment will also be discussed. Related welding and cutting processes will also be identified and practiced Corequisite: WELD1035 AND WELD1045 (0/90/0/0)

WELD 1170 Print Reading and Fabrication Lab 2 credits

Course provides students with skills to apply the aspects of blueprint reading and to use set-up tools to fabricate a weldment from a print. Corequisite: WELD1055 (0/90/0/0)

Wind Energy (WIND)

WIND 1010 Basic Electricity 3 credits

Fundamental electrical theory including electrical components and their effects on AC and DC circuits. Covers electrical measurement with emphasis on circuit analysis using Ohm's law, circuit testing equipment, and the use of each instrument. (45/0/0/0)

WIND 1020 Basic Electricity Lab 2 credits

Includes practical application of safe work practices in building series and parallel circuits as used in the building industry. Includes utilizing digital meters and related test equipment in a live work setting. (0/90/0/0)

WIND 1030 Electrical and Operations Safety for Wind Energy 1 credit

The study of the electrical safety guidelines in the wind industry. (15/0/0/0)

WIND 1058 Electrical and Operations Safety for Wind Energy 3 credits

Basic study of the electrical safety guidelines for wind industry. (45/0/0/0)

WIND 1080 Wind Energy Fundamentals 3 credits

Introduction to how wind works, its reliability, and its economic, environmental and political issues. Introduces the various applications and the basic principles of wind energy systems. The course will cover the past and the future of the wind industry. (45/0/0/0)

WIND 1085 Wind Energy Fundamentals Lab 2 credits

Basic study of safety, equipment safety, structural awareness, environmental hazards, fall protection, non-climbing techniques, rescue plans, and physical demands for wind technician. Corequisite: WIND1080 (0/90/0/0)

WIND 1155 Mechanical Systems for Wind Energy 3 credits

This course is an introduction to the form and function of mechanical systems. The emphasis for this course will be on power transmission, lubrication, safety procedures, maintenance, and repair of mechanical equipment and systems. (45/0/0/0)

WIND 1160 Mechanical Systems for Wind Energy Lab 2 credits

This course will provide hands on experience with the safe use and care of the tools and equipment commonly used in the maintenance field. Students will practice the basic mechanical skills needed to properly maintain and repair industry equipment. Corequisite: WIND1155 (0/90/0/0)

WIND 1230 Motor Control **2 credits**
Practical source on various circuits commonly used to control electrical motors, including practice in troubleshooting and wiring control circuits in a laboratory situation. Prerequisite: WIND 1010 WITH MIN. GRADE OF C (30/0/0)

WIND 1240 Motor Control Lab **2 credits**
Practical application in constructing circuits used to control motors. Includes troubleshooting and repair of motor control systems in a lab setting. Prerequisite: WIND 1020 WITH MIN. GRADE OF C Corequisite: WIND1230 (0/90/0/0)

WIND 1255 Blueprint Reading **2 credits**
Study of electrical and structural blueprints used in the wind industry. Course includes creating a materials list and cost estimates for constructing wind turbines. Students will also learn how to use a CAD program to blueprint electrical and electromechanical devices used in the operation of wind turbines. (30/0/0/0)

WIND 1300 Cooperative Internship I **1 - 8 credits**
Work-study program for in-depth instruction on the job. The college gives both related and vocational instruction before and/or during this period, including seminars directly related to the work experience. These experiences are planned and supervised by the college and the employers so that each contributes to the student's education and employability. First year completion of the Wind Energy program or permission of instructor. (0/0/0/480)

WIND 2030 Wind Electronics II **3 credits**
Students will be introduced to and analyze the characteristics of alternating current (AC) and direct current (DC) voltages and currents as it relates to wind energy systems. Various circuit configurations and electronic components and devices will be studied to determine the effects of how they intermingle and react to one another within a circuit. Prerequisite: WIND 1010 WITH MIN. GRADE OF C AND WIND 1020 WITH MIN. GRADE OF C AND WIND 1230 WITH MIN. GRADE OF C AND WIND 1240 WITH MIN. GRADE OF C Corequisite: WIND2115 AND WIND2120 (45/0/0/0)

WIND 2045 Programmable Logic Controllers **4 credits**
Students will understand the relationship of Programmable Logic Controllers, software programming, and communication protocols to various control systems. Students will engage in common programming techniques, and demonstrate safe programming standards. Prerequisite: WIND 1230 WITH MIN. GRADE OF C AND WIND 1240 WITH MIN. GRADE OF C (60/0/0/0)

WIND 2050 Fluid Fundamentals **2 credits**
The study of fluid characteristics, the operations of valves, pumps and cylinders, and the basic steps in hydraulic troubleshooting. (30/0/0/0)

WIND 2055 Fluid Fundamentals **3 credits**
The study of fluid characteristics, the operations of valves, pumps, and cylinders, and the basic steps in hydraulic troubleshooting. (45/0/0/0)

WIND 2065 Fluid Fundamentals Lab **1 credit**
Practical application in the safe use of high pressure hydraulic fluids. Students will also work as a team to draw and construct a simple hydraulic circuit, analyze a hydraulic system and demonstrate the use of flow control components. Corequisite: WIND2055 (0/45/0/0)

WIND 2080 Generator Theory **2 credits**
Fundamental generator theory will emphasize the basic construction and components of a generator. Students will understand the theory of magnet flux and how it affects generator performance. Prerequisite: WIND 1230 WITH MIN. GRADE OF C AND WIND 1240 WITH MIN. GRADE OF C (30/0/0/0)

WIND 2085 Generator Lab **1 credit**
Student will assemble and disassemble a small scale generator with safe work practices. Various testing equipment will be demonstrated. Corequisite: WIND2080 (0/45/0/0)

WIND 2095 Air Foils and Composite Repair Lab **2 credits**
This course will enable the student to understand the construction, design and repair of wind turbine blades. This course will further cover the moving and transportation of wind turbines blades. Students will understand common industry terminology used in the manufacturing and repair of wind turbine blades. Students will also be exposed to traditional and new repair techniques. (0/90/0/0)

WIND 2115 Control Systems **2 credits**
Students will learn to interpret, understand, and troubleshoot the various industrial control systems that utilize advanced electrical and electronic components and devices such as sensors, relays, proximity switches, and controllers. Prerequisite: WIND 1230 WITH MIN. GRADE OF C AND WIND 1240 WITH MIN. GRADE OF C Corequisite: WIND2045 (30/0/0/0)

WIND 2120 Control Systems Lab **2 credits**
Application of the concepts and principles of Control Systems. Students will experimentally test and evaluate control systems. Students will further troubleshoot and repair various industrial control systems utilizing advanced electrical and electronic components and devices such as sensors, relays, proximity switches and controllers. Prerequisite: WIND 1230 WITH MIN. GRADE OF C AND WIND 1240 WITH MIN. GRADE OF C Corequisite: WIND2045 AND WIND2115 (0/90/0/0)

WIND 2210 Mechanical Systems II **1 credit**
This course will cover the interaction and repair of wind turbine up-tower mechanical devices. Repairs and maintenance will follow the guidelines of re-manufacturing companies along with best practices by the Electrical Apparatus Service Association. Students will have an opportunity to obtain a torque certification credential. Prerequisite: WIND 1155 AND WIND 1160 (15/0/0/0)

WIND 2220 Mechanical Systems II Lab **3 credits**
The lab will cover the hands-on training with the various mechanisms of wind turbines. Corequisite: WIND2210 (0/135/0/0)

WIND 2270 Data Communication and Acquisition **4 credits**
Students will have an understanding of Supervisory Control and Data Acquisition and relate the information to wind energy efficiency. Prerequisite: WIND 2115 AND WIND 2120 AND WIND 2045 WITH MIN. GRADE OF C (60/0/0/0)

WIND 2280 Wind Turbine Siting **2 credits**
Student will understand the proper placement of individual wind turbines as well as wind farm sites. This course will cover basic principles of how to find the best site and if it is suitable for wind energy production both large and small scale. Topics that will be covered are, physical restrictions, political issues, financing, institutional concerns, wind turbine noise, shadow flicker, proper placement near the electric grid, proper spacing of turbines, and environmental issues associated with wind turbines. Prerequisite: WIND 1080 (30/0/0/0)

WIND 2290 Power Generation and Distribution **2 credits**
Students will have an introduction to the generation of electrical power with a wind turbine generator moving that power through a transmission system to a substation. This course will cover the aspects of working with substations, voltage regulations, capacitors, and experience in a substation. This course will also cover substation grounding, substation inspection for maintenance, switching orders of high voltage circuits, installations of high side fuses. Student will experience making terminations on underground high voltage cable. (30/0/0/0)



ORGANIZATION AND STAFF

For the most current staff and faculty directory, please visit <https://northeast.edu/directory>

ORGANIZATION AND STAFF

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Del Ames Neligh
Donovan Ellis..... Pierce

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Nicole Sedlacek..... O'Neill
Carol Sibbel O'Neill

District III

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Arlan Kuehn, Vice Chairperson South Sioux City

District IV

Dr. Terry Nelson West Point
Gene Willers.....Pilger

District V

Julie Robinson, Secretary..... Norfolk
Dirk Petersen Norfolk

At Large

Jeffrey Scherer Beemer

ADMINISTRATION

BARRETT, LEAH (2020)
President
Ed.D, Executive Leadership, St. John Fisher College –
Rochester, New York
B.S., M.B.A, University of Wyoming

BRESSLER, COLEEN (1999)
Executive Director of Administrative Services
B.S., M.B.A., Wayne State College

FEILMEIER, PAUL (2020)
Vice President of Technology Services
B.S., M.S., Bellevue University

GILL, MICHELE (2013)
Vice President of Educational Services
Ph.D., EDAD, University of Nebraska-Lincoln; B.S., M.A.,
University of Nebraska-Kearney

GRAY, SCOTT (2020)
Vice President of Administrative Services and General
Counsel
B.S., J.D., University of Nebraska-Lincoln

GREVE, JENNIFER (2007)
Executive Director of Marketing and Recruitment
B.S., Wayne State College

GRUDZINSKI, SHANELLE (2009)
Dean of Applied Technology
M.B.M. University of Phoenix
B.S., Wayne State College

HANSON, CYNTHIA (2017)
Dean of Workforce Development
Ed.D., University of South Dakota
M.S., Drake University
B.A., Briar Cliff College

HERLEY, WADE (2013)
Dean of Business and Humanities
Ed.D., University of South Dakota
MA., University of South Dakota
B.S., Wayne State College

KEELER-STROM, MICHELA (2005)
Dean of Institutional Effectiveness
B.S., Wayne State College; M.P.A., University of Nebraska-
Omaha

KILDAY, FAYE (2010)
Executive Director for Teaching and Learning
M.S., Bellevue University
B.S., University of Nebraska-Kearney

KRUSE, TRACY (2013)
Vice President of Development and External Affairs
B.A., M.B.A., University of Northern Iowa;
Ph.D., Iowa State University

LAMMERS, SHELLEY (1999)
Dean of Student Success
B.S., Chadron State College;
M.A., University of South Dakota

McLEAN, BRANDON (2006)
Executive Director of Physical Plant
B.S., University of Nebraska-Lincoln

NIPP, AMANDA (2010)
Vice President of Student Services
B.A., Nebraska Wesleyan University;
M.S.E., University of Kansas

FACULTY/PROGRAM DIRECTORS

ABELS, SCOTT (2015)
Foundational English/ESL
M.F.A.-Creative Writing, Boise State University
B.A.-English, Chadron State College

ALDAG, STACEY (2008)
Mathematics
M.A., -Mathematics, University of Nebraska-Lincoln
M.S.- Math Education, Wayne State College
B.A.-Math Education, Wayne State College

ANDERSON, BRIAN (2010)
Broadcasting
B.S.-Mass Communications, Wayne State College
A.A., Northeast Community College
Trade Experience

ANDERSON, STACY (2020)
Business
M.B.A, Wayne State College
B.S.-Human Resources Management, Wayne State College
A.A.-Business Administration, Northeast Community
College

BAILEY, PAUL (1989)
Heating, Ventilation and Air Conditioning
M.S.E.-Vocational Education, Wayne State College
B.S.-Technology, Wayne State College
A.A.S.-HVAC University of South Dakota.
Northeast Community College; R.S.E.S. Certificate Member;
Refrigeration Service Engineer Society Master Specialist
CMS; NATE Certified in heat pump, air conditioning, air
distribution, and gas heat; Grade three Boiler Engineer;
Factory
Service Schools; trade experience; service manager, Certified
Master HVAC-R Educator

BALDWIN, WARD (2015)
Mathematics
M.S.-Mathematics, Wayne State College
B.A.-Math Education, Wayne State College

BARNES, COLLEEN (2008)
Criminal Justice/Sociology
M.S.-Community Counseling, University of Nebraska-
Kearney
B.S.,-Sociology, University of Nebraska-Kearney

- BARNES, JON B. (2016)
 Human Services and Human Relations
 M.A.-Counseling, Lincoln Christian University
 B.A.-Family Life Ministry, Nebraska Christian College
- BARNES, WILLIAM (2001)
 Electromechanical Technology
 A.A.S.-Service Energy, Western Iowa Tech
 Community College;
 Trade Experience
- BARRITT, SARA (2007)
 Business/Accounting
 M.P.A.-Accountancy, University of Nebraska-Lincoln
 B.S.-Business Administration w/Accounting Emphasis,
 University of Nebraska-Lincoln
- BATT, JAMES E. (1994)
 Biology
 M.A-Biology, University of South Dakota
 B.A.-Biology Augustana College;
- BEARDSLEE, ANTHONY (1998)
 Audio and Recording Technology
 M.E.-Educational Administration, University of
 Nebraska-Lincoln
 B.S.-Business Information Systems, Bellevue University;
 A.A.S.-Audio/Recording Technology Northeast Community
 College;
 Trade Experience
- BEAUDETTE, DAVID (2009)
 Auto Body Technology
 A.A.S.-Auto Body Repair Technology, Northeast
 Community College;
 Trade Experience
- BRANDT, CURTIS (2016)
 Building Construction
 A.A.S.-Building Construction, Southeast Community
 College
 Trade Experience
- BRETSCHNEIDER, PATTI (2014)
 Nursing
 M.S.N., University of Nebraska Medical Center
 B.S.-Nursing, University of Nebraska Medical Center
- BRUMMELS, KATIE (2016)
 Nursing
 M.S.N., Nebraska Methodist College
 B.S.-Nursing, Clarkson College
- BURBACH, CHRIS (2013)
 Agriculture
 B.T.-Agribusiness, Northwest Missouri State University
 A.A.S.-Diversified Agriculture, Northeast Community
 College;
- BUSH, TRENTEE (2019)
 Agriculture, Horticulture
 Ph.D.-Educational Studies, University of Nebraska-Lincoln
 M.S.-Horticulture, University of Nebraska-Lincoln
 B.S.-Horticulture, University of Nebraska-Lincoln
- CARPENTER, JACOB (2019)
 Diesel Technology
 A.A.S.-Diesel Technology, Northeast Community College
 EPA6 Refrigeration Certification
- CLAUSSEN, HEATHER (2012)
 Director of Allied Health Programs
 M.A.-Education Administration, University of South Dakota
 B.S.-Elementary Education, Wayne State College
- COAN, KRISTINA (1983)
 Information Technology
 B.S.-Business Administration, Wayne State College;
 A.A.S.-Data Processing/Computers Northeast Community
 College;
 Trade/analyst Experience
- COOPER, ASHLEY (2021)
 Mathematics
 M.S.E., Curriculum and Instruction, Doane University
 B.S., Middle Grade Education, University of Nebraska-
 Lincoln
- COOPER, MICHAEL (1991)
 Veterinary Technology
 D.V.M., Ohio State University
 B.S.-Animal Science, University of Nebraska-Lincoln
- CORBETT, ANNIE (2021)
 Psychology
 Ph.D., Saybrook University
 M.B.A., The University of Arizona Global Campus
 B.A.-Psychology, The University of Arizona Global Campus
- CRAMER, STEWART (2018)
 Music
 M.M., University of Nevada-Las Vegas
 B.A., Performance and Voice, Indiana University
- DVORAK, STEFANIE (2018)
 Nursing
 M.S.N., Nebraska Methodist College
 B.S.N., University of Nebraska Medical Center
- ELLIOTT, THOMAS (2017)
 Foundational English/ESL
 M.S.-Liberal Studies Social Sciences, Fort Hays State
 University
 B.A.-English, Fort Hays State University
- ELZNIC, JASON (2005)
 English/Journalism
 M.S.E.-English, Wayne State College
 B.S.-English, Wayne State College
- EVANS, CRAIG (2005)
 Diesel Technology
 A.A.S.-Diesel, Northeast Community College
- FREEMAN, COLLEEN (2018)
 Psychology/Human Services
 M.A-Clinical Health Counseling., Grace University
 B.A., Lewis University
 A.A., Joliet Junior College
- FUERHOFF, SARAH (2016)
 Health Information Management Systems
 B.S.-Health Information Management, College of St. Mary
- GUENTHER, LISA (2019)
 Early Childhood Education
 M.A.E.-Elementary Education, University of South Dakota
 B.A.-Education, Wayne State College
- HEIDT, DAVID (1991)
 Chemistry/Physics
 M.S.E-Math/Science. Wayne State College
 B.S.E.-Science University of Nebraska-Lincoln
- HILDEBRAND, KORY (2011)
 Utility Line off-campus
 Diploma, Mitchell Technical Institute
- HOBZA, RYAN (2007)
 Building Construction
 A.A.S.-Drafting Architectural, Northeast Community
 College
- HOEHNE, CARA (2012)
 Business
 M.B.A, Wayne State College
 B.S.-Business Administration/Public Accounting, Wayne
 State College
- HOFFMAN, ANTHONY (1996)
 Electrical Construction and Control
 B.S.-Administration, University of Nebraska-Kearney;
 A.A.S.-Electrician, Northeast Community College;
 Nebraska and South Dakota Electrical
 Contractor; Trade Experience

- HOILE, TOM (2014)
Auto Body Technology
A.A.S.-Auto Body Technology, Northeast Community College
Trade Experience
- HOLCOMB, MICHAEL (2006)
Drafting – Architectural
A.A.S.-Drafting, Northeast Community College
Trade Experience
- JACKSON, ANGIE (2011)
Biology/Anatomy and Physiology/Microbiology
M.S.-Biology, University of Nebraska-Kearney;
B.S.-Natural Science Wayne State College
- JOHANSON, DALE (1994)
Mathematics
M.A.-Mathematics, University of South Dakota;
B.S.-Mathematics/Computer Science Midland Lutheran College;
- JOHNSON, KATIE (2019)
Mathematics
M.S.E.-Mathematics, Chadron State College;
B.S.-Mathematics, Wayne State College
- JOHNSON, MATTHEW (2000)
Utility Line
B.S-Safety Management., Central Missouri State University;
A.A.S.-Utility Line, Northeast Community College;
Trade Experience
- JOHNSON-BARTEE, BONNIE (2008)
English
M.S.E.- English, Wayne State College
B.S.-English Writing and Literature, Wayne State College
A.A., Northeast Community College
- JUDT, JENNIFER (2013)
Biology
M.S.-Biology, University of Nebraska-Kearney
B.S.-Natural Science Education, Wayne State College;
- JUNCK, JILL (2019)
Allied Health/Nursing
M.S.N., Nebraska Methodist Hospital,
B.S.N., Mount Marty College
- KARELLA, TERE (1994)
Physical Therapist Assistant
B.A.-Management, Bellevue University,
A.A.S.-Physical Therapist Assistant, Colby Community College,
- KAUP, TRAVIS (2013)
Diesel Technology
A.A.S.-Diesel Technology, Northeast Community College;
Trade Experience
- KELLER, BRANDON (2017)
Agriculture
M.B.A.-Ag Economics, Northwest Missouri State University
B.S., Kansas State University
- KNAPP, JOHN (2011)
Welding
A.A.S.-Welding, Southeast Community College
- KRUSEMARK, RENEE (2013)
English
PhD-Interdisciplinary Leadership, Creighton University
M.A.-English, National University
B.A.-Theatre, University of Nebraska-Lincoln
- KUCERA, ERIN (2015)
Biology/Zoology
M.S.-Biology, University of Nebraska-Omaha
B.S.-Life Science/Biology, Wayne State College
- KUEHNER, MICHELLE (2015)
Nursing/Allied Health
M.S.N., Nebraska Methodist College
B.S.-Nursing, University of Phoenix
- LAMBRECHT, CHANCE (2017)
Agriculture
B.T.-Agriculture, Northwest Missouri State University
- LECHNER, MICHAEL (1996)
Agriculture
M.S.-Agriculture Education, University of Nebraska-
Lincoln;
M.A-Counseling., Wayne State College
B.S.-Agriculture, University of Nebraska-Lincoln
- LEMKE-ELZNIC, MELISSA (2005)
Speech
M.S.E.-Communication Arts, Wayne State College
B.S.-English Literature, Wayne State College
- LIEWER, JOHN (2012)
Wind Energy Technology
A.A.S.-Electrician Residential Construction, Northeast Community College
- LUEBE, SARAH (2015)
Nursing
M.S.N., Nebraska Methodist College
B.S.-Nursing, Nebraska Medical Center
A.A.S.-Nursing, Northeast Community College
- LYNCH, MICHAEL L. (1995)
Art
M.F.A.-Painting Washington University (Missouri)
B.F.A.-Painting, Northwest Missouri State University;
- McCARTHY, MATTHEW (2002)
Criminal Justice
M.P.A.-Public Administration, University of Nebraska-Omaha
B.S.-Criminal Justice Law Enforcement, Wayne State College;
Trade Experience
- McCARTHY, MICHAEL (2016)
Welding
A.A.S.-Welding, Northeast Community College
- McCLAREN, LORI (2017)
Business
M.B.A.-Business Management, University of South Dakota
B.S.-Business Administration, University of South Dakota
- McKEON, TOM (2000)
Utility Line
A.A.S.-Utility Line, Northeast Community College;
Trade Experience
- McLOUTH, KEVIN (2014)
Instrumental Music
M.M., University of South Dakota
B.S.-K-12 Composite Music, Dickinson State University
- MERRITT, HEIDI (2009)
Nursing
M.S.N., University of Nebraska Medical Center
B.A.-Sociology University of Nebraska - Lincoln;
B.S.N., University of Southern Mississippi
- MEYER, SHEILA (2016)
Nursing
M.S.N., Nebraska Methodist College
B.S.-Nursing, University of Nebraska Medical Center
A.A.S.-Nursing, Northeast Community College
Diploma-Practical Nursing, Northeast Community College
- MILENKOVICH, TONY (2001)
Diesel Technology
A.A.S.-Diesel Truck Equipment, A.A.S.-Construction Equipment, Southeast Community College;
I.M.A.C.A., 608 Air Conditioning Certification;
Trade Experience;

- MILLER, LINDA D. (2001)
 Accounting/Business
 M.B.A., Wayne State College
 B.S.-Business Administration/Accounting, Wayne State College
 A.A.S.-Business Administration, Northeast Community College
- MUNCY, PAUL (2017)
 History/Geography
 M.A.-History, California State University
 B.A.-History, California State University
- MUNDIL, STEFANIE (2007)
 Health, Physical Education and Recreation
 M.S.E.-Exercise Science, Wayne State College;
 B.S.-Exercise Science Wayne State College;
 NSCA - CPT National Strength and Conditioning Association
- MUSIL, CHERYL (2016)
 Nursing
 M.S.N., Nebraska Wesleyan University
 B.S.-Nursing, Nebraska Wesleyan University
 Diploma-Nursing, Bryan Memorial Hospital School of Nursing
- NELSON, JOHN (2008)
 Heating, Ventilation, and Air Conditioning
 A.A.S.-Heating, Ventilation, and Air Conditioning, Northeast Community College
 Certified Master HVAC-R Educator
- NELSON, MARY JO (2010)
 Nursing
 M.S.N.- University of Nebraska Medical Center
 B.S.N.-University of Nebraska Medical Center
- NELSON, THERESA (2009)
 Speech
 M.A.-Communication, University of Nebraska-Omaha
 B.A.-Speech, University of Wisconsin
- NOONAN, ROBERT (2013)
 Agriculture
 M.S.-Agronomy, University of Nebraska-Lincoln
 B.S.-Agronomy University of Nebraska-Lincoln
- O'BOYLE, MARY (1997)
 Education/Psychology/French/Sociology
 M.S.E.-Counseling, Wayne State College
 B.S.E., Queens University of Belfast
- O'BYRNE, MICHAEL (2017)
 Mathematics
 M.S.-Mathematics, North Carolina Central University
 B.S.-Mathematics, North Carolina Central University
- OTTE, BOWDIE (1996)
 Automotive Technology
 B.A.-Industrial Technology Education, Wayne State College;
 A.A.S.-Automotive Technology, Northeast Community College;
 A.S.E., Master Auto Technician Advanced Level
 Trade Experience
- OTTIS, JOSEPH (2020)
 Automotive Technology
 A.A.S.-Automotive Technology, Northeast Community College
 ASE Master Certified Technician, ATRA Master Certified Technician
- PETERSON, ADAM (2009)
 Speech/Theatre
 M.F.A.-Theatre Directing, University of Essex
 B.S.-Theatre Education, Wayne State College
- PFEIL, TODD (2020)
 Utility Line
 A.A.S.-Utility Line, Northeast Community College
 NPPD Switchman certified, Merchant honors certificate, Journeyman license
- PTACEK-WILKEY, JULIE (1997)
 English
 M.A.E.-English, Wayne State College
 B.A.-English, Wayne State College
- RASTEDE, BRIAN (2018)
 Electrical Construction and Control
 A.A.S.-Electrical Construction and Control, Northeast Community College
 Trade Experience
- RASTEDE, KRISTI (2008)
 English
 M.A.-English, University of South Dakota
 B.S.-English, Wayne State College;
- REESE, CURTIS (2019)
 Science
 M.S.-Biology, University of Nebraska-Kearney
 M.S.E.-School Administration, Wayne State College
 B.S.E.-Life Sciences/Biology, Wayne State College
- RIES, AMY J. (2003)
 Health, Physical Education and Recreation
 M.A.-Health Physical Education, University of South Dakota;
 B.S.-Human Resources and Family Science, University of Nebraska-Lincoln;
 R.D., L.M.N.T.
- RODENBORG, CAROL (2018)
 Director of EMS/Paramedic Programs
 B.S.N., University of Wisconsin-Madison
- ROEBER, MICHAEL (1998)
 Agriculture/Livestock Coach
 M.S.E.-Vocational Agriculture, University of Nebraska-Kearney
 B.S.-Animal Science/Agricultural Education, University of Nebraska-Lincoln;
- ROSKELAND, ERIC (2016)
 Electromechanical Technology
 A.A.S.-Electromechanical, Southeast Community College
 Trade Experience
- SCHEER, JENNIFER (2013)
 Mathematics
 M.S.E.-Curriculum and Instruction, Wayne State College
 B.S.-Math Education, Nebraska Wesleyan University
- SCHIMONITZ, PHILLIP (2009)
 Graphic Design
 M.F.A.-Visual Communication Design, Kent State University
 B.F.A.-Commercial Art, University of Nebraska-Kearney;
- SCHLOTE, JOSHUA (2007)
 Veterinary Technology
 B.S.-Veterinary Technology-Clinical, St. Petersburg College
- SCHNEIDER, MARIBETH (2021)
 Health Information Management Systems Program Director/
 Instructor
 M.S., Administration, University of South Dakota
 B.S., Dakota State College
 A.S., Medical Record Tech, Dakota State College
- SCHULTZ, MARGARET (2009)
 Music
 M.M.-Music Education, University of South Dakota
 B.S.-Music Education, Morningside College
- SCHWANEBECK, LAURA (2013)
 Physical Therapist Assistant Program Director/Instructor
 M.P.T., Midwestern University
 B.S.-Biology, Nebraska Wesleyan

- SELLIN, SARAH (2017)
Agriculture
M.S.-Agronomy, University of Nebraska-Lincoln
B.S.-Agronomy/Animal Science, Oklahoma Panhandle State University
- SHAFFER, ANGELA (2004)
Business
M.B.A., Wayne State College
B.S.-Social Science, University of Nebraska-Lincoln
- SIMPSON, NATHAN (2016)
Wind Energy Technology
A.A.S.-Electrician Residential Construction, Northeast Community College
Trade Experience
- SPRAY, KAREN (2000)
Administrative Professional
M.B.A., Wayne State College
B.A.S.-Business Administration-Management, Peru State College
A.A.S.-Accounting, Northeast Community College
- STOLPE, CLEVE (2016)
Utility Line
A.A.S.-Electrical Construction and Control, Northeast Community College
Diploma-Electrical Residential and Commercial, Northeast Community College
Licensed Electrical contractor
Trade Experience
- SUHR, ANDREA (2010)
Physical Therapist Assistant
A.A.S.-Physical Therapist Assistant, Northeast Community College
- SULLIVAN, THOMAS (2014)
Mathematics
M.A.E.-School Principalship, University of Nebraska-Kearney;
B.A.-Mathematics, Hastings College
- SWENSON, WENDY (2008)
Spanish
M.E.-Curriculum and Instruction, Doane University
B.S.-Spanish, Creighton University;
- TERNUS, ERIC (2020)
Drafting
A.A.S.-Drafting Architectural, Northeast Community College
- THARNISH, CAROLE L. (2016)
English-Vocational
M.A.-English, Hastings College
B.S.-Business Administration, University of Nebraska-Kearney
- THOMASON, AMANDA (2013)
Biology/Anatomy and Physiology/Microbiology
D.C., Palmer College of Chiropractic
B.S.-Biology, University of Nebraska-Omaha;
- THYEN, BERNIE (2000)
Agriculture
M.S.-Agriculture, South Dakota State University;
B.S.-Crops and Soils Science, University of Wisconsin-Platteville;
A.A.S.-Agronomy Technology, University of Minnesota-Waseca;
- VOECKS, KYLE (2003)
Utility Line
A.A.S.-Utility Line, Northeast Community College;
Trade Experience
- VOGT, BRADLEY (2000)
Information Technology
M.B.A.-Business Administration, University of South Dakota
B.A-Business Administration, Doane University;
- WALKER, ROGER (2008)
Building Construction
B.A.-Trades and Industrial Building Construction, Wayne State College
A.A.S.-Building Construction, Northeast Community College;
- WEIDNER, KAREN (1997)
Director of Nursing Programs
D.N.P., Samford University
M.S.N., University of Nebraska Medical Center
B.S.N., Creighton University
B.S., University of Nebraska-Lincoln
A.A.S., McCook Community College
- WEITZMANN, IRINA (2005)
Biological/Physical Science
Ph.D.-Biology, Russian State Medical University
M.D.-Medico-Biological College, Russian State Medical University
- WELKE, BETH (2000)
Mathematics
M.S.E.-Mathematics, University of Nebraska-Kearney
B.S.-Mathematics, Briar Cliff
- WEMHOFF, KELLY (1995)
Mathematics
M.S.E.-Mathematics, Wayne State College
B.A.-Mathematics, Wayne State College
- WESSENDORF, KASSANDRA (2020)
Veterinary Technology/Biology
D.V.M., Iowa State University
B.S.-Animal Science, University of Nebraska-Lincoln
- WORTMAN, MISTY (2008)
Psychology/Sociology
M.S.E.-Interdisciplinary Studies, Wayne State College
B.S.-Psychology, Wayne State College
- ZIERKE, MICHAEL (2000)
Ag Mechanics/Welding
B.S.-Agriculture, University of Nebraska-Lincoln

Support Staff

ADMINISTRATIVE SERVICES

Afrank, Stacy.....	Business Services Assistant I
Andersen, Carla.....	Custodian
Anson, Michael.....	Custodian
Arreguin, Luz Maria.....	Custodian
Arreguin, Roberto.....	Custodian
Arreguin, Rosa.....	Custodian
Boecker, Leon.....	Maintenance-Plumbing
Brabec, Loretta.....	Associate Director of Custodial Services
Brandl, Tonya.....	Student Accounts Specialist
Brauer, James.....	Groundskeeper
Brauer, Michaela.....	Accounts Payable Specialist II
Bredehoeft, Tina.....	Groundskeeper
Carlson, Julie.....	Director of Retail and Print Services
Chambers, Anthony.....	Director of Physical Plant
Clausen, Amy.....	Payroll Specialist II
Cooper, Susan.....	Maintenance-Facilities
Spulak, Christine.....	Custodian
DeLancey, Mandy.....	Purchasing Administrative Assistant
Dorado, Analia.....	Custodian
Eby, William.....	Custodian/Maintenance-O'Neill
Erickson, Keith.....	Custodian
Erickson, Rich.....	Warehouse Manager
Freudenburg, ViVi.....	Accounts Payable Specialist I
Funk, Judith.....	Business Services Assistant I
Good, Janice.....	Custodian

Griffith, Kelly.....Director of Student Accounts and Cashiering
 Grissom, David.....Maintenance/HVAC
 Happold, Jennifer Administrative Services Executive Assistant
 Hedell, Steven.....Custodian
 Hrabanek, Sharon.....Custodian
 Jansen, KyleGroundskeeper
 Jansen, MeganStudent Accounts Specialist
 Jones, Terry.....Custodian
 Ketteler, MoniquePrint Services Coordinator
 Knull, Corey.....Groundskeeper
 Lange, Douglas.....Custodian
 Leicy, Duane.....Custodian
 Lind, Deb.....Custodian
 Linscott, Eric.....Custodian
 Maly, Brandon..... Director of Accounting
 McGowen, Chet..... Director of Payroll
 McKibbon, Chris..... Director of Budgeting
 Mitchell, Cyndee.....Custodian
 Mitchell, Tabitha.....Custodian
 Oligmueller, Sarah..... Assistant Retail Services Manager
 Osborne, Kristina.....Associate Director of Accounting
 Painter, Sharon..... Grants Compliance Accountant
 Paulsen, Brian Director of Safety and Emergency Preparedness
 Pochop, Larry.....Custodian
 Ponder, Albert.....Custodian
 Porter, BrianGroundskeeper
 Ranslem, Kendra Accounts Payable Specialist I
 Reikofski, Gregg..... Maintenance–Construction
 Rutten, Christopher..... Director of Purchasing
 Sayers, Shawn..... Associate Director of Grounds
 Schafer, J.J.Groundskeeper
 Schindler, JudyPurchasing Specialist
 Schoonover, TairaCustodian - South Sioux City
 Schuurmans, Erin.....Staff Accountant
 Serres, James..... Maintenance–HVAC
 Shelhamer, Sandra.....Custodian
 Smith, MelanyCustodian
 Smith, Taylor.....Custodian
 Smydra, Allana..... Physical Plant Administrative Assistant
 Throener, Vanessa..... Retail Services Specialist
 Turner, Denise..... Custodian–South Sioux City
 Vavra, Corey..... Maintenance–Electrical
 Walker, Christopher.....Custodian
 Weinberger, Kristine.....Custodian
 Wiedeman, Carol.....Custodian
 Wilken, Jeanie.....Custodial Supervisor – Second Shift

DEVELOPMENT AND EXTERNAL AFFAIRS

Bliss, David..... Event Coordinator
 Boschen, David..... Executive Assistant
 Development and External Affairs
 Goeden, Jazmin Development Coordinator
 Kassmeier, Lynda.....Lifelong Learning Center Coordinator
 Kent, Natalie.....Assistant Director of Grants and Contracts
 Quinn, HollyDirector of Development Services
 Risinger-Green, Susan Development Officer
 Tudor, Christine..... Development Officer

Vacha, Tyler Director of Corporate and Foundation Relations
 Warneke, Kent.....Director of Grants and Contracts

EDUCATIONAL SERVICES

Andersen, Kimberly Youth Apprenticeship Coordinator
 Andrew, Donna.....Applied Technology Executive Assistant
 Bates, DebraNursing Program Specialist
 Belz, LisaHELP Grant Career Coach/Recruiter
 Clark, Julie..... Adult Education Coordinator
 Cook, Ryan..... Truck Driving Trainer
 Corbett, Annie.....Assessment Coordinator
 Corkle, Sonja.....Regional Coordinator–Ainsworth
 Daberkow, Lynn.....Extended Campus Administrative Assistant–West Point
 Doherty, Dawn..... Health and Public Services Executive Assistant
 Duncan, EmilyDirector of Adult Education
 Fuchs, Brandi Allied Health/EMS Administrative Assistant
 Gregory, Heather Allied Health Administrative Assistant
 Haberer, Sonia..... Educational Services Schedule Specialist
 Hake, Karmen.....Ag-ceptional Administrative Assistant
 Holmquist, Doris.. Educational Services Executive Assistant
 Hood-Hytrek, Tonya..... Coordinator of Adult Education Volunteers
 Hood, Vern..... Welding Trainer
 Kaiser, AmyWorkforce Development Coordinator
 Korth, Penny.. Science, Technology, Agriculture, and Math Executive Assistant
 Lammers, Glen.....Applied Engineering Trainer
 Lewis, Edward..... Truck Driving Trainer
 Luikens, Linda.....Schedule Specialist
 McCarville, Jim.....Workforce Development Coordinator
 Melcher, Tracy..... Workforce Development Coordinator
 Mendez, Yolanda Adult Education Administrative Assistant
 O’Byrne, Barbara Instructional Designer
 O’Connor, MelissaBusiness and Humanities Executive Assistant
 Oetken, Larry..... Job Training and Safety Coordinator
 Radenz, Daniel..... College Farm Operations Specialist
 Ranslem, Brad..... Associate Dean of Applied Technology
 Sanches-Juarez, Sara Adult Education Administrative Assistant
 Schneider, Merri..... Extended Campus Director–O’Neill
 Sixta, Connie..... Associate Dean of Business and Humanities
 Smydra, Tara Associate Dean of Science, Technology, Agriculture, and Math
 Spiegel, Lindsay Associate Dean of Institutional Effectiveness
 Streff, Carla.....Extended Campus Director–West Point
 Thelander, Trish Workforce Development Executive Assistant
 Thomas, RobertCollege Farm Manager
 Timmerman, Kathy.....Extended Campus Administrative Assistant–O’Neill
 Uhrich, Kendall HELP Grant Success Coach
 Wilken, Curtis..... Assistant Farm Production Overseer
 Williams, Makala..... Director of Early College
 Wurdinger, SandraInstitutional Effectiveness Executive Assistant

HUMAN RESOURCES

Dvorak, Jessica Director of Human Resources,
Talent and HR Compliance
Lammers, Kathy Human Resources Executive Assistant
Retzlaff, Natalie Talent and Development Coordinator
Rios, Marcus Director of Human Resources,
Rewards and Retention

PRESIDENT'S OFFICE

Curry, James Director of Public Relations
Reikofski, Diane President's Executive Assistant

STUDENT SERVICES

Anderson, Dan Men's Basketball Coach/
Weller Fitness Center and Open Gym Supervisor
Balaski, Mary Director of Disability Services
Becker, Josh Director of TRIO Student Support Services
Becker, Kristina College Welcome Center Receptionist
Bernt, Wesley Golf Coach
Bollwitt, Betty Residence Life Desk Clerk
Bowers, Cindy Residence Life Assistant
Brundieck, Stephanie Counselor
Carlson, Beth Veterans Educational Benefits
Administrative Assistant
Casselmann, Rachel Associate Registrar,
Admissions and Registration
Cassidy, Joni Recruiter
Christiansen, Taylor Advisor
Clapp, Marcus Baseball Coach/Fall Intramural Director
Dahlheim, Gregg Concessions Manager
Dahlheim, Pam Student Services Executive Assistant
Defor, Julie College Welcome Center Receptionist
Dieckman, Stacy Director of Financial Aid
Earl, Sara Associate Director of Residence Life
Erickson, Paige Testing Specialist
Faust, Anthony Director of Recruitment
Gascoigne, Paula Financial Aid Specialist
Gonzalez, Maria Recruiter–South Sioux City
Goodwater, Kathy Residence Life Desk Clerk
Grimoskas, Maralyn Testing Specialist–
South Sioux City
Gubbels, Elizabeth Advisor
Hampl, Matthew Academic Support Coordinator
Hausmann, Heidi Advisor
Headlee, Brian Graphic Designer
Heggemeyer, Terri Director of Career Services
Hoeffler, Karen Assistant Registrar
Hoffman, Ashley Recruiter
Hollmann, Crystal Director of Marketing
Holtz, Gina Extended Campus
Coordinator–West Point
Hopper, Tiffany Enrollment Specialist II
Johnson, Janet Disability Services Advisor
Kirby, Sara Administrative Assistant Center for
Global Engagement
Knobbe, Brenda Admissions and Registration Specialist
Koehler, Amy Career Services Administrative Assistant
Kollath, Carissa Director of Student Activities
Konopasek, Lindsey Enrollment Specialist Supervisor
Maple, Makala Registrar
Mattison, Haley On-Campus Recruiter
Meyer, Connie Disability Services Advisor
Miller, Becky Communications Specialist

Miller, Chad Men's/Women's Soccer Coach/
Game Management Coordinator
Mills, Jerrett Associate Director of Athletics
Norman, Emily Director of Residence Life and Student
Conduct
Pinkelman, Tiffany Residence Life Overnight
Support Specialist
Potter, Judy Admissions and Registration Specialist
Reifenrath, Lisa Director of Advising Services
Rossman, Brandi TRIO Student Support Services Advisor
Rupprecht, Erika Student Activities Coordinator
Saalfeld, Pam Director of the Center for Global Engagement
Sazama, Matthew TRIO Student Support Services Advisor
Schilling, Tara Marketing Coordinator
Schuckman, Pattie Residence Life Database Specialist
Schultze, Amanda Volleyball Coach/Advisor
Schwede, Jennifer Admissions and Registration Specialist
Svehla, Matt Women's Basketball Coach/
Spring Intramural Director
Taylor, Debbie TRIO Student Support Services
Administrative Assistant
Terrill, Brittnee Assistant Director of Financial Aid
Trowbridge, Lori Director of Student Life and Union 73
Vanosdall, Kim Associate Director of Financial Aid
Vetter, Crystal Residence Life Desk Clerk
Wiebelhaus, Cara Advisor–South Sioux City
Willoughby, Amber Adaptive Technology
Support Specialist
Woodhead, Iris Women's Softball Coach/Advisor

TECHNOLOGY SERVICES

Auten, Mike Director of Service Center Operations
Bailey, Trevor Systems Administrator
Bonner, Shelby Service Center Specialist
Cone, David Application Developer
DeMelo, Joshua Application Database Administrator
Fenton, Tim Learning Space Technologist
Furstenau, Kevin Network Cabling and
Systems Technician
Gibson, Jody Interim Director of
Institutional Research and Analytics
Gleason, Jennifer Application Developer
Gorman, Matthew Application Database Administrator
Hilliges, Sandy Application Administrator
Ippensen, Jennifer Director of Library Services
Karel, Austin Data Scientist
Korbel, Paul Lead Technical Support Specialist
Lockee, Jacob Systems Administrator
Loera, Maria Service Center Specialist–South Sioux City
Melnick, Julie Data Scientist
Michaels, Maria Service Center Operations Supervisor
Peters, Renee Director of Technology Risk and Service
Management
Reichlinger, Lucas Systems Administrator
Reynolds, Justin Application Administration
Ruskamp, Lori Library Technical Services Specialist
Sager, Wayne Technology Sourcing Specialist
Scheer, Curtis Director of Web and Enterprise Services
Schwartz, Pam Application Administrator
Sock, Brenda Technology Services Executive Assistant
Steinhauser, Bret Director of Network and Infrastructure
Services
Sullivan, Carol Service Center Specialist
Teply, Tina Service Center Specialist

Tillotson, Shawn Associate Dean of
Business and Technology
Wiese, Tom Technical Support Specialist
Wurdinger, Kenneth Technical Support Specialist

ADJUNCT FACULTY

ALBERS, CORY Business/Economics
M.B.A., Upper Iowa University
ALLYN, SUSAN Learning Skills/ESL
M.E., University of Nebraska-Lincoln
ANDERSON, ADELE EMS/Allied Health
B.A., University of Northwestern-St. Paul
ANDERSON, MICHAEL EMS
A.A.S., Northeast Community College
ANGEROTH, KATHLEEN Music
M.S., Iowa State University
ATKINS, SANDRA EMS
Field Experience, EMT Paramedic License
AVIDANO, AMANDA Horticulture
B.S., Bellevue University
BAILEY, TREVOR Information Technology
A.A.S., Northeast Community College
BALDWIN, CHRISTINE Psychology
M.S.E, Wayne State College
BARG, JOE Auto Body
A.A.S., Northeast Community College
BAUER, COLEMAN Journalism
B.A., Doane University
BAYER, SAMANTHA Psychology
M.S., University of Nebraska-Omaha
BEAUDETTE, SHAWN Business/Ag/Criminal Justice
J.D., University of Nebraska
BECKER, JOSHUA Learning Skills
B.S., Wayne State College
BLACKBURN, GENEVRA Nurse Aide
B.S.N., University of Nebraska Medical Center
BODE, BARBARA Psychology
M.S.E., Wayne State College
BOETTCHER, DESSI Nursing
A.A., University of South Dakota-Vermillion
BORG, ANGELA Nurse Aide
B.S.N., University of Nebraska Medical Center
BORGELT, DEBORAH Mathematics
M.E., Doane University
BROZ, SANDRA Psychology
Ph.D., University of South Dakota
BRYAN, JOSEPH Business
M.B.A., East Carolina University
BRYAN, THEODORE Chemistry
Ph.D., University of Arkansas
BUCK, NINA Foundational English
M.F.A., University of Hawaii-Manoa
BURBACH, COUTNEY HIMS
B.S., College of St. Mary
BURRIS-JANSSEN, EMMA English
M.A., University of New Hampshire
BURTWISTLE, JENNIFER Biological Science
Ph.D., University of Nebraska-Lincoln

BUSSINGER, BRANDY Nurse Aide
B.S.N., University of Nebraska Med Center
CANTRELL, KAY Mathematics
B.S., Wayne State College
CARTER, RONALD Sociology
M.A., Chico State College
CHRISTIAN, KIRK Information Technology
B.S., Walden University
CLARK, GREGORY Agriculture
M.S., North Carolina State University
CLARK, LYNNE ESL
M.S.E., Wayne State College
CLAUSEN, AIMEE Early Childhood Education
M.E., Doane College
CLAUSSEN, HEATHER Art
M.A., University of South Dakota
B.S., Wayne State College
CLAY, JARED Political Science
M.A., University of South Dakota
CLAYTON, WENDY Health, Phys Ed and Rec
M.S.E., Wayne State College
B.S., University of Nebraska-Lincoln
COBURN, CATHERINE .. Nurse Aide and Medication Aide
A.D.N., Northeast Community College
DAVIDSON, SCOTT Mathematics
M.S.E., Wayne State College
B.S., Northwestern College
DIECKMAN, SANDY Mathematics
M.S.E., Wayne State College
B.S., University of Nebraska-Lincoln
EGGERS, KAROL Speech
M.A., University of South Dakota
EMENHISER-HARRIS, KAREN Art
M.A., State University of New York-Buffalo
EVERS, JULIA Criminal Justice
Master of Forensic Science, Nebraska Wesleyan University
FICK, KATHY Sign Language
A.A.S., Iowa Western Community College
FISHER, ANNA Health, Phys Ed and Rec
D.C., Palmer College of Chiropractic
FLEMING-TRICE, TRACY Social Work
M.S.W., University of New England
FOLEY, SUZANNE Biology
M.A., Hastings College
FOSSUM, ERIC Technical Communications
M.S., Iowa State University
B.S.N., Midland University
FRENCH, HOLLI EMS
A.A.S., Southeast Community College
EMT License
FROHBERG, DANIEL Electrical Construction/Control
A.A., Northeast Community College
Trade Experience
GLASER, GINA Health Information Management
A.A.S., Northeast Community College
GOEDEN, JAZMIN Speech
M.S., Wayne State College
B.S.- South Dakota State University
GRAHAM, ROBYN Agriculture
M.S., Kansas State University

GUENTHER, KELLI	Mathematics	KATHOL, LYLE.....	Learning Skills
M.A., University of Nebraska-Omaha		M.S.E., Wayne State College	
GUGGENMOS, KELLY	Welding	KAUTH, RENAE.....	Dietary Management
B.S., University of Nebraska-Lincoln		B.A., Mount Marty College	
HAIN, KATHRYN	History	KETTELER, RHONDA	EMS
Ph.D., University of Utah		A.D.N, Northeast Community College	
M.A., Jerusalem University College		KILDAY, JAY	Agriculture
B.S., University of Nebraska-Lincoln		B.S., Chadron State College	
HARDIN, SUSAN	Dietary Management	KINDSCUH, ALICE.....	Nursing
B.S., University of Nebraska-Kearney		D.N.P., University of Nebraska Medical Center	
HAUF, APRIL	Sociology	KINNAN, AARON	Building Construction
M.A., Western Illinois University		A.A.S., Southeast Community College	
HAYMART, CLAY	English	KINNEY, LAUREN	Nursing
M.S.E., Wayne State College		M.S.N., Nebraska Methodist College	
HEBB, KAMILA.....	Health, Phys Ed and Rec	KNEIFL, JOHN	EMS
B.S., Wayne State College		EMT Instructor License	
Keiser M3 Certified Indoor Cycling instructor		KNEIFL, KEVIN	EMS
HEEMSTRA, JILL	Agriculture	EMT Instructor License	
M.S., South Dakota State University		KOCHENOWER, KATHRYN	Business
HEFFNER, FRANKLIN.....	History	B.B.A., Baker College	
M.S., Morningside College		KOEHLMOOS, JENNIFER.....	Biology
HEIDER, CAROLE	Music	A.D.N., Northeast Community College	
M.M.E., University of South Dakota		KORTH, BRADLEY.....	EMS/American Heart Association
B.A, University of South Dakota		A.A.S, Northeast Community College	
HENKEL, BONNIE	Plumbing	KRAUSE, TAMA	Dietary Management
Trade experience, Master Plumber License		M.S., University of Nebraska-Lincoln	
HENN, RYANN.....	Veterinary Technology	LAMMLI, JASON.....	Business
A.A.S., Northeast Community College		J.D., Marquette University	
HERMELBRACHT, BRIAN.....	Agriculture	LANG, ASHLEY	Agriculture
M.S., Northwest Missouri State University		M.S., University of Wyoming	
HESSE, JENNA.....	Nursing	LARSON, CONSTANCE	Psychology
B.S.N., Bryan Memorial Hospital School of Nursing		PhD., Marquette University	
HETZEL, KRISTY.....	Biology/Chemistry	LEE, TREYLA	Education
B.S.N., Kansas State University		M.S.E., Wayne State College	
HILSON, MICHAEL	Music	LEU, ANNETTE.....	Administrative Professional
B.M., North Texas State University		B.S., Bellevue University	
HOFFMAN, JEFFREY.....	Health, Phys Ed and Rec	LI, NA	Foundational English
Ph.D., Springfield College		M.L.S., Fort Hays State University	
HOFFMAN, KAREN.....	Nurse Aide/Medication Aide	B.A., Shenyang University of Technology	
L.P.N., Pierre School of Practical Nursing		LOHR, ROSE (KATHLEEN)	Art
HOLT, CARRIE	Nursing	M.A.E., University of Nebraska-Kearney	
M.S.N., Nebraska Methodist College		LONG, AMY	Business
HULSTEIN, JAMES.....	History and Geography	M.S., Salve Regina University	
M.A., University of Nebraska-Omaha		LONG, JADRIEN	Health, Phys Ed and Rec
HUPP, GRETCHEN.....	Nurse Aide and Medication Aide	B.A., Mount Marty College	
A.D.N., Northeast Community College		A.A., Northeast Community College	
IPPENSEN, JENNIFER.....	Library Orientation	LOVE, JASON.....	Business
M.A.Ed., University of Nebraska-Kearney		B.S., Wayne State College	
M.F.A., University of Nebraska-Omaha		LUIKENS, LINDA.....	Information Technology
B.A., Doane University		A.A.S., Northeast Community College	
JARMAN, NANCY	Nurse Aide	LUNDEEN, ADAM	Media Arts
A.S., Iowa Lakes Community College		A.A.S., Northeast Community College	
JOHNSON, CASSANDRA	Nurse Aide	MARICLE, HILARY	Agriculture
A.S.-Nursing, University of South Dakota		M.S., University of Nebraska-Lincoln	
JOHNSON, ROBIN	Education and Early Childhood Ed	MARTYN, HARRY (AL)	Science
M.A., University of Nebraska-Lincoln		M.A., University of South Dakota	
JONES, JAMES	Small Engines/DESL	MATTISON, HALEY	Health, Phys Ed and Rec
Technician Specialist Certification, Motorcycle Mechanics		M.S., University of Colorado-Colorado Springs	
Institute			

MAZUCH, TINAHealth Information Management
M.S.E., Bellevue University
B.S.E., College of St. Mary
McELROY, ROBERT EMS
A.A.S., Northeast Community College
McFEE, JEANETTE Criminal Justice
M.S., University of Nebraska-Omaha
McMANIGAL, STEVEHistory/Political Science
M.A.E., Wayne State College
MEISINGER, KARAHealth, Phys Ed and Rec
M.P.H., University of Nebraska-Omaha
MEYER, MARK Horticulture
B.A., Doane University
A.A.S., Northeast Community College
MILLER, JESSICA Nurse Aide/Med Aide
B.S.N., University of Nebraska Medical Center
MITCHELL, DAVID Psychology
Ph.D., University of South Dakota
MOELLER, LACY Nurse Aide
B.S.N., University of Nebraska Medical Center
MONTEITH, TINA EMS
B.S., Creighton University
A.S., Northeast Community College
MONTGOMERY, MATTHEW EMS
A.A.S., Northeast Community College
Paramedic License
MORTON, CARLA Health, Phys Ed and Rec
M.S., University of Missouri-Columbia
B.S.E., University of South Dakota
MUNK, BRIAN Horticulture
M.S., University of Nebraska-Lincoln
NOVOTNY, LAWANDA Nurse Aide
L.P.N., Northeast Community College
NUSS, ANGELA Allied Health
B.S., Concordia University – St. Paul, Minnesota
O'BRIEN, JOSEPH Criminal Justice
M.S., Nebraska Wesleyan University
O'BRIEN, TREVER EMS
A.A.S., Northeast Community College
O'CONNOR, MELISSA Information Technology
A.A.S., Northeast Community College
OHNESORG, WAYNE Agriculture
Ph.D., University of Nebraska-Lincoln
OSBORNE, KRISTINA Accounting
B.S., Colorado Technical University
OSTBERG, ANN Mathematics
M.A.E., University of Nebraska-Lincoln
PACKARD, STEPHEN Business
M.B.A., University of South Dakota
PAEPER, MARY Nurse Aide
R.N., Nebraska Methodist College
B.S.E., Wayne State College
PAULSEN, BRIAN Criminology
M.F.S., Nebraska Wesleyan University
B.S., Bellevue University
PEIFFER, JEFF History/Sociology
M.A.E., Wayne State College

PEITZMEIER, BARBARA Biology
M.S., University of Nebraska
PICKINPAUGH, MONICA Early Childhood Education
M.A., University of South Dakota
PLAGGE, JOAN Biology
M.S., Wayne State College
PORN, BRIAN History
M.A.- US History, Adams State University
REICHLINGER, LUCAS Information
Technology
A.A.S., Northeast Community College
REZNICEK, JOAN Health, Phys Ed and Rec
M.S.E., Wayne State College
RIEF, SHARON Psychology
M.S.E., Wayne State College
RIPPLE, TRACI Sociology
M.A., University of Nebraska-Omaha
B.S., Kansas State University
ROBINETTE-PREWITT, CARRIE EMS
B.S., Bellevue University
A.A.S.-Paramedic, Northeast Community College
ROSCOVIVUS, JIM Information Technology
M.S., American Sentinel University
ROSSMAN, BRANDI Learning Skills
B.A., University of Nebraska-Lincoln
SAALFELD, PAMELA English/Theatre/Global Studies
M.A.E., Wayne State College
SAZAMA, MATTHEW Learning Skills
M.S.E., Wayne State College
B.S., Wayne State College
A.S., Northeast Community College
A.A., Northeast Community College
SCHARTZ, KELLY Mathematics
M.E., Chadron State College
SCHELLEN, WILLIAM Horticulture
B.S., University of Nebraska-Lincoln
SCHNEIDER, KATELYN Foundational English
B.S., Wayne State College
SCHUTTER, CHELSEA Psychology
M.A., Townson University
SCHWAGER, JANET English/Psychology
M.S.E., University of Nebraska-Kearney
SEAGREN, MICHELLE Health, Phys Ed and Rec
M.S., South Dakota State University
SEIL, FAE Health, Phys Ed and Rec
M.A., University of St Thomas
SEVENING, RYAN Media Arts
PhD-, University of South Dakota
M.A., University of South Dakota
SHERWOOD, JAMES Chemistry
B.S., Morningside College
SHERWOOD, STEVEN Geography
M.A., University of Nebraska-Omaha
SHONKA, STACI Mathematics
M.S., Chadron State College
SHRADER, KENDRA Education
M.S., Creighton University
M.S.E., Wayne State College

258 Organization and Staff

SIMONSON, NICHOLAS Chemistry/Biology
M.S.E., University of Nebraska-Kearney
SIXTA, CONNIE Speech/Learning Skills
B.S., Wayne State College
A.A., Northeast Community College
SODERBERG, BROCK EMS/Allied Health
A.A.S., Northeast Community College
EMS Instructor and Paramedic Licenses
SPAHN, DANNY Information Technology
M.S., Dakota State University
STAPPERT, LINDSAY English
M.S.E., Wayne State College
B.S.E., Wayne State College
STARK, CARMEN Spanish
M.S.E., Wayne State College
STEVENS, LYLE History
M.A., Northwest Missouri State University
STOOS, MOLLY Nurse Aide
B.S.N., Briar Cliff University
STOUT, ROBERT Welding
Diploma, Northeast Community College
STRATTON, RACHEL Health, Phys Ed and Rec
B.S., University of Nebraska-Lincoln
TAYLOR, NICHOLAS Health, Phys Ed and Rec
M.S., United States Sports Academy
B.S., Sterling College
TEGELER, JANE Nurse Aide/Medication Aide
A.S.N., University of Nebraska-Lincoln
TEJRAL, DEBORA Health Information Management
B.S.N., College of St. Mary's
THOMAS, SHARYN Early Childhood Education
M.S.E., Wayne State College
TICHOTA, BRIAN Media Arts
A.S., National Education Center-Brown Institute-Minneapolis
TILLOTSON, HEATHER Education
M.E., Doane University
B.S., Wayne State College
TILLOTSON, RACHEL Mathematics
B.S., Wayne State College
TIMM, GARY History/Political Science
M.A.E., Wayne State College
B.A., Wayne State College
TRUE, PATRICIA Human Services
M.S.E., Wayne State College
UHL, STEVEN Business
M.P.A., University of South Dakota
VANDE ZANDE, AMANDA Music
M.M., University of South Dakota
VONGLAN, LEROY Art
B.F.A., Wayne State College
VOSLER, JANICE Mathematics
M.S.E., Wayne State College
WATKINS, MICHAEL EMS
B.S., Bellevue University
WEITZENKAMP, AUBREY Mathematics
M.A., University of Nebraska-Lincoln
WEMHOFF, ANGELA Nursing
A.S., Northeast Community College

WHITE, JEFFREY Business
B.S., Wayne State College
WHITLOCK, JODI Art
M.F.A., University of South Dakota
WILKE, CHRISTOPHER Electrical
A.A.S., Southeast Community College-Milford
WILLERS, VALERIE English
M.S.E., Wayne State College
WINDESHAUSEN, CONTESSA Nurse Aide
B.S.N., Briar Cliff University
WOLFE, NICK Building Construction
B.S., Wayne State College
A.A.S., Northeast Community College
WRIGLEY, THOMAS Speech
M.B.A., University of Omaha
B.S., University of Omaha
ZAVADIL, DENNIS Mathematics
M.S.E., Wayne State College
ZEMAN, DONALD EMS
A.A.S.-Paramedic,
EMT Paramedic License

Foundation

The Northeast Community College Foundation was established in 1975 and is committed to providing support for quality educational opportunities for students. Donations from area residents, businesses, and Northeast alumni help Northeast expand access, facilities, and educational offerings. The Foundation is governed by a Board of Directors, which consists of volunteers in our area who are dedicated to Northeast Community College and its students. Many merit and need-based scholarships are offered through the Foundation. Please contact the Foundation Office or Financial Aid Office for more information.

Walter Aschoff Osmond
Kendra Barnes Norfolk
Dr. Robert Cox Norfolk
E. Clark Gotschall Atkinson
Paula Havranek O'Neill
Matt Hoelsing Norfolk
Arlan Kuehn South Sioux City
Roy Miller Lyons
Larry Poessnecker Atkinson
Jeanne Reigle Madison
Greta Roth Wisner
Juan Sandoval Norfolk
Jeff Scherer Beemer
Wayne Studebaker Norfolk
Dr. G. Tom Surber Norfolk
Kathryn Svik Norfolk
Bill Tielke Atkinson

Advisory Committees

Northeast Community College has received state recognition for its vocational/technical programs. These programs are growing in scope and popularity primarily because they are relevant to students and area needs.

This success is due in large measure to the knowledge and energy given to programs by the advisory committees which work closely with Northeast Community College to make the programs practical and meaningful. The committees assist in determining needs, defining training objectives, planning and developing program content, organizing practical evaluation, serving as liaison for student placement in working positions and providing the follow-up of graduates and continuing liaison with agriculture, businesses, and industry.

Accounting

Derrick BlumSehi and Associates
 Nancy Brozek McMill CPAs and Advisors
 Headley Campbell Faith Regional Health Services
 Karlie Hunt Associated Wholesale Grocers
 Brandon Maly Northeast Community College
 Robert Morrow Morrow, Davies and Toelle
 Brad Noel Norfolk Iron and Metal
 Kristina Osborne Northeast Community College
 John Wilker Faith Regional Health Services
 Ryan Zwingman Nucor

Administrative Professional

Greg Beckman CHI Health, Plainview
 Kelly Burge MasterCare Patient Equipment
 Dan Goeken Insight Financial Planning
 Shana Halsey Nebraska Public Power District
 Ron Hilliges Norfolk Mutual Insurance
 Jay Knobbe State Farm Insurance
 Cindy LaCroix Nebraska Public Power District
 Tami Pick Daycos
 Brenda Proffitt Midwest Health Partners
 Sheila Schukei City of Norfolk
 Nancy Staub Northeast Community College
 Gabriel Steinmeyer Norfolk Area Chamber of Commerce
 Angie Ternus Century 21 Real Estate Professionals
 Kim Wilcox Real Estate Solutions
 Julie Wragge Lower Elkhorn NRD

Adult Education

Carol Conway Holt Co. Veterans Services, O'Neill
 Tracey Garvey ELL Teacher,
 South Sioux City Middle School
 Patti Goodier Head Librarian, Ponca Carnegie Library
 Taylor Kester Antelope Co. Jailer/Dispatcher, Neligh
 Ellen Kyser Retired Teacher, Ainsworth
 Cara Snider Wheeler Co. Clerk, Bartlett
 Nick Strehle Manager, Ridder Feedlot, Beemer
 Cindy Weber ELL Teacher,
 South Sioux City Middle School
 Hayle Yeldon Wayne HeadStart

Agriculture

David Brunsing Midwest Bank
 Brandon Christiansen Farmer
 Alan Colsden Helena AgriEnterprises
 Ron Coufal Beef Feedlot Owner and Farmer
 Clayton Hensley Central Valley Ag
 Nancy Kirkholm Farmer
 Ivan Lentsch Precision Planning
 Jake Mayer Settje Agri Services and Engineering
 Jim Miller Farmer
 Kathy Neidig Neidig Farms and Lakeside Livestock Equip
 Van Neidig Neidig Farms and Lakeside Livestock Equip
 Aaron Sauser Lindsay Manufacturing Co. -
 Kyle Schmidt Precision Point
 Dennis Smydra AKRS
 Robin Sutherland NRCS/LENRD

Audio and Recording Technology

Werner Althaus NET
 B. Cletus Baker Studio B, Ltd.
 Matt Davis Midwest Sound and Lighting
 Pete Franks Theatrical Media Services
 Jasper Goforth Audio Visions
 Dan Kane Power Base Studio
 Kurt Labenz Mixing Room Studios
 Bill Lohrberg Midwest Sound and Lighting
 Doug VanSloun Focus Mastering
 Tom Ware Ware House Studios

Auto Body Repair Technology

Joe Barg Renner Auto Body
 Jerry Doherty Wattier Auto Body Repair
 Matt Hansen Nationwide/Allied Insurance
 Scott Hauser Norfolk Auto Supply, Inc.
 Will Hatterman Will's Paint and Body
 Doug Huttman Renner Auto Body
 Dustin Johnson Ernst
 Josh Kruger Norfolk GM
 Brett Luethold Wattier Auto Body Repair
 Dennis Mitchell 3-D Auto Body, Inc.
 Al Pfeifer Pfeifer Auto Body, Inc.
 Aaron Reeker B Street Collision Center
 Jeff Regan Axalta
 Gary Waggerman Topp's Body Shop

Automotive Technology

Nathan Arens Pearson Motor Company
 Derik Fox Norfolk GM Auto Center
 Don Bermel Full Throttle Service
 Jeff Braithwait Eastern Auto Service
 Blake Buchanan Norfolk GM Auto Center
 Derek Fenster Penner's Tire and Auto, Inc.
 Michael Guenther Downtown Auto Service
 Don Keiser Quality Transmission
 Troy Krantz Northtown Automotive
 Ron Lingenfelter Norfolk Transmission
 Tom Meyer Tom's Service
 Kevin Olson Quality Transmission
 Rick Pearson Pearson Motor Co.
 Rick Prince Rick's Auto Repair
 Kasey Prochaska Cornhusker Auto Center
 Gary Schuett Hometown Auto Repair

Broadcasting - Radio/TV

Haylie Babl News Channel Nebraska
 Keith Bliven KTIV-TV
 Andy Bottger KCAU-TV
 Mike Drahot Cable One
 Danielle Feenstra KCAU-TV
 Austen Hagood KUSO FM
 David Kelley KTCH/KCTY
 Scott Posse KBRX FM
 Jeffrey Steffen WJAG, Inc
 Angela Stenger Flood Communications
 Billy Wolf WJAG, Inc

Building Construction

Joe Beckenhauer Beckenhauer Construction
 Jon Bolin Bolin Construction
 Roger Brummels Century Lumber
 Scott Carhart Carhart Lumber
 Tyson Fischer Tyson Fischer Construction
 Tim Hassenstab A&H Building and Supply Inc
 Jarod Hendricks Gerhold Concrete
 Robert Kelberlau Kelberlau Construction
 Roland Pedersen Binswanger Glass
 Josh Probasco T&H Drywall Services, Inc
 Don Wisnieski Wisnieski Construction
 Terry Wolfe Wolfe Custom Homes

Business and Banking Services

Brad Bosh Farm Bureau Insurance
 Kelly Burge Cruise and Associates
 Dan Goeken Insight Financial Planning
 Shana Halsey Nebraska Public Power District
 Ron Hilliges Norfolk Mutual Insurance

Tanner Lancaster State Farm
 Andy Pfeifer Farm Credit
 Tami Pick Day Companies
 Chris Ruda Homestead Homes
 Sheila Schukei City of Norfolk
 Gabriel Steinmeyer Norfolk Area Chamber of Commerce
 Scott Williams Insurance Associates

Criminal Justice

Mark Benne NNJS - Madison Director
 Paul Hattan Nebraska State Patrol
 Terry Kotrous Madison County Sheriff's Office
 Bob Lowe Nebraska State Probation
 William Mizner Retired
 Matt Otte O'Neill Police Department
 Fred Roskins BlueLine Security Services
 Travis Tjeerdsma Mike Durfee State Prison

Diesel Technology

Jason Cook Dinkel Implement
 Bryce Dennis Manzer Equipment, Inc.
 Chad Dorsy Titian Machinery
 Jim Eskens Ziegler Cat
 Bill Fehringer Green Line, Inc.
 Nick Folkers Folkers Brothers Garage
 Dale Kavan Norfolk Truck Center
 Bill McKay RDO
 Nick Weber Cornhusker International Trucks, Inc.
 James Wordekemper Affiliated Carriers, Inc.
 Dennis Zimmerer Peterbuilt of Norfolk

Dietary Manager Training Program

Christy Anderson Consultant Dietitian
 Susan Hardin Consultant Dietitian
 Christy Heller Careage of Wayne
 Julleen Johnson Plainview Manor
 Renae Kauth Consultant Dietitian

Drafting

Tim Barber Ineight
 Kristopher Burnham Specialized Engineering Solutions
 Kelly Carman HDR
 Roger Compton RK Steel, Inc
 Robert Eckdahl Black and Veatch
 Jon Faltys Behlen Mfg. Co.
 Kent Grange Thompson Electric Company
 Tom Gregory Valmont Industries, Inc, Structures Div
 Dan Haas Kolberg-Pioneer
 Erik Halsey Sand Creek Post and Beam
 Josh Harrell PDM Precast
 Bryan Hinrichsen Tyson
 Chad Hoepfner Homestead Homes
 Rick Hubbard Vulcraft
 Jake Hunke Schnackel Engineers, Inc.
 Craig Jackson Heritage Homes
 Doug Kreikemeier ... Valmont Industries, Inc, Structures Div
 Brett McCarthy Alvine Engineering
 Rebecca Munson Norfolk Public High School
 Jon D. Ness RFA Engineering
 Katie Novicki Olsson Associates
 Nicole Postello BPI Technology, Inc
 Leanne Ritter Advanced Consulting Engineering Services
 Todd Shackelford Alvine Engineering
 Les Swanson Bullseye Fire Sprinkler, Inc
 Jason Ternus Nucor Detailing Center
 Mandy Wehner Olsson Associates

Early Childhood Education

Merisa Anderson Head Start
 Marie Auten Milestones Learning Center and Child Care
 Leslie Baker Fits and Giggles Daycare
 Tonya Brester Tonya's Tiny Town
 Chad Bryant Helping Hands Childcare, Preschool,
 After School Program

Hayly Daudt Haley's Happy Hearts
 Erika Fink Goldenrod Hills Head Start
 Jean Ganstra Department of Health and Human Services
 Cassie Hall Our Savior's Kings Kids
 Molly Kassmeier Happy Kids Daycare
 Brandee Lengel Teach Early Childhood Nebraska
 Shayla Lind Y-Kids
 Chelsea McIntosh O'Neill Preschool
 Sarah Moje Christ Lutheran Elementary School
 Amber Pfansteil Pierce Elementary School
 Liz Sudbeck Northern Hills Childcare Center

Electrical Construction and Control

Mike Ablor Abe Electric
 Stuart Bauer State of Nebraska Electrical Inspector
 Jim Claussen IES
 Dick Clements Alby's Electric
 Robert Jenkins Reliable Electric
 Mark Johnson Johnson Electric
 Jeff Jones Model Electric
 William Nelson City of Norfolk
 Randy Noeker Interstate Electric
 Richard Schutz State of Nebraska Electrical
 Inspector (retired)

Amy Tlam Muth Electric

Electromechanical Technology

Todd Boling City of Norfolk
 Jay Connelly Continental
 Joel Dendinger Nucor Steel
 Monty Pflueger Nucor Steel
 Gene Reed CED
 John Spray Gerhold Concrete
 Bruce Stange Continental
 Michael Welch U.S. Corps of Engineers

Graphic Design

Candice Alder City of Norfolk
 Christopher Amundson Nebraska Life Magazine
 Meagan Cook Blissful Images
 Donna Froehlich Digital Dreams Photography
 Julie Hermsen Norfolk Area Shopper
 Kora Kassmeier Marathon Press
 Mark Malmberg Bid Red Printing Inc
 Michael Meuret Midwest School Services
 Greg Parr Custom Sports
 Kristy Parr Custom Sports
 Jodi Richey Richey Design
 Ron Sack Bailey Lauerman
 Bill Settell Copy Craft Printing
 Gene Walters Big Red Printing

Health Information Management Systems (HIMS)

Tracy Benjes Elkhorn Logan Valley Public Health Dept
 Courtney Burbach Faith Regional Health Services
 Lisa Fix West Holt Memorial Services
 Gina Glaser Norfolk Medical Group
 Brenda Machmueller Boone County Health Center

Kathy Nordby.....Midtown Health Center

Heating, Ventilation, and Air Conditioning

Curt Brodsky.....Kalin's Indoor Comfort
 Marty Clausen.....Clausen Air
 Matt Hines.....Black Hills Energy
 Warren Hoferer.....WinAir Supply
 Nathan Johnson.....Major Refrigeration
 Terry King.....Trane
 James Loutzenhiser.....NPPD
 Gary Love.....Custom Heating and Air Cond.
 Truman Rossman.....Rossman Sales and Service
 Pat Sukup.....Energy Control

Horticulture

Pam Bergstrom.....LENRD Forester
 Ty Haas.....City of Norfolk Parks
 Delray Kumm.....Shamrock Nursery
 Brian Munk.....Northeast Community College/City of Lincoln
 Shawn Sayers.....Northeast Community College

Information Technology

Matthew Arens.....Norfolk High School
 Rick Colwell.....Continental Tech
 Todd Dickie.....Power Sports Nation
 Bill Johnson.....Daycos
 Jason King.....Norfolk Iron and Metal
 John Mandel.....Vulcraft
 Jim McKenzie.....City of Norfolk
 Dan Spray.....Connecting Point
 John Stappert.....Power Computing
 Brian Sterud.....Faith Regional Health Services
 Nic Thelen.....Prodata Computer Services

Machining and Manufacturing Automation

Jennifer Blackburn-Nielsen.....Blackburn Manufacturing
 Jay Connelly.....Continental ContiTech
 Chuck Foxhoven.....Norfolk Public Schools
 Machele Hale.....Beef Products, Inc
 Jose Hernandez.....Norfolk Public Schools
 Mike King.....Vulcraft
 Carl Lindahl.....Vulcraft
 Jim Monk.....Norfolk Specialities, Inc.
 Derek Nordy.....Nucor Cold Finish
 Scott Orwig.....Norfolk Iron and Metal
 Nicole Postello.....Beef Products, Inc
 Doug Stevens.....Apache Industries

Nursing

AnnCrumly, RN.....Valley Hope
 Victoria Dendinger, RN.....St. Joseph's Rehabilitation and Care Center
 Betsy Feilmeier, RN.....Faith Regional Health Services
 Nicole Haglund, RN.....Providence Medical Center
 Amy Langan, RN.....Avera St. Anthony Hospital
 CindyLesiak, RN.....Boone County Health Center
 Bette Lingenfelter, RN.....Norfolk Regional Center
 Lacey Moeller, RN.....Norfolk Veteran's Home
 Kathy Nordby.....Midtown Health Center
 Lisa Parks, RN.....Faith Regional Health Services
 Barb Peterson, RN.....Pender Community Hospital
 Julie Phillips, RN.....Faith Regional Health Services
 Ann Preister, RN.....Faith Regional Health Services
 TiffanyRice, RN.....Osmond General Hospital
 Connie Rupp, RN.....Faith Regional Health Services

Dara Schlect, RN.....St. Francis Memorial Hospital
 Carrie Sousek, RN.....Faith Regional Health Services
 Mary Sprout, RN.....Antelope Memorial Hospital
 Melissa Vietor, RN.....Faith Regional Health Services
 Stephanie Wehrle, RN.....Norfolk Medical Group
 Brenda Wells, RN.....Faith Regional Health Services
 Nicole Wiese, RN.....Faith Regional Health Services

Paramedic

Adele Anderson.....Public Member
 Mike Anderson.....LifeNet of the Heartland
 Scott Bonsall.....Norfolk Fire Division
 Scott Cordes.....Norfolk Fire Division
 Mike Mann.....West Nebraska Claims Service
 Karmen Rotherham.....Antelope Memorial Hospital
 Wendy Snodgrass.....Nebraska EMS Educational Compliance Program Manager
 Dr. G. Tom Surber.....Medical Director
 Michael Wanke.....Norfolk Ambulance Inc.
 Shane Weidner.....City of Norfolk
 Tim Wragge.....Norfolk Fire Division
 Dr. Lisa Yosten.....Faith Regional Health Services
 Don Zeman.....LifeNet of the Heartland

Physical Therapist Assistant

Emily Afrank, DPT.....Family Physical Therapy and Sports Center
 Kristi Busch, PTA.....CHI Health
 Jacob Flint, MHA.....Stone Hearth Estates
 Ryan Gallagher, DPT, ATC Overland Rehabilitation Services
 Angie Jackson.....Northeast Community College
 Tracy Jacobsen, OTR/L.....Jacobsen Physical Therapy
 Dawn McKown, PT/ATC.....Regional West Hospital
 Lisa Miserez, PTA.....St. Francis Memorial Hospital
 Sheri Sheriff, PT, DPT.....Faith Regional Health Services
 Amanda Votta, PTA.....Aegis Therapies
 Timothy Wegner, PTA.....Genesis Home Health and Hospice
 Marci Woehler, PTA.....Wayne Country View Care and Rehabilitation

Plumbing

Jeff Brown.....Wood Plumbing and Heating
 Mike Doering.....Doering Trenching and Plumbing
 Larry Dolejsi.....Larry's Plumbing Service
 Arlen Gall.....Gall Plumbing, Inc.
 Dan Hofmann.....Hofmann Plumbing
 Dave Johnson.....Johnson's, Inc. Plumbing and Heating
 Kevin Johnson.....Nedrows
 Dale Primrose.....Pettitt Plumbing, Heating and Air Cond.
 Dave Prochaska.....Norfolk Public Schools
 Paul Serres.....City of Norfolk
 Joe Tangeman.....Tangeman Plumbing and Sewer Service
 Randy Uttecht.....Norfolk Winnelson
 Aaron Volkman.....Volkman Plumbing and Heating, Inc.
 Scott Zaruba.....Black Hills Energy

Truck Driving

Mike Andresen.....Fremont Contract Carriers
 Jeff Arens.....Schuster
 Tim Gibbons.....Crete Carriers
 Brad Jordan.....Werner Enterprises
 Kati McKie.....Vocational Rehab
 Stephanie Plate.....Grand Island Express
 Corey Pospisal.....Norfolk Iron and Metal
 Rodney Warnock.....Northeast Comm College/Schuster
 Andrew Winkler.....Grand Island Express

Utility Line

Todd Barger..... Southern Public Power District
 Scott Fritz..... Nebraska Public Power District
 Wes Gyhra Lincoln Electric System
 Scott Haber..... Cuming County Public Power District
 Dan Hellbusch Loup Power District
 Bruce Hoehne Stanton County Public Power District
 Jeremy Kaiser Dawson Public Power District
 Todd Knutson Elkhorn Rural Public Power District
 Michael McLaughlin..... Nebraska Public Power District
 Larry Oetken..... Northeast Community College JTS
 David Sehi Lincoln Electric System
 Mike Stockwell..... Cornhusker Public Power District
 Todd Zimmerer North Central Public Power

Christopher Walnofer Nebraska Public Power District
 Ryan Waters..... Nordex USA, Inc.
 Matthew Winter..... Edison Mission
 Aaron Wyatt Vestas Elkhorn Ridge/Crofton Bluffs

Veterinary Technology

Lin Brummels Counseling Service, Wayne
 Jeff Claborn Twin Rivers Veterinary Clinic
 Katie Hostler, LVT..... Stolley Park Veterinary Hospital
 Jennifer Jacobsen, LVT Nebraska Veterinary Services
 Teresa Lake Omaha Steaks
 Shane Pedersen, DVM..... Willow Creek Veterinary Services
 Sharon Schnepf..... MWI Veterinary Supply
 Dale Stephenson, DVM..... Companion Animal Clinic
 Brittany Swanson, LVT Veterinary Emergency Services
 Phil Wurdinger, LVT..... Hanson Hog West

Welding

Josh Arnst Mathison Linweld
 Erin Baird Sabre Communications
 Tyler Bertsch Behlen Manufacturing
 Larry Bledsoe ARI
 Ryan Brehmer Brehmer Manufacturing
 Craig Broyhill..... Broyhill Company
 Mark Folkers Kolberg-Pioneer, Inc.
 Corey Granquist Nucor Vulcraft
 Jen Horken Beef Products International
 Brian Hundt Island Supply
 Nick Jensen..... Thurston Manufacturing
 Todd Jepson..... Reliance Construction
 Joe Krajicek South Sioux City High School
 Wayne Krueger South Sioux City High School
 Dan Lee Port Neal Welding
 Ashely McQuistan Blue Ox
 Paul Morfeld..... EBM Manufacturing, Inc.
 Kevin Potter..... Heritage Industries
 Mark Proski Sentinel Building Systems
 Gabe Rohan..... Superior Industrial Mechanical, Inc.
 Greg Schroeter Strobel Energy Group
 Darrel Shoultz Industrial Tools and Machine
 Jesse Versch Beef Products International
 Marty Winebrenner Plains Boiler
 Angie Wright..... Valmont/Newmark
 Cindy Zeman IDFI 3T

Wind Energy

Brett Citrowske Renew Energy Maintenance
 Jim Claussen..... IES Industrial
 Caelen Friedow Nextera Energy
 Luke Hinkle..... Invenergy
 James Loutzenhiser Nebraska Public Power District
 Cole Mohnen Vestas Grande Prairie
 Chuck Trioa..... Nebraska Public Power District

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2021-22 STUDENT CALENDAR (All dates are subject to change.)

Effective Immediately - Added 6/23/2021

FALL SEMESTER 2021

- August 20 Fall Orientation
- August 21-22 Residence Halls open by appointment
- August 23 Classes begin
- August 27 Tuition, fees, housing and meals due
Last day to cancel or change a meal plan
- September 6 Labor Day - College closed
- October 1 Last day to withdraw from first eight-week classes
- October 15 First eight-week classes end
- October 18 Fall Break for students and faculty
- October 19 Second eight-week classes begin
- November 1 Registration for intersession and spring semester begins
- November 19 Last day to withdraw from fall semester classes
- November 24-26 Thanksgiving Break for students
- November 25-26

2021-22 STUDENT CALENDAR		August 2021 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
September 2021 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	October 2021 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	November 2021 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
December 2021 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	January 2022 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	February 2022 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
PLEASE REFERENCE ADDENDUM PAGE 267 EFFECTIVE IMMEDIATELY ADDED TO ADDENDUM 9/20/2021		May 2022 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
		August 2022 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

- December 1
- December 15

INTERSESSION 2021

- December 20
- Dec 24-Jan 3
- January 10
- January 14

SPRING SEMESTER 2022

- January 16 Residence Halls open by appointment
- January 17 Classes begin
- January 21 Tuition, fees, housing and meals due
Last day to cancel or change a meal plan
- February 25 Last day to withdraw from first eight-week classes
- March 11 First eight-week classes end
Residence Halls close at 5:00 p.m.
- March 14-18 Winter Break for students and faculty
- March 21 Second eight-week classes begin
- April 4 Registration for summer and fall semesters begin
- April 14 Last day to withdraw from spring semester classes
- April 15-18 Spring Break for students and faculty - College closed
- April 27 Last day to withdraw from second eight-week classes
- May 11 Semester ends
Residence Halls close at 5:00 p.m., unless resident is participating in Commencement
- May 13 Commencement

SUMMER TERM 2022

- May 23 Summer term begins
Summer term tuition, fees, housing and meals due

PRE-SUMMER SESSION 2022

- May 23 Pre-Summer and Six-Week Session begins
- May 30 Cooperative Internships begin
- June 3 Memorial Day - College closed
Pre-Summer Session ends

JUNE SESSION 2022

- June 6 June Session begins
- July 1 June Session ends

JULY SESSION 2022

- July 4 College closed
- July 11 July Session begins
- August 5 July Session ends
- August 12 Cooperative Internships end

2021-22 STUDENT CALENDAR (All dates are subject to change.)

Effective Immediately - Added 9/20/2021

FALL SEMESTER 2021

August 20	Fall Orientation
August 21-22	Residence Halls open by appointment
August 23	Classes begin
	Tuition, fees, housing and meals due
August 27	Last day to cancel or change a meal plan
September 6	Labor Day - College closed
October 1	Last day to withdraw from first eight-week classes
October 15	First eight-week classes end
October 18	Fall Break for students and faculty
October 19	Second eight-week classes begin
November 1	Registration for intersession and spring semester begins
November 19	Last day to withdraw from fall semester classes
November 24-26	Thanksgiving Break for students and faculty
November 25-26	Thanksgiving Break - College closed
December 1	Last day to withdraw from second eight-week classes
December 15	Semester ends

INTERSESSION 2021-2022

December 20	Classes begin
Dec 24-Jan 3	Holiday Break for students and faculty
January 10	Last day to withdraw from intersession classes
January 14	Intersession ends

SPRING SEMESTER 2022

January 16	Residence Halls open by appointment
January 17	Classes begin
	Tuition, fees, housing and meals due
January 21	Last day to cancel or change a meal plan
February 25	Last day to withdraw from first eight-week classes
March 11	First eight-week classes end
	Residence Halls close at 5:00 p.m.
March 14-18	Winter Break for students and faculty
March 21	Second eight-week classes begin
April 4	Registration for summer and fall semesters begin
April 14	Last day to withdraw from spring semester classes
April 15-18	Spring Break for students and faculty - College closed
April 27	Last day to withdraw from second eight-week classes
May 11	Semester ends
	Residence Halls close at 5:00 p.m., unless resident is participating in Commencement
May 13	Commencement

2021-22 STUDENT CALENDAR		August 2021
		S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
September 2021	October 2021	November 2021
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30
December 2021	January 2022	February 2022
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28
March 2022	April 2022	May 2022
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31
June 2022	July 2022	August 2022
S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31	S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

SUMMER TERM 2022

May 16	Summer term begins
	Summer term tuition, fees, housing and meals due

PRE-SUMMER SESSION 2022

May 16	Pre-Summer and Six-Week Session begins
	Cooperative Internships begin
May 27	Pre-Summer Session ends
May 30	Memorial Day - College closed

JUNE SESSION 2022

May 31	June Session begins
June 27	June and Six-Week Session ends

JULY SESSION 2022

July 4	Independence Day - College closed
July 11	July Session begins
August 5	July Session and Cooperative Internships end

BUSINESS**Associate of Applied Science in Business****Required Program of Study**

The business degree offers comprehensive instruction covering basic skills for management, marketing, customer service and sales occupations. Students must successfully complete the general education requirements, the business core requirements, and approved electives. In addition to classroom work, students participate in a cooperative internship program, which incorporates on-the-job work experience. Students may add on specialized certificates to expand their business knowledge in Insurance Services, Entrepreneurship, Banking Services, Technology Services and Real Estate.

FRESHMAN YEAR

First Semester		Credits
Course		
BSAD 1000 Human Relations and Ethics or PSYC 1810 Introduction to Psychology	3	
BSAD 2540 Principles of Management.....	3	
INFO 1100 Microcomputer Applications or OFFT 1500 Microsoft Office	3	
ENGL 1010 English Composition I	3	
MATH 1100 Topics and Ideas in Mathematics.....	3	
		<u>15</u>

Second Semester		Credits
Course		
BSAD 2050 Business Communications	3	
BSAD 2160 Customer Service and Business Etiquette.....	3	
BSAD 2520 Principles of Marketing.....	3	
BSAD 2550 Advanced Management	3	
ECON 1040 Personal Finance or ECON 2110 Macroeconomics.....	3	
		<u>15</u>

Required Summer

BSAD 1320 Cooperative Internship	3	
		<u>3</u>

Approved Electives: ACCT 1210 Principles of Accounting II, ACCT 2020 Accounting with QuickBooks, BSAD 1200 Introduction to Electronic Commerce, BSAD 1600 Real Estate Principles and Practices, BSAD 1620 Real Estate Finance, BSAD 2170 Applied Statistics, BSAD 2140 Principles of Banking, BSAD 2230 Retail Management, BSAD 2240 Principles of Insurance, BSAD 2350 Security and Loss Prevention, BSAD 2620 Fundamentals of Real Estate Appraisal, BSAD 2710 Business Law II, ECON/BSAD 1040 Personal Finance, ECON 2110 Macroeconomics, ECON 2120 Microeconomics, ENTR 1050 Introduction to Entrepreneurship, ENTR 2040 Entrepreneurship Feasibility Study, ENTR 2090 Entrepreneurship Business Plan, INFO 2100 Excel Spreadsheet Applications, LEAD 1010 Introduction to Community Leadership, SOCI 2150 Issues of Unity and Diversity.

SOPHOMORE YEAR

First Semester		Credits
Course		
ACCT 1200 Principles of Accounting I or ACCT 1100 Survey of Accounting	3	
BSAD 2530 Advanced Marketing	3	
BSAD 2250 International Business	3	
SPCH 1010 Fundamentals of Communication or SPCH 1110 Public Speaking	3	
BSAD 2700 Business Law I.....	3	
		<u>15</u>

Second Semester		Credits
Course		
BSAD 1070 Business Math	3	
BSAD 2130 Salesmanship	3	
BSAD 2760 Applied Business Projects.....	3	
Approved Elective.....	3	
Approved Elective.....	3	
		<u>15</u>

Total Credit Hours **63**



- 20 Pohlman Agriculture Complex**
approximately 1 mile east
via Benjamin Avenue
- 25 Utility Line/Truck Driver Training**
approximately 1/2 mile east
via Benjamin Avenue
- 26 Veterinary Clinic/
Farm Operation**
via Victory Road



1. Agriculture/Allied Health

2. Apartment A

3. Apartment B

4. Applied Technology

5. Building Construction Student Built Homes

6. Burkhardt Hall

7. College Welcome Center

8. Cox Activities Center

9. Diesel Technology

10. Echtenkamp

11. Hawks Point

12. Law and Public Safety Training Lab

13. Library Resource Center

14. Lifelong Learning Center

15. Maclay

16. Maintenance

17. McIntosh College of Nursing

18. Path Hall

19. Physical Plant

20. Pohlman Agriculture Complex

21. Surplus Building

22. Simon Hall

23. Science

24. Union 73

25. Utility Line/Truck Driver Training

26. Veterinary Clinic/Farm Operation

27. Weller

28. Wind Turbine

29. Wirth

NORTHEAST.EDU

Northeast
community college

Main Campus

801 E. Benjamin Avenue / Norfolk, Nebraska 68701
(402) 371-2020 / (800) 348-9033

Extended Campus Locations

O'Neill, South Sioux City, and West Point

Regional Office Locations

Ainsworth and Hartington

