



Northwestern
Michigan
College

www.nmc.edu

More than
60 programs
of study

Programs & Areas of Study Index

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2012-2013 Academic Calendar

FALL SEMESTER 2012

Registration Begins	April 11, 2012
Tuition Payment Due	August 7
Classes Begin	August 25
College Closed (Labor Day holiday observed)	Sept. 1-3
Classes Cancelled	October 16
College Closed (Thanksgiving holiday observed)	Nov. 21 (after 5 p.m.) - Nov. 25
Classes End	Dec. 16
Grades Available	Dec. 19
College Closed (combined winter holidays observed)	Dec. 24 - January 1

SPRING SEMESTER 2013

Registration Begins	Oct. 3, 2012
Tuition Payment Due	January 3, 2013
Classes Begin	January 14
Spring Break (No Classes)	March 25 - 31
Honors Convocation	May 3
Commencement	May 4
Classes End	May 5
Grades Available	May 8

SUMMER SESSION 2013

Registration Begins	Oct. 3, 2012
Tuition Payment Due	May 7, 2013
Classes Begin	May 11
NMC BBQ	May 19
College Closed (Memorial Day holiday observed)	May 25-27
College Closed (Independence Day holiday observed)	July 4
Classes End	August 9
Grades Available	August 14

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Timothy J. Nelson
President

"NMC's faculty and staff take pride in seeing students achieve their goals. Whatever you're looking for, we are dedicated to helping make sure you find it here."

Why should you attend NMC?

- More than 90 percent of NMC graduates and transfer students consistently report accomplishing their educational goal and say that NMC is a good value for the money
- Small classes, personal attention: NMC's average class size is 20 students
- Dedicated faculty members
- More than 60 programs of study
- Online learning options
- On-campus housing options
- The NMC Foundation, thanks to local donors, offers more scholarship dollars to more students than any community college in Michigan
- The average earnings of a student with an NMC Associate Degree are more than one-third higher than a student with a high school diploma
- Fifty bachelor's, master's and doctoral degree programs available at NMC's University Center, the largest higher education partnership in Michigan, with 9 universities

NMC. Find it here.

*"I'm still really connected to NMC.
I think I've taken a class every
semester since 1993. I love it here."*

Kandace Chapple
*Editor and Co-Publisher,
Grand Traverse Woman magazine*

A.S.A., NMC - 1995
B.B.A., Davenport University at NMC's University Center - 1997
Business, Ferris State University at NMC's University Center - 2001



Welcome

NMC. Find it here.

Overview

History

Northwestern Michigan College was founded in 1951 by local citizens who wanted to provide an affordable college education for area residents. Starting out in temporary headquarters at the airport terminal building in Traverse City, NMC now has a spacious 100-acre main campus located east of downtown, between the east and west arms of Grand Traverse Bay. Four additional campuses provide facilities for comprehensive programs and community services:

- **University Center** - Opened in 1995, this facility on Boardman Lake offers bachelor's completion programs and advanced degrees in partnership with nine Michigan colleges and universities.
- **Aero Park Campus** - Located at Traverse City's Airport Industrial Park, facilities there house NMC's aviation, workforce development and trade and technical programs, including automobile service technology and renewable energy.
- **Great Lakes Campus** - Opened in 2003 on West Bay, facilities include the Great Lakes Maritime Academy, the Great Lakes Culinary Institute, the Great Lakes Water Studies Institute and the Hagerty Center.
- **Rogers Observatory** - Opened in 1981, more than 100,000 community members have visited the Observatory south of Traverse City for regular public viewing nights as well as for special celestial events like comets and eclipses.

Location

Traverse City, Michigan is in the northwestern part of Michigan's lower peninsula and is accessible by U.S. 31/M-37 from the north and south and M-72 from the east and west. Traverse City is the hub of the growing five-county region, home to about 165,000 year-round residents. Traverse City is known as the Cherry Capital of the World due to the prevalence of tart cherry trees, and as a four-season resort area with a growing reputation for food and wine.

Enrollment

Approximately 5,400 students enroll in credit courses each semester. An additional 10,000 enroll in non-credit courses and workshops annually. More than half of NMC's academic students are between 18 and 25 years old. The average student age is 27, factoring in the many adults in the region who choose to continue their education. More than 80 percent of students live in NMC's five-county service area.

Calendar

NMC operates on a semester calendar. There are two 15-week semesters, fall and spring, plus many short-format offerings and shorter sessions during the summer.

Degrees

NMC offers Associate in Science and Arts, Associate in Applied Science, Associate in General Studies, Associate Degree in Nursing and career certificates in more than 50 programs. (Complete list available at nmc.edu/programs) The NMC University Center offers bachelor's completion and advanced degrees. NMC has committed to a statewide agreement that helps students transfer credits earned at NMC to participating four-year colleges and universities.

Campus Housing

NMC provides a residence hall, plus apartment buildings on main campus. See pages 42-43.

Financial Aid

More than half of NMC students receive financial aid through scholarships, loans, grants and on-campus employment. See pages 31-41.





Health & Science Building



Main Campus



Fine Arts Building

Facilities

Main Campus

1701 East Front Street, Traverse City, Michigan

APARTMENT BUILDINGS

NMC has three apartment buildings providing one and two bedroom apartments for married couples and single parents.

BECKETT BUILDING

This building was named for James J. Beckett, Chair Emeritus of the NMC Board of Trustees and longtime volunteer on behalf of the college. The building has six general purpose classrooms, three multi-media classrooms, and one computer lab. It also has faculty offices, a conference room and several study areas.

BIEDERMAN BUILDING

This building contains general purpose classrooms, student interaction areas, one computer lab, Student Health Services, and faculty offices for Health Occupations, Science and Math, and office of Public Relations. It is named for NMC founder Les Biederman, chair of the first Board of Trustees.

DENNOS MUSEUM CENTER

This major museum facility, named for donors Michael and Barbara Dennos, includes three galleries for changing exhibitions, an interactive gallery for children, and a gallery for NMC's collection of Inuit art. It also features a classroom-size theater and sculpture court gallery. The 367-seat William and Helen Milliken Auditorium has an open stage and offers performance space for NMC music, drama, and dance departments as well as community and visiting groups.

Dennos Museum Center



EAST HALL

This residence hall houses about 200 students and offices for the residence life staff. It was remodeled in 2002.

FOUNDERS HALL

The office of Resource Development, NMC Foundation, and two conference rooms are located here.

HEALTH AND SCIENCE BUILDING

This 54,700 square-foot building features state-of-the-art teaching laboratories for science courses such as chemistry, biology, physics, and geology; and for health courses such as dental and nursing. There are also six general purpose classrooms and many interactive spaces for students in study rooms and hallways. The spacious lobby features the NMC Welcome Center and the building is connected to the Biederman Building at its southeast corner.

OKERSTROM FINE ARTS BUILDING

This building has studios, classrooms and an 84-seat recital hall. In 2000 this building was named in honor of Shirley S. Okerstrom, former member and chair of the NMC Board of Trustees and a supporter of the arts.

OLESON CENTER FOR CONTINUING EDUCATION

This conference center, remodeled in 2006, features three meeting rooms which can be used separately or as one large room, a teaching kitchen and a multi-purpose room. The Oleson Center was named in honor of the Gerald and Frances Oleson family which has provided long-term support of the college through the annual Barbecue and other donations.





Main Campus

Wise Memorial
Clock Tower

Great Lakes Campus

Facilities

Main Campus continued

1701 East Front Street, Traverse City, Michigan

OSTERLIN BUILDING

The Osterlin Building was named after Dr. Mark Osterlin and Mrs. Helen Osterlin. In this building are the Osterlin Library, the Center for Learning, Educational Media Technologies, Advising Center, Tutoring, classrooms and computers.

RAJKOVICH PHYSICAL EDUCATION CENTER

This building has a gymnasium, fitness center, dance studio, and classrooms. In 1969, it was named after Nick Rajkovich, a former faculty member who developed the NMC physical education program. In 2000, Frances Rajkovich's name was added to the building in recognition of her generous support of NMC.

SCHOLARS HALL

This building contains general purpose classrooms, the photography laboratory, faculty offices for Communications and Social Sciences, Writing Center and many student study areas.

TANIS BUILDING

This building was named for Preston N. Tanis, the first president of NMC who directed the college from 1951-1970 and wrote its first history. In this building are the offices of Admissions and Financial Aid.

WELCOME CENTER

This information headquarters is located in the lobby of the Health and Science Building.

WEST HALL & STUDENT CENTER

Remodeled in 2002, West Hall houses the college's food service, the campus bookstore as well as the office of Student Life, Personal Counseling and Student Government.

WISE MEMORIAL CLOCK TOWER

Located south of East Hall on the main campus, the clock tower was named for benefactors Harold and Imogene Wise and was erected with private donations from NMC founder Les Biederman, the Wise family, and NMC faculty and staff.

Great Lakes Campus

715 East Front Street at Barlow Avenue, Traverse City

This facility on the West Bay waterfront houses the Great Lakes Maritime Academy, the Great Lakes Culinary Institute, the Great Lakes Water Studies Institute, and the Hagerty Center. The two buildings are connected by a glass exhibition hall to preserve views of the bay.

HAGERTY CENTER

The Hagerty Center is a full-service banquet and conferencing facility located at the Great Lakes Campus, providing state-of-the-art technology and a professional staff. For more information, contact a Hagerty Center representative at (231) 995-3100.

Hagerty Center

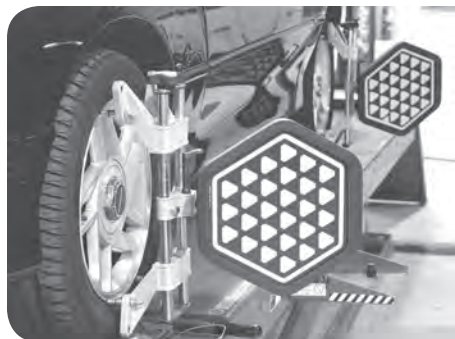


Great Lakes Maritime Academy



Culinary Institute





Automotive Technology



Aviation



Aero Park Campus

Facilities

Aero Park Campus

Aero Park Drive, Airport Industrial Park, Traverse City

AERO PARK LABORATORIES

2525 Aero Park Drive

Aero Park Laboratories (APL) is NMC's newest campus building. Located on the Aero Park campus, across from the Automotive Technologies building, it is home to NMC's Construction Technology and Renewable Energy programs.

AUTOMOTIVE TECHNOLOGY BUILDING

2510 Aero Park Drive

This facility contains the Automotive Service Technology Program.

AVIATION BUILDING

2600 Aero Park Drive

This building contains the Flight Training Device (FTD) for the NMC Aviation Program. An adjacent hangar provides aircraft parking space.

PARSONS-STULEN BUILDING

2600 Aero Park Drive

This facility provides training in the areas of manufacturing, aviation, and information technology. Named after John T. Parsons and Frank L. Stulen, local innovators who created "numerical control," this facility contains a flexible learning environment, computer labs, conference room and faculty and staff offices. Other offerings include organizational Training and Research.

Observatory

1753 Birmley Road, between Garfield and Keystone roads, south of Traverse City

ROGERS OBSERVATORY

This facility is named after former science/math division director and instructor Joseph H. Rogers, who spearheaded the project. The structure contains a classroom area, dome, telescope and darkroom. It was constructed to house astronomy classes and provide an educational program for community groups. The Grand Traverse Astronomical Society conducts regular programs at the Observatory.

University Center Campus

2200 Dendrinis Drive, off Cass Road between 14th Street and South Airport Road, Traverse City

This campus is home to NMC's nine University Center partners, who offer more than 50 bachelor's completion and advanced degree programs in the areas of business, education and health and human services. NMC's Extended Education division and several business offices, including human resources, are also housed here.

Rogers Observatory



University Center



University Center Campus



Community Resources

Dennos Museum Center

www.dennosmuseum.org
(231) 995-1055

Programming in the visual and performing arts for the college community and the citizens of northwestern Michigan.

Open to the public Mon.-Sat., 10 a.m. to 5 p.m., Thur. until 8 p.m., and Sun., 1 to 5 p.m. NMC students are admitted free with student ID. Museum members are admitted free.

Great Lakes Water Studies Institute

www.nmc.edu/water
(231) 995-1793

Located at NMC's Great Lakes Campus on West Grand Traverse Bay, NMC's Water Studies Institute is strategically positioned to engage individuals and organizations to protect, wisely use, and manage the key resource of fresh water.

Hagerty Center

www.nmc.edu/hagerty
(231) 995-3100

Located at NMC's Great Lakes Campus, the Hagerty Center is a premier waterfront venue for lifelong learning. State-of-the-art conferencing facilities, space to seat up to 380 and an on-site chef and culinary facilities are available to meet the needs of trade shows, conferences and banquets.

Lobdell's: A Teaching Restaurant

www.nmc.edu/culinary
Reservations: (231) 995-3120

Located at the Great Lakes Campus, Lobdell's serves as a working laboratory for culinary students and is open to the public for lunches and dinners in fall and spring semesters.



Osterlin Library

www.nmc.edu/library
(231) 995-1060

Community members as well as students may use the library facilities, including computers, and borrow books free of charge. Photo ID is required for a library card or to use computers. The library has an extensive collection of research volumes, periodicals and government documents.

Rogers Observatory

www.nmc.edu/observatory
(231) 995-2300

Named for Joseph H. Rogers, the late science/math division director and instructor who spearheaded the project. Located south of Traverse City to take advantage of dark skies, the Grand Traverse Astronomical Society conducts regular programs at the Observatory.

Training Services

www.nmc.edu/training
Aero Park Campus, (231) 995-2218

Customer-focused solutions, active learning model training, on and off-site delivery – this is what you can expect from NMC's Training Services. We help you gain a clearer understanding of your own processes and create an improvement plan developed through a facilitated event at your facility. Areas of focus include:

Training and Coaching

- Advanced Manufacturing
- Lean Business Practices
- Leadership and Team Skills

WNMC Radio

www.wnmc.org
Requests: (231) 995-1090

Located at 90.7 FM, WNMC is community radio. Most of the people you hear on the air are just local people like yourself who love great music and great radio. Volunteers are always welcome.

NMC. Find it here.



New Student Checklist

Find out about NMC

- ☐ Explore the opportunities for study at NMC - visit www.nmc.edu or review this NMC catalog.
- ☐ Call the Welcome Center to schedule a tour, (231) 995-1135.

Complete the Application for Admission

- ☐ Find it in this catalog, the Registration Guide, at www.nmc.edu/admissions or visit the NMC Admissions Office on the main floor of the Tanis Building.
- ☐ Submit online, mail, or deliver it, along with the \$20 fee, to the NMC Admissions Office, (231) 995-1054.
- ☐ Request your high school transcript or GED scores, ACT scores, AP scores and college transcripts, where applicable, be sent to the Admissions Office.
- ☐ Tour on-campus housing and find out more about our full-service residence hall and campus apartments.

Apply for the Financial Assistance You Need

- ☐ Go to www.fafsa.gov online to complete and submit your Free Application for Federal Student Aid (FAFSA). For more information, visit the Financial Aid Office on the main floor of the Tanis Building, visit www.nmc.edu/financialaid or call (231) 995-1035.
- ☐ Check with your academic office to find out more about divisional scholarships.

Complete Placement Testing

- ☐ Take NMC's COMPASS placement exam to make sure you are placed in the right courses. You may only need to take portions of the test:
 - If you have ACT scores in reading of 19 or higher and writing of 18 or higher, you do not need to take the reading/writing portion.
 - If you have an ACT score of 19 or higher in math, you do not need to take the math portion unless you wish to take a class higher than your placement allows. (High school dual-enrolled students need 21 or higher.)
- ☐ COMPASS testing is available daily through the Center for Learning in the Osterlin Building. Evening and weekend hours are available, call (231) 995-2134. Visit www.nmc.edu/compass to prepare for the test.
- ☐ Ideally COMPASS is completed before Orientation. If traveling from out of the area, placement testing may be completed on your Orientation date.

Attend Orientation

- ☐ All new students are required to attend. Choose a date and time at www.nmc.edu/orientation
- ☐ At Orientation you will get an overview of NMC and meet with an academic advisor to schedule your classes.

Register & Pay for Classes

- ☐ Register early for best selection and pay according to the dates published in the Registration Guide.
- ☐ Register and pay at Orientation, online at www.nmc.edu/selfservice or in the Records and Registration Office. Stop by the Bookstore in West Hall and purchase your books.

Academic Area: Aviation

Contact Information
www.nmc.edu/aviation
2600 Aero Park Drive
(231) 995-1220
(231) 929-7116 fax
aviation@nmc.edu

Memberships

- University Aviation Association
- NBAA

Accreditation
Federal Aviation Administration

Transfer Guides
Available in the Advising Center,
Osterlin, main level or
www.nmc.edu/advising

Scholarships
See page 35-41, Aviation
Academic Office, or visit
www.nmc.edu/scholarships

Facilities

- Single-engine aircraft
- Multi-engine aircraft
- 2 simulators

Opportunities

- Honors courses

Aviation

Accelerated flight programs, first-class instruction and great career opportunities await those who enroll in NMC’s Aviation program. You’ll experience personal attention from instructors as you work toward obtaining an associate or bachelor’s degree. The program, which is well-known in the airline industry, offers Private, Instrument and Commercial certificates. NMC is one of the few community colleges to offer training in Unmanned Aerial Systems as well as an international aviation partnership that will enable you to fly worldwide in countries accepting EASA/JAR-FCL and FAA pilot licenses.

Program Highlights

- Training Pilots since 1967
- FAA 141 and VA approved
- Certificates/ratings in two years or less
- Options to complete Multi-engine, Flight Instructor and Instrument Flight Instructor Ratings
- Specialty courses including Unmanned Aerial Systems designed to increase hiring potential
- International aviation partnership that allows students to obtain both FAA and EASA/JAR-FCL licenses
- In-house FAA flight testing
- Four-season environment for quality training
- GPS Equipped, Glass Panel Aircraft
- Frasca simulator with 220-degree visual display system
- Aerobatic, Tailwheel and Seaplane Training
- Cross-country flight opportunities
- Non-credit programs available

Degrees Available

Associate in Applied Science (AAS) 67

Transfer Opportunities

NMC’s University Center offers two bachelor’s degree program options for aviation students via partners Ferris State University and Davenport University. See page 22-23. After two years at NMC, you may move to their campuses, or remain in Traverse City and continue to pursue your degree at the University Center. Aviation faculty can advise you on bachelor’s degree completion programs at other schools.



Academic Area: Business

Business

Business programs prepare you for immediate employment in today's competitive, complex and changing business world or to transfer to a four-year school. The curriculum includes business-specific classes and liberal arts studies.

Students planning to enter the job market upon graduation generally pursue an Associate in Applied Science (AAS) degree or a Certificate of Achievement. Those who plan to transfer to four-year institutions to pursue a bachelor's degree should refer to the requirements for the Associate in Science and Arts (ASA) degree. During your first semester at NMC, you should consult an academic advisor for guidance in scheduling courses to meet your objectives.

Degrees Available

Associate in Applied Science (AAS)
Associate in Science and Arts (ASA)
Certificates of Achievement

Occupational Specialty Programs

Accounting (AAS)	64
Administrative Support Specialist (Certificate)	64
Business Administration (AAS)	68
with concentrations in Computer Applications, Entrepreneur, General Business, Management, and Marketing	
Business Administration - Online (AAS).....	69
Computer Studies	
Computer Information Technology - General (AAS)	71
Computer Information Technology - Developer (AAS)	71
Computer Information Technology - Infrastructure (AAS)	72
Infrastructure Specialist I, II and III (Certificates)	72-73
Office Applications Specialist (Certificate)	73
Computer Support Specialist (Certificate).....	73
Industry Certifications	74
Culinary Arts (AAS).....	79
Culinary Arts (Certificate)	79
Entrepreneurship - Levels I and II (Certificates)	82
Legal Assistant (AAS - under discontinuance plan)	83
Technical Management Administration (AAS)	93
Web Developer - Levels I, II and III (Certificates).....	75

Transfer Options (Follow ASA Degree Requirements)

Accounting	60
Business Administration	60

Online & Other Learning Options

- AAS Business Administration - General Business
- ASA degree - Depending on the transfer college requirements, many required courses can be taken online.
- Computer Studies: Office Applications Specialist Certificate

Contact Information

www.nmc.edu/business
James Beckett Building
(231) 995-1169
(231) 995-1546 fax
business@nmc.edu

Accreditation

American Culinary Federation

Transfer Guides

Available in the Advising Center,
Osterlin, main level or
www.nmc.edu/advising

Scholarships

See page 35-41, Business
Academic Office, or visit
www.nmc.edu/scholarships

Facilities

- The James J. Beckett 204
Computer Lab provides
business specific technology
resources to students.
- The Parsons-Stulen 204
Computer Lab provides tech-
nology resources to students.

Internships

- Academic
- International

Opportunities

- Honors courses

Testing Services

- NMC is an authorized
Certiport, Pearson-Vue and
Prometric testing center.

Academic Area: Communications

Learning Opportunities

Contact Information
www.nmc.edu/communications
Scholars Hall
(231) 995-1175
(231) 995-1952 fax
communications@nmc.edu

Student Organizations

- White Pine Press
- NMC Magazine
- NMC Players

Transfer Guides
Available in the Advising Center,
Osterlin, main level or
www.nmc.edu/advising

Scholarships
See page 35-41, Communications
Academic Office, or visit
www.nmc.edu/scholarships

Facilities

- 2 Computer Classrooms
- Writing and Reading Center

Internship
Broadcasting with WNMC

Opportunities

- Honors courses

Communications

You may choose Communications courses to fulfill requirements for other programs or concentrate in one of these four specific areas of study:

- Public Speaking and Communications Studies
- English:
 - Developmental Reading and Writing, including classes for English Language Learner (ELL) students
 - College Composition with class sections for ELL students
 - Literature
 - Linguistics
- Theater
- World Languages: American Sign Language, French, and Spanish

Students who choose a concentration are generally planning to transfer to a four-year college or university to complete a bachelor’s degree. While at NMC, these students pursue a general liberal arts curriculum, with electives chosen from their area of interest. If you plan to transfer, consult with advisors and faculty members in your field of interest during your first semester at NMC to familiarize yourself with transfer requirements. Staying in Traverse City and transferring to NMC’s University Center is another option if you wish to continue with a liberal studies curriculum.

Degrees Available
Associate in Science and Arts (ASA)

Transfer Options (Follow ASA Degree Requirements)

Communications	60
English.....	61
Theater	62
World Languages	
American Sign Language.....	63
French.....	63
Spanish	63

Online & Other Learning Options
ASA degree - Depending on the transfer college requirements, many required courses can be taken online.



Academic Area: Freshwater Studies

Freshwater Studies

This water focused program has an interdisciplinary approach designed to offer students flexibility and a variety of opportunities especially critical in these challenging economic times. The core program of studies includes Introduction to Freshwater Studies, Watershed Science, Geographic Information Systems (GIS), Oceanography, Meteorology and Climatology, and an Internship experience either locally or overseas.

The degree is intended both for students who plan to enter the professional arena as well as those who wish to further their studies at a four-year school.

Degrees Available

Associate in Applied Science (AAS)

Associate in Science and Arts (ASA)

Concentration Streams

Economy and Society	82
Global Freshwater Policy and Sustainability	82
Science and Technology	82

Transfer Options

NMC has collaborated with Grand Valley State University to allow Freshwater Studies students to go on to earn a Bachelor's degree in Liberal Studies with an Environmental Leadership emphasis at GVSU's University Center location. All courses for both NMC Associate of Science and Arts degree and GVSU Bachelor's degree will be offered in Traverse City.



Contact Information

www.nmc.edu/water

NMC Great Lakes Campus

(231) 995-1793

(231) 995-1794 fax

water@nmc.edu

Transfer Guides

Available in the Advising Center, Osterlin, main level or

www.nmc.edu/advising

Scholarships

See page 35-41, Science and Math Office, or visit

www.nmc.edu/scholarships

Facilities

- Water analysis laboratory
- *Outland 1000* remotely operated vehicle (ROV)
- *R/V Northwestern* research vessel
- NMC float plane

Opportunities

- Honors courses
- Internships

Academic Area: Health Occupations

Contact Information

www.nmc.edu/healthoccupations
 Biederman Building 103G
 (231) 995-1235
 (231) 995-1950 fax
healthoccupations@nmc.edu

Student Organizations

- ADAA Student Membership
- MDAA

Accreditation

- Michigan Board of Nursing
- American Dental Association Commission on Dental Accreditation

Transfer Guides

Available in the Advising Center, Osterlin, main level or
www.nmc.edu/advising

Scholarships

See page 35-41,
 Health Occupations
 Academic Office, or visit
www.nmc.edu/scholarships

Facilities

The Health & Science Building Nursing Lab and the Robert Chase Dental clinic provide exceptional environments for learning.

Opportunities

- Advanced studies available through the University Center
- Honors courses

Health Occupations

Health Occupations programs prepare you for immediate employment or to transfer to four-year colleges and universities. Specialized occupational classes lead to a certificate. The Associate Degree programs offer a combination of specialized classes and liberal arts and science studies.

The Dental Assistant and Nursing programs have specific admissions requirements. Details appear in the program information section.

If you plan to transfer, consult with advisors and faculty members in your field of interest during your first semester at NMC to familiarize yourself with transfer requirements. Transferring to NMC's University Center is another option.

Degrees Available

Associate Degree in Nursing (ADN)
 Associate in Applied Science (AAS)
 Certificate of Achievement

Occupational Specialty Programs

Allied Health	
Respiratory Therapy (Partnership)	92
Dental Assistant	
Dental Assistant (AAS)	80
Dental Assistant (Certificate)	80
Nursing	
Associate Degree in Nursing (ADN)	88
LPN to ADN Completion (ADN)	89
Practical Nursing (Certificate).....	91

Transfer Options - Nursing

Many colleges and universities offer BSN completion programs. Three University Center partners, Davenport University, Ferris State University and Spring Arbor University, allow you to complete your BSN while remaining in Traverse City. See page 22-23 or go to www.nmc.edu/uc for more information.

Online & Other Learning Options

- Nursing Online Option (page 89)



Academic Area: Humanities

Humanities

From graphic design, photography to music, dance, history and philosophy, NMC's Humanities academic area offers you a wide range of creative educational opportunities. You'll also learn unique skills that will ultimately help you move on to a university or land a job in your desired field. All Humanities students have access to state-of-the-art computer labs. If it's photography you're pursuing, you'll enjoy NMC's impressive photography lab. We also provide private instrument instruction and opportunities to participate in a variety of musical ensembles and performances. You also may take advantage of our flexible learning options in computer software, history, philosophy and music courses.

Degrees Available

Associate in Applied Science (AAS)

Associate in Science and Arts (ASA)

Occupational Specialty Programs

Visual Communications (AAS) 93

Visual Communications - Creative Management in Art Direction (AAS) 93

Transfer Opportunities

Art 60

Dance 62

History 62

Music 62

Philosophy 62

Religion 62

Visual Communications 63

Online & Other Learning Options

ASA degree - Depending on the transfer college requirements, many required courses can be taken online.

Contact Information

www.nmc.edu/humanities

Fine Arts Building

(231) 995-1325

(231) 995-1696 fax

humanities@nmc.edu

Student Organizations

- White Pine Press

- NMC Magazine

Transfer Guides

Available in the Advising Center, Osterlin, main level or

www.nmc.edu/advising

Scholarships

See page 35-41, Humanities

Academic Office, or visit

www.nmc.edu/scholarships

Labs

- Music Macintosh Lab

- Visual Communications
Macintosh Lab

- Photography Darkroom

Equipment

- Music Instruments

- Fully-equipped Ceramic Studio

Opportunities

- Instrument, Dance and
Ensemble Performance

- Concert & Jazz Band

- Chamber Singers

- Chorale

- Hands-on work experience in
Visual Communications with
non-profit organizations

- Student Publications

- Honors courses



Academic Area: Maritime Academy

Contact Informationwww.nmc.edu/maritime

Great Lakes Campus

(877) 824-SHIP

(231) 995-1200

(231) 995-1318 fax

maritime@nmc.edu**Cadet Organizations**

- International Shipmasters Association
- Propeller Team
- Sailing Club
- SNAME - Society of Naval Architects & Marine Engineers
- Women On The Water

Accreditation

- U.S. Maritime Administration
- U.S. Coast Guard

Transfer Guides

Available in the Advising Center,
Osterlin, main level or

www.nmc.edu/advising**Scholarships**

See page 35-41, GLMA

Academic Office, or visit

www.nmc.edu/scholarships**Facilities**

- *T/S State of Michigan*
- Maritime Labs
- Shiphandling Simulator
- Engineering Simulator
- Great Lakes Campus Harbor

Shipboard Internships

- Academic
- Domestic Sailing
- International Sailing

Opportunities

- Sea time aboard *T/S State of Michigan*, Great Lakes and ocean vessels
- Honors courses

Great Lakes Maritime Academy

At the Great Lakes Maritime Academy, you'll prepare for the challenge of operating commercial ships as a deck or engineering officer.

The Academy's unique relationship with partner institution Ferris State University allows cadets to earn maritime degree credentials and a Bachelor's degree in Business Administration simultaneously. A core maritime curriculum for students who enter the Academy with a Bachelor's degree is also available.

Upon completion of all requirements, you are prepared to write the U.S. Coast Guard examination for licensing as deck or engineering officers.

You'll learn seamanship, navigation and piloting or steam and diesel engineering with up to 276 days of sea time. The training ship *State of Michigan* is used daily as a floating classroom, a hands-on learning environment and sets sail several times a year to reinforce skills taught shore side. Upon graduation, you'll discover exceptional employment opportunities and salaries.

Degrees Available

- Associate in Applied Science (NMC)
- Bachelor's of Science in Business Administration, Ferris State University/NMC University Center
- U.S. Coast Guard unlimited tonnage license for:
 - Third Mate of the Great Lakes and Oceans and 1st Class Great Lakes Pilot (Deck Program)
 - Third Assistant Engineer, Steam or Motor Vessel, unlimited horsepower (Engine Program)

Occupational Specialty Programs

Maritime.....	84-87
Maritime Deck Officer (AAS-NMC; BS-Ferris State University)	86
Maritime Engineering Officer (AAS-NMC; BS-Ferris State University)	86
Power Plant Facilities Operator (AAS)	87



Academic Area: Physical Education

Physical Education

A wide variety of Physical Education courses allow you to pursue personal interests, improve fitness, participate in sports or recreational activities, relieve stress, or earn additional credits. Two physical education credits may be taken as electives to satisfy the total number of Group 2 credits needed to fulfill Associate in Science and Arts degree requirements. See page 52.

Physical Education courses are grouped as follows:

Health and Fitness (HF)	129-130
Fitness Circuit, Yoga, Pilates, Personal Trainer Certification, Aerobic Dance, Step Aerobics, Lap Swim	
Outdoor Pursuits (OUT)	150
Winter Travel and Camping, Backpacking, Caving, Rock Climbing, Snowshoeing, Canoeing	
Physical Education (PE)	150-152
Volleyball, Basketball, Basketball Coaching, Basketball Officiating, Weightlifting, Aikido, Tae Kwon Do, Kuntaw, Judo, Swing, Latin and Slow Dancing, Hip-Hop Dance	

In addition to these credit courses, the Physical Education program offers non-credit recreational opportunities. For a fee, you may join the Fitness Center, which is equipped with weight machines, exercise bikes, treadmills, stair climbers, and elliptical trainers. Intramural sports start in the fall with outdoor co-ed kickball and flag football and then move indoors in the winter with co-ed dodge ball, soccer, basketball and volleyball.

Open recreation hours allow you to join in pick-up games of basketball, volleyball, or indoor soccer. Outdoor facilities include an athletic field, softball diamond, sand volleyball and basketball courts, and a frisbee/disc golf course.

Transfer Opportunities

Most Physical Education credits will transfer to four-year schools in Michigan. Check with the Advising office for requirements at specific schools.

Contact Information

www.nmc.edu/physicaleducation

Nick and Frances Rajkovich
Physical Education Center
(231) 995-1198
physicaleducation@nmc.edu

Student Organizations

See page 45.

Transfer Guides

Available in the Advising Center,
Osterlin, main level or
www.nmc.edu/advising

Scholarships

See page 35-41, Physical Educa-
tion Academic Office, or visit
www.nmc.edu/scholarships

Facilities

- Athletic Gymnasium
- Fitness Center
- Exercise and Dance Room
- Athletic Field
- Outdoor Sports Courts

Opportunities

- Recreation and
Intramural Sports
- Honors courses



Academic Area: Science & Math

Contact Information
www.nmc.edu/science-math
Biederman Building 203G
(231) 995-1260
(231) 995-2120 fax
science-math@nmc.edu

Student Organizations

- Astronomy Club
- Engineering Club

Transfer Guides
Available in the Advising Center,
Osterlin, main level or
www.nmc.edu/advising

Scholarships
See page 35-41, Science & Math
Academic Office, or visit
www.nmc.edu/scholarships

Facilities

- Greenhouse
- Observatory
- Science Labs:
 - Anatomy & Physiology
 - General Biology
 - General Chemistry
 - Geology
 - Human Biology
 - Microbiology
 - Organic Chemistry
 - Physics

Opportunities

- Office Assistant
- Science Lab Assistant
- Honors courses

Science & Math

You'll find courses designed to fulfill basic requirements in occupational programs at NMC. Also, most Science and Math courses are easily transferable to four-year institutions, making your path toward a bachelor's degree a smooth one.

Degrees Available
Associate in Applied Science (AAS)
Associate in Science and Arts (ASA)

Occupational Specialty Programs
Plant Science, Applied (AAS) 92

Transfer Opportunities

Astronomy	60
Biology.....	60
Chemistry.....	60
Engineering	61
Environmental Science	61
Mathematics	62
Physics	63

Online & Other Learning Options
ASA degree - Depending on the transfer college requirements, many required courses can be taken online.



Academic Area: Social Science

Social Science

Whether you're looking to fill a program requirement or wish to concentrate in a specific social science area that transfers to a four-year institution, you'll find what you need here. NMC offers transfer courses in Anthropology, Child Development, Criminal Justice, Education, Economics, Geography, Political Science, Psychology, Sociology, and Social Work. Students who study the social sciences go on to work in a number of fields in business, child care, education, human service, governmental and non-profit arenas, and field research.

If your interest lies in serving the community as a police officer, the Law Enforcement program prepares students to become law enforcement officers while earning a two-year degree. Child Development is another specialty program that prepares qualified students to work in the field while earning a certificate. NMC also offers specialty courses in Nautical and Underwater Archaeology that may not be found at larger institutions. NMC works closely with our University Center partners so students may earn a bachelor's degree in Social Work or Education.

Students looking to build their resume, Service Learning projects offer you the opportunity to explore careers and build work-related skills through hands-on learning. At the same time, you are providing important volunteer services to the community.

Degrees Available

Associate in Applied Science (AAS)
Associate in Science and Arts (ASA)
Certificate of Achievement

Occupational Specialty Programs

Child Development (Certificate)	70
Law Enforcement (AAS)	83

Transfer Opportunities

Anthropology	60
Child Development	60
Criminal Justice	60
Economics	61
Education	61
Geography	62
Political Science	63
Psychology	63
Social Work	63
Sociology	63

Online & Other Learning Options

- ASA degree - Depending on the transfer college requirements, many required courses can be taken online.
- Criminal Justice program (ASA degree)

Contact Information

www.nmc.edu/socialscience
Scholars Hall
(231) 995-1290
(231) 995-1299 fax
socialscience@nmc.edu

Accreditation

- MCOLES - Law Enforcement
- National CDA Certified Training Site - Child Development

Transfer Guides

Available in the Advising Center, Osterlin, main level or
www.nmc.edu/advising

Scholarships

See page 35-41, Social Science Academic Office, or visit
www.nmc.edu/scholarships

Internships

Service Learning Internships

Opportunities

- Honors courses

Contact Informationwww.nmc.edu/technical

2600 Aero Park Dr.
 (231) 995-1300
 (231) 995-2022 fax
technical@nmc.edu

Accreditation

Automotive Service Excellence
 (ASE)

Transfer Guides

Available in the Advising Center,
 Osterlin, main level or
www.nmc.edu/advising

Scholarships

See page 35-41, Technical
 Academic Office, or visit
www.nmc.edu/scholarships

Facilities

- Auto-Tech Lab
- Cisco Lab
- Computer Lab
- Electronics Lab
- Machining Lab
- Welding Lab

Opportunities

- Internships
- Honors courses

Technical

Technical programs prepare you for immediate entry level employment or to transfer to a four-year institution. In addition to degrees, certificates and certifications, technical programs allow those already employed to upgrade their technical skills. In all technical programs, enrollments are limited to give you access to the most current technology, industry-knowledgeable instructors, curriculum reviewed and approved by local advisory committees, and hands-on training.

Degrees Available

Associate in Applied Science (AAS)
 Certificate of Achievement
 Industry Certifications

Occupational Specialty Programs**Automotive**

Automotive Service Technology (AAS)	65
Electrical and Drivability Specialist (Certificate).....	65
Hybrid Technology Specialist.....	66
Master Automotive Technician (Certificate)	66
Under Car Specialist (Certificate).....	66
Bridge Learning Community.....	67

CAD/CAM

Detailer - Advanced Manufacturing (AAS).....	69
Drafter - Mechanical (Certificate).....	70
Trainee - Mechanical (Certificate).....	70

Construction Technology

Carpentry Technology (Certificate).....	76
Electrical Technology (Certificate).....	76
Facilities Maintenance (Certificate).....	76
HVAC/R Technology (Certificate).....	76

Renewable Energy

Electrical (AAS & Certificate).....	77
HVAC (AAS & Certificate).....	77

Engineering Technology (AAS & Certificate) 81

Manufacturing Technology (AAS) 84

Welding Technology (Certificate)..... 94



Online Learning Options

Online Learning

www.nmc.edu/online

Osterlin Building, Room 134, (231) 995-1070

NMC offers many courses and five degree programs online. Courses may be delivered:

- Completely online
- Online with proctored testing
- Hybrid courses blending online and on-campus delivery (at least 50 percent online)

The online course areas are accessed using NMC's e-Learning (Moodle) system at **elearning.nmc.edu**.

Visit **www.nmc.edu/online** to find out more details. Using the searchable schedule feature located on this page, you can also determine which classes are offered online or in other delivery methods.

Degree Programs

ADN (Associate Degree in Nursing)

- Intended for full-time ADN students
- Lab and clinical courses require on-site attendance
- More information: **www.nmc.edu/healthoccupations** or (231) 995-1235

AAS (Associate In Applied Science Degree) Business Administration - General Business

- More information: (231) 995-1169

ASA (Associate in Science and Arts Degree)

- Contact an NMC Advisor for more information, (231) 995-1040

AGS (Associate in General Studies)

- Contact an NMC Advisor for more information, (231) 995-1040

ASA: Criminal Justice

- A collaborative program among NMC, Delta College and West Shore Community College
- More information: (231) 995-1290

Certificate Programs

Computer Studies: Office Applications Specialist Certificate

- More information: (231) 995-1169

General Studies Certificate

- Contact an NMC Advisor for more information, (231) 995-1040

Science and Arts Certificate

- Contact an NMC Advisor for more information, (231) 995-1040

Noncredit Online Learning

See page 24, visit **www.nmc.edu/ees** or call (231) 995-1700.

Bridge Learning Community

www.nmc.edu/bridge

Aero Park Campus, Parsons-Stulen Building, (231) 995-1971

Designed specifically for nontraditional adult learners, Bridge is a set of communications, math and computer classes offered both days and evenings to fit various schedules. Bridge is appropriate for first-time adult college students, students who have been away from a formal education setting and students seeking to upgrade workplace skills.

Working with more than 30 regional agencies to serve individuals residing in the surrounding six-county area, more than 100 students enroll in Bridge each year. Students receive assistance with admissions, registration and financial aid as well as transportation, child care and more. The program is designed to give students foundational success, on which they can build either an academic or career path.

Students in Bridge describe the program as motivational, a confidence builder and an opportunity to succeed. The NMC Bridge is a learning community, and it operates on the premise that "we all learn better together."

Service Learning

www.nmc.edu/servicelearning

(231) 995-1290

Service Learning offers students the opportunity to explore careers and build work-related skills through hands-on learning experiences. It also provides documentation of volunteer hours required by some schools for graduation.

A service-learning internship is a method of earning college credit, extra credit or honors credit for a specific class, or validation of supervised field experience. It is an opportunity for students who want to explore career or interest areas, apply classroom theory to a real situation, and gain practical experience for resume building. Internships are arranged between the student, supervising faculty, field supervisor, and service learning coordinator. Internships can be arranged in all liberal and occupational study areas for one to four hours of elective credits. A maximum of four credits will count toward associate degree requirements.

NMC.
Find it here.

NMC University Center



www.nmc.edu/uc

2200 Dendrinis Drive (off Cass Road)
Traverse City, MI 49684
(888) NMC-UCTC (662-8282)
(231) 995-1777

What can I study?

The University Center partners offer programs in the areas of Business, Health and Human Services, and Education. Visit www.nmc.edu/uc or see the University Center Catalog for more information.

What degrees are available?

Bachelor's completion degrees, master's degrees, doctoral degrees, professional certificates, education endorsements and planned programs.

How do I apply?

The ideal approach for admission to a bachelor's degree program is to complete the first two years of college courses (and an associate's degree) from Northwestern Michigan College. You then apply for admission to the four-year institution of your choice. Applications are available through UC campus office representatives. Once accepted to a university, you are literally a student at that institution, with the same rights and responsibilities as other students at that college or university.

How can I get help?

Consult directly with representatives from the university to learn about their programs. Planning ahead will ensure that you complete courses or tests required for admission.

How do I register for classes?

You can register by mail, telephone, onsite, and online. Call the university representative for details.

How do I pay?

Tuition and fees are assessed by the individual partner institutions. The UC campus office representatives are the best source of information.

Is financial aid available?

Financial aid eligibility and awards are primarily determined by the student's school of choice. Visit www.nmc.edu/uc or contact the UC campus representative for more information. Some scholarship money is available from the UC. For information call (231) 995-1776.

Where are classes held?

Most classes are held at the NMC University Center Campus on Boardman Lake in Traverse City. Located at 2200 Dendrinis Drive, the UC campus is off Cass Road, north of South Airport Road.

How can I find out more?

Visit www.nmc.edu/uc to find out more about the programs and universities you're interested in. Tours of the University Center are available by calling (231) 995-1777 or stop by the Welcome Center at the UC campus.

UC Partners/Programs:

Central Michigan University

Contact: Judith Nemitz
2200 Dendrinis Dr., Suite 101
(231) 995-1756, (231) 995-1758 fax
traverse.city@cmich.edu

Bachelor's Programs

- Elementary Education

Master's Programs

- Administration, with concentrations in:
 - General
 - Human Resources
 - Leadership
 - Public
- Humanities
- Reading and Literacy (K-12)
- School Principalship

Doctoral Program

- Doctor of Education (EdD)

Certificate & Endorsements

- Recertification/Endorsement
 - Early Childhood (ZS)
 - Elementary Education Endorsement (K-6)
 - Reading (BT)
 - Reading Specialist (BR)
- Driver's Education
- Specialist in Education (EdS)

Davenport University

Contact: Katherine Baxter
2200 Dendrinis Dr., Suite 104
(231) 995-1740 or (800) 894-0883
(231) 995-1743 fax
katherine.baxter@davenport.edu

Bachelor's Programs

- Business Administration (BBA)
 - Applied Business
 - Business Prof. Studies
 - Human Resource Management
 - Management
 - Marketing

Master's Program

- Strategic Management (MBA)

NMC University Center

Eastern Michigan University

Contact: Jacqui Frensley
2200 Dendrinos Dr., Suite 98
(231) 995-1750 or (877) 368-8289
(231) 995-1751 fax
traverse.city@emich.edu

Graduate Certificate Program

- Historic Preservation

Ferris State University

Contact: Debbra Curtiss
2200 Dendrinos Dr., Suite 100
(231) 995-1734 or (866) 857-1954
(231) 995-1736 fax
FerrisNorth@ferris.edu

Bachelor's Programs

- Accountancy
- Business Administration
 - Aviation
 - Management
 - Maritime
 - Professional Track
- Computer Information Systems
- Computer Information Technology
- Hotel Management
- Information Security and Intelligence
- Nursing
- Secondary Teacher Education
- Social Work

Post-Bachelor's Programs

- 18-Hour Planned Programs
- Endorsement: Secondary
- Endorsement: Special Education
- Post-B.A. Teacher Certification, Secondary

Master's Programs

- Career & Technical Education
- Education-Curriculum and Instruction
 - Educational Leadership
 - Special Education, LD
 - Subject Area

Certificate Programs

- Homeland Security: Digital Security and Forensics
- Human Resource Management
- International Business
- Marketing

Grand Valley State University

Contact: Sue Wierzbicki
2200 Dendrinos Dr., Suite 102
(231) 995-1785 or (888) 922-1785
(231) 995-1786 fax
nminfo@gvsu.edu

Bachelor's Programs

- Language Arts/Elementary Education
- Liberal Studies
- Social Studies/Elementary Education

Master's Programs

- Education
 - Elementary Education
 - Instruction & Curriculum
 - Early Childhood (ZS)
 - Special Education (CI)
 - Occupational Therapy (Hybrid)
- Social Work

Certificates, Endorsements**& Planned Programs**

- Early Childhood (ZS)
- Elementary Education
- Environmental Studies (Minor)
- 18-Hour Planned Programs
- Special Education: Cognitively Impaired (CI)
- Post-Baccalaureate Teacher Certification, Elementary

Lawrence Technological University

Contact: Jill Niemi
2200 Dendrinos Dr., Suite 99
(231) 995-1724 or (877) LTU-8866
(231) 995-1723 fax
jniemi@ltu.edu

Master's Program

- Business Administration (MBA)

Graduate Certificate

- Nonprofit Management and Leadership

Michigan State University

Contact: L. Andrew Norman
2200 Dendrinos Dr., Suite 203
(231) 995-1719 (231) 995-2183 fax
normanl@msu.edu

Program / Certificate

- Applied Plant Science (NMC AAS/ ASA Degree and MSU Certificate)
 - Commercial Horticulture Operations
 - Commercial Turfgrass Operations
 - Landscape Horticulture
 - Viticulture

Spring Arbor University

Contact: David Wilson
2200 Dendrinos Dr., Suite 200
(231) 995-1761 or
(800) 968-0011 (x4317)
(231) 995-1763 fax
David.Wilson@arbor.edu

Bachelor's Programs

- Family Life Education
- Organizational Management
- Nursing

Master's Program

- Management

Western Michigan University

Contact: Kim Stevens
2200 Dendrinos Dr., Suite 201
(231) 995-1846, (231) 995-1789 fax
kim.stevens@wmich.edu

Master's Program

- Counselor Education
(Clinical Mental Health & School)

Graduate Certificate Programs

- Alcohol and Drug Abuse (SPADA)
- Holistic Health Care

Extended Educational Services - Community & Continuing Education

Extended Educational Services

www.nmc.edu/ees

(NMC University Center off Cass Road)

2200 Dendrin Drive - North Wing,

Traverse City, MI 49684

(231) 995-1700

(231) 995-1708 fax

ees@nmc.edu

Non-credit courses are held at various campus locations.

EES is the professional development, community and continuing education arm of NMC providing a broad array of learning options. No application is necessary. Each quarterly *Learn for Life* schedule highlights more than 200 courses that cover topics of interest for anyone age 4-100, including:

- Certificate Programs
- College for Kids
- Computer Skills
- Creative Arts
- Culinary
- Fitness and Recreation
- Language and Writing
- LIFE Academy
- Personal Enrichment
- Personal Growth and Wellness
- Renewable Energy
- Small Business/Entrepreneur
- Professional Development

Complete *Learn for Life* course schedules are published four times a year and posted online. Sign up for courses online or by phone, fax, mail or in person.

Professional Development

EES offers a variety of professional development courses including the latest in computer software training, small business development, customer service, real estate, human resources, grant writing, and managerial topics. Continuing Education Units (CEUs) can be awarded for many courses meeting requirements for professional development.

College For Kids

Enrichment courses for preschool through high school students are offered year round. An extensive summer program provides a wide range of learning options including art, music, drama, science, the environment, technology, outdoor adventure, aviation, cooking, and writing. Week-long classes are offered throughout the summer. Partial scholarships are available based on financial need.

LIFE Academy - Learning Is Forever

The LIFE Academy is a program of learning opportunities created with and for adults age 50+ consisting of mostly daytime, short-term courses. Learners choose from more than 40 options each term across a broad spectrum of interests. Special events include monthly LIFE Lunch Forums and Campus Days in the spring and fall.

Adults age 62+ who live or own property in Grand Traverse County are eligible for a 20% reduction in tuition for both continuing education and academic credit courses. EES also offers professional development in the field of aging.

Online Courses

Over 200 noncredit online courses are offered each term. Courses include instruction on web page design, computer software programs, test preparation, business topics, writing skills, and enrichment topics.

Certificate Programs

Continuing Education Certificate programs include:

- Certified Nursing Assistant
- Computer Skills
- Small Business/Entrepreneur
- Naturalist Program

Complete descriptions are available.

Scholarships

A variety of partial scholarships are available.

Special Events

- Campus Days (Spring and Fall)
- Festival of Foods
- Film Production Assistant Boot Camp
- International Affairs Forums
- Monthly LIFE Lunch Forums
- Conferences
- Workshops/Seminars
- Writers Conference





Student Services

Student Services

Admissions

www.nmc.edu/admissions

Tanis Building, (231) 995-1054

Northwestern Michigan College is an open door comprehensive community college, which means we admit most students who have graduated from high school or successfully completed the GED with potential to succeed in higher education.

Once a student is admitted to NMC, he/she must complete an assessment of writing, reading and math skills to determine his/her ability to benefit from courses that NMC offers. If it is determined that NMC does not offer courses appropriate for the student, a referral to an agency or other alternative will be made with the assistance of a counselor or advisor.

Students interested in completing a GED may do so through the Traverse Bay Area Intermediate School District. To register or obtain more detailed information on how to get started, contact Michigan Works Adult Education at (231) 922-7826.

How to Apply

When you decide to apply for admission at NMC, your first step is to file an Application for Admission. Application forms are available from the NMC Office of Admissions, at high schools, inside the back cover of this catalog, or online at www.nmc.edu/admissions. Application fee is \$20.

While American College Test (ACT) or Scholastic Aptitude Test (SAT) scores are not required for admission to NMC, you may send your ACT scores for reviewing your academic achievements and educational plans. In addition, if your ACT score is 19 or above in reading and 18 or above in English, you qualify for ENG 111 English Composition and are not required to take those portions of the basic skills assessment test (COMPASS) before starting at NMC. If you have a 19* or higher on the ACT math test, you may be able to enroll in MTH 111/11. (*High school dual enrolled students need a 24 or higher on their ACT math test to enroll in NMC math courses or may take the COMPASS math test.) An ACT math score of 24 or higher will place a student in MTH 106, MTH 121 or MTH 131. If you completed AP tests, please have the scores sent to NMC.

Types of Admission

• REGULAR ADMISSION

- **Degree or Certificate Admission-** For applicants who intend to complete an associate degree, to transfer or to complete a certificate program in an occupational specialty.
- **Non-Degree Admission-** For applicants who intend to pursue course work in an area of interest to gain skills or for enjoyment.

• HOME SCHOOL

Included under regular admission. See page 27 for details.

• PROVISIONAL ADMISSION

If you have below a 2.0 average on your high school transcript, you may be admitted to NMC on a provisional basis. To help you meet your educational goals, you must seek academic advising and enrolled in a reduced credit load.

• DUAL-ENROLLED ADMISSION

For applicants who are enrolled in classes at NMC while still in high school. See page 27 for more details.

• GUEST ADMISSION

Applicants currently attending another Michigan college/university may apply as a guest student at NMC. Guest students must submit a completed **Michigan Uniform Undergraduate Guest Application**. This application must be submitted for each semester a student plans to attend for a maximum of two semesters. After two semesters, a student must complete an NMC application for admission if they wish to continue to be enrolled at NMC.

Application Assistance

Need help applying? Find it at both the Office of Admissions (contact information above or e-mail admissions@nmc.edu) and the Welcome Center in the lobby of the Health & Science Building (231) 995-1135.

HIGH SCHOOL AND/OR COLLEGE TRANSCRIPT REQUIREMENTS

If you are a Degree/Certificate or a Non-Degree/Certificate applicant, send your transcripts according to these guidelines:

- **If you are under 21 and have not attended a college or technical school since high school**, request that an "official" transcript be forwarded to NMC's Office of Admissions from your high school.
- **If you are under 21 and have earned fewer than 20 college* level credits**, request "official" transcripts be forwarded to NMC's Office of Admissions from both your high school and the college or technical schools you have attended.
- **If you are over 21**, you do not need to submit a high school transcript unless you are seeking admission to a limited enrollment program such as Health Occupations or the Maritime Academy.
- **If you are over 21 and have attended a college or technical school**, you do not need to submit a high school transcript. An official transcript of accredited college work is only required if you are:
 - Seeking admission to a limited enrollment program such as Health Occupations or the Maritime Academy
 - Wishing to have previous college work evaluated for credit at NMC
 - Applying for college financial aid or
 - Applying for Veterans Benefits.

TRANSFERRING CREDITS FROM OTHER COLLEGES

If you have credits from another college or university, request the registrar of that school to send an official transcript to the NMC Admissions Office. Your credits will be evaluated and the transfer credit evaluation mailed to your permanent address. You will receive credit from institutions recognized by Regional Institutional Accrediting Organizations for those college-level courses in which you received a 2.0/C or higher grade and which are similar to courses at NMC. The total number of credits will be recorded on your transcript. In certain circumstances, when applying to specific occupational programs, only the classes that apply to those programs may be evaluated. Only credits transfer, grades do not.

If you attended a foreign institution, your transcript must be evaluated by an evaluation service for comparison to regionally accredited institutions in the United States. Accrediting services recommended by NMC are Educational Credential Evaluators, Inc. (www.ece.org) or World Education Services (www.wes.org)

HOME-SCHOOLED APPLICANTS

NMC welcomes home school and non-traditional school applications. Home school graduates will be admitted under Regular Admission. NMC requires home school transcripts. Home school students who have not graduated will be admitted as a dual-enrolled admission and must reapply each semester until completion of high school graduation. Written consent from the student's parent/guardian and approval from the home school provider is required for current home school students.

DUAL ENROLLED APPLICANTS

Dual enrollment at NMC is selective. High school students must qualify for dual enrollment and admission to NMC. To be considered for academic classes (i.e. Government, history, English, math, science, psychology, business, geography etc.) prospective dual enrolled students must either:

1. Submit ACT reading score of 19 or higher and writing score of 18 or higher to NMC's Admissions Office for review, or
2. If you also want to take a college class that requires proficiency in math, you will need an ACT score of at least 21 or better on the math placement test. This may qualify you for Intermediate Algebra or higher. All other math courses require COMPASS testing.
3. Take NMC's COMPASS Placement Test. For information on testing, please call (231) 995-2134.

After test scores are on file, students will receive an eligibility letter from NMC's Admissions Office showing what classes they may be able to take and outlining additional steps in the dual enrollment process.

Eligible dual enrolled students who would like to take academic classes must do the following:

1. Complete the dual enrollment application with your high school counselor and obtain all required signatures.
2. Send or bring the application to NMC's Admissions Office with the non-refundable application fee.
3. Attend orientation. At this time students will register for classes. (First time dual enrollment students must attend an orientation.)
4. Pay for your classes or present paperwork from your school if they are covering the tuition.

There are no eligibility or test score requirement for students taking aviation, studio art, studio music, physical education, or technical courses approved by the instructor. These students simply fill out and submit the dual enrollment application with all signatures and the non-refundable application fee to NMC's Admissions Office. Once the application has been processed, students may register.

ADMISSION TO LIMITED ENROLLMENT PROGRAMS

Health Occupations have special admissions requirements as outlined under the specific program in this catalog.

The Great Lakes Maritime Academy (GLMA) also has special admission requirements. GLMA application packets are available online at www.nmc.edu/maritime, or from the Office of Admissions at the Academy, Great Lakes Campus, 715 E. Front Street, (231) 995-1200.

RIGHT TO APPEAL

In the event you are denied admission to an occupational program that has special admission requirements, you may appeal such matters to the Director of Admissions and subsequently to an admissions review committee for consideration.

ADMISSION OF OUT-OF-STATE STUDENTS

Northwestern Michigan College welcomes out-of-state student admission applications. If you plan on visiting the Traverse City area please phone our Welcome Center at (231) 995-1135 for information regarding a campus tour.



NMC.
Find it here.

ADMISSION OF INTERNATIONAL STUDENTS

Northwestern Michigan College is authorized under federal law to enroll non-immigrant students. We welcome applicants from around the world. Potential students will be asked to demonstrate English language proficiency either through testing or other indicators. A minimum score of 550 (paper) or 213 (computer) or 79 (internet based) on the TOEFL test is required. You will also need the equivalent of a U.S. high school education with an approximate grade point average of 2.5. Since the college does not have financial aid available for international students, you must clearly demonstrate your ability to finance your education in the U.S. by completing a financial statement. All international students are required to carry an approved medical insurance program to cover major medical expenses. If you are not covered by medical insurance, you will be required to enroll in the student insurance program available through Northwestern Michigan College, at a cost of approximately \$750 per year. Deadline for Fall admission is July 15; deadline for Spring admission is November 15. Complete details online at www.nmc.edu/admissions or call (231) 995-1034.

INTERNATIONAL STUDENT SERVICES

NMC has two International Student Advisors who can be reached through the Admissions Office at (231) 935-1054. International students are encouraged to use these services to support their academic and social success. The following services are provided:

- With advance notice, an NMC representative will arrange for pick up from the Cherry Capital Airport for students arriving for the first time.
- Approval for on-campus employment
- Community and cultural orientation
- International Club activities
- Liaison to other college support services
- Liaison to community groups

Residency

Your tuition rate is determined by your residency during the admissions process. There are four classifications:

1. **In-District:** Legal resident of Grand Traverse County
2. **In-State:** Legal resident of Michigan outside of Grand Traverse County
3. **Out-of-State:** Legal resident of a state other than Michigan
4. **International:** Legal resident of a country other than the U.S.

Grand Traverse County property owners and their dependents are considered in-district and pay lower tuition because they also pay county property taxes which support NMC. (Exception: Maritime classes are based on credit hours only.) To change your residency, you must obtain a petition online or from the Records Office. In-state or Grand Traverse County **property owners** must provide a copy of the current property tax receipt. **Non-property owners** must reside at a permanent address in Michigan/Grand Traverse County for a minimum of six consecutive months taking 5 or fewer credits. In addition to the petition, the student must submit copies of the supporting documentation to the Records Office at least one week prior to the start of the main session. An authorized change in residency status for tuition assessment is not retro-active to any previous semester of enrollment at NMC.

Students under 25 years of age, whether or not they are claimed as dependents on their parents' previous year income tax return, should check for additional special requirements. Completing an "Information Change Form" will not change your residency unless you are leaving Grand Traverse County. If you have questions, contact the Records Office (231) 995-1049.

Legal residence for students is verified on a continuing basis. NMC sends letters to enrolled students each semester (Fall, Spring, and Summer) with a "Forward and Address Correction Requested" label on the envelope. When discrepancies are found, a change is made in the student's address. Each semester all addresses and residency codes are compared/verified for accuracy and updated where appropriate.

NMC.

Find it here.



Advising Center

www.nmc.edu/advising

Osterlin Building, (231) 995-1040

Confused about your academic and career direction? The Advising Center staff can help you clarify your academic and career path and help you develop your pathway to success.

Academic Advising

Academic advising at NMC is a shared responsibility between students and advisors. The Advising Center staff offers a full complement of advising services for students. First-year students will meet with an advisor during orientation, and are also required to meet with an academic advisor again during their first semester to review career options, transfer possibilities, and course selections. Students are encouraged to stay connected to an advisor throughout their enrollment at NMC to ensure they are on the right track.

Career Advising

Consider one or more of these tools, available in the Advising Center, as you make academic and career decisions:

- Career Coach: An online program providing employment data, trends and projections for Michigan.
- Myers-Briggs Type Indicator to determine which careers most suit your personality.
- Online, interactive career exploration resources available.
- Strong Interest Inventory allows you to compare your interests to people already working in different careers.
- Skills and values card sorts which allows you to identify what you like to do and what's important to you.
- Enroll in Career Exploration and Planning (PSY 100), a one-credit elective course, that includes all of the above and more.

Transfer Advising

An extensive collection of online transfer guides is available to students planning to transfer to four-year universities in Michigan. Students who follow transfer guides and team up with one of our advisors throughout their stay at NMC will have good information for a smooth transfer. If a transfer guide doesn't exist for a specific school or program, advising staff will assist in selecting appropriate courses. NMC also recommends that students personally contact the transfer institution they are considering for additional information.

Employability Skills

NMC's Advising Center can help you gain necessary job-search skills for locating part- or full-time work. We have resources to assist you in writing your resume and cover letters, opportunities to practice for an interview and acquire skills on how to conduct your employment search.

Bookstore

www.nmc.edu/bookstore

West Hall, lower level (231) 995-1285

New and used textbooks, study aids, art/drafting supplies, uniforms for special programs, computer software, NMC clothing and logo gifts, and snacks and beverages.

Refund Policy: Refunds will be given through the second week of the semester only. You are entitled to a full refund if you drop a class or withdraw from the college or your class has been cancelled. To receive a refund, you must provide the original cash register/financial aid receipt.

Cashier Services

www.nmc.edu/cashier

Tanis Building, (231) 995-1570

Pay tuition and fees, get parking permits.
See Tuition, Billing and Fees.

Center for Learning

www.nmc.edu/centerforlearning

Osterlin Building, (231) 995-2134

The Center for Learning provides a variety of academic support services using current technology and a professional staff available 70 hours per week.

ACADEMIC SKILLS IMPROVEMENT

- PLATO skill-building in reading, writing, math, and other academic areas
- Textbook software support
- Personal skill development, including study skills and time management

COMPUTER APPLICATIONS

- Specialty software such as MS Office Applications, Photoshop, nutrition analysis, dental assisting
- Multiple word processing programs
- Career and scholarship exploration software

TEST PROCTORING

- Many faculty offer quizzes and exams here.
Please bring photo ID.

Class Cancellations/ College Closure

Daily Class Cancellations

Posted online at www.nmc.edu/class-cancellations and on campus video monitors, Monday-Friday. For weekend class cancellations, students should call their instructor's voice mail.

Delayed Openings or Closures

College-wide delayed openings or closures will be reported to area radio and television stations, via email to all students, faculty and staff, and via text message to those who are subscribed to receive alerts on their cell phones. It will also be posted online at www.nmc.edu and recorded: (231) 995-1100.

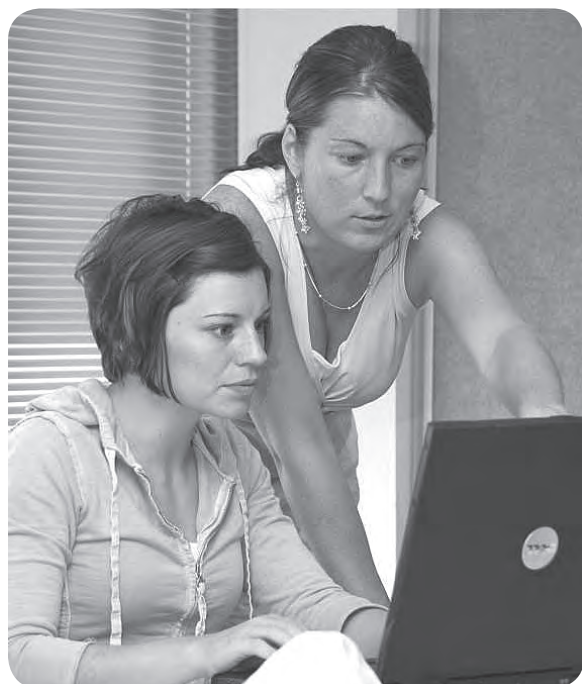
COMPASS Placement Testing

www.nmc.edu/compass

Osterlin Building, (231) 995-2134

Placement assessment is required of new students and will be used to place you into appropriate courses. COMPASS is the computerized test NMC uses to determine placement into your first classes.

The test has three sections: reading for comprehension, writing skills and math. It is not timed, and takes the average student about two hours to complete. ACT scores of 19 or higher in both math and reading and a 18 or higher in English may be used for course placement.



Why COMPASS?

Your success matters to us. You'll be more successful at NMC and beyond when you start in the right classes. Your COMPASS test score will determine where you start in math and English at NMC. More than 57 percent of new NMC students start in a preparatory math or English class.

PLATO is an online resource that provides excellent review for COMPASS. For login information, please contact the Center for Learning at (231) 995-2134.

COMPASS testing is available daily at the Center for Learning in the Osterlin Building. You will need to bring photo identification, your NMC ID, and a calculator. Visit www.act.org/compass for sample questions.

A COMPASS resource manual is available for check-out from the Osterlin Library. In addition to the sample questions listed at the site above, the website www.testprepreview.com is suggested for review. Select COMPASS test on this site.

Computer Labs

Equipment and Locations

Dell computers running Microsoft Windows 7 and the Microsoft Office Suite:

- Beckett Building, Rm. 204, (231) 995-1068
- Center for Learning, Osterlin Building, (231) 995-2134
- Library Research Area, Osterlin Building, (231) 995-1540
- Parsons-Stulen, Rm. 206, (231) 995-2000
- Zonta Library, University Center, (231) 995-1749

Apple Macintosh computers running MAC OS X and the Microsoft Office Suite:

- Center for Learning, Osterlin Building, (231) 995-2134
- Beckett Building, Room 214, (231) 995-1564

Technology Support Services

Computer Services, Information, and Support

Lower Level Tanis Building, Area 51

Help Desk: (231) 995-3020

Enter a helpdesk ticket online at helpdesk.nmc.edu

Disability Support Services

Osterlin building, (231) 995-1929

Support Services are available to students with documented disabilities and include classroom accommodations such as note-takers, books on CD, adaptive equipment and testing modifications (extended time and quiet space).

In addition, NMC offers a support group for students with disabilities. For additional information, please call (231) 995-1929, 995-1139, 995-1038 (TTY).

Financial Aid

www.nmc.edu/financial-aid

Tanis Building, Room 142 (231) 995-1035

The following information is subject to change at anytime, without notice, due to changes in federal or state regulations or institutional policies. Please visit www.nmc.edu/financial-aid for the most up-to-date information.

Financial Aid Philosophy

Paying for college is a shared responsibility among the student, the family, and NMC's Financial Aid office. Scholarships, grants, employment, and loans are available. Any or all of these may be combined in a "financial aid package" to help with educational costs. Northwestern Michigan College is committed to working with students to acquire the maximum financial aid for which they are eligible.

Financial Aid Consideration

To be considered for the maximum amount of aid possible, all students should:

1. Complete an NMC Application for Admission, and
2. Submit high school, General Education Development (GED) and college transcripts.
3. Complete the FAFSA (Free Application for Federal Student Aid) as soon as possible after January 1 of the year in which you are seeking aid. Applications received by April 1 will receive priority consideration.

Available aid includes:

FEDERAL (TITLE IV)

1. Pell Grants
2. Supplemental Educational Opportunity Grants (FSEOG)
3. Work Study Program (FWS)
4. Direct Loan (DL) www.studentloans.gov
 - Subsidized and Unsubsidized
 - Parent Loan (PLUS)
5. Iraq and Afghanistan Service Grant (IASG)

For more information about Title IV financial aid programs visit www.studentaid.ed.gov

STATE

1. Michigan Competitive Scholarship
2. Michigan Tuition Incentive Program (TIP)
3. Children of Veterans Tuition Grant

For more information about state of Michigan student aid, visit www.michigan.gov/osg

INSTITUTIONAL/FOUNDATION

1. Scholarships

OTHER

1. Alternative Loans

General Eligibility Requirements for Federal Aid

To be eligible to receive federal student aid, a student must:

- Be a U.S. citizen or eligible non-citizen
- Have a valid Social Security number
- Comply with Selective Service registration, if required (see www.sss.gov for more information)
- Have a high school diploma or a General Education Development (GED) certificate
- Be enrolled or accepted for enrollment as a regular student working toward a degree or certificate in an eligible program
- Not owe a refund on a federal grant or be in default on a federal student loan
- Have financial need (except for unsubsidized Direct Loan and Parent PLUS Loans)
- Not have a drug conviction for an offense that occurred while you were receiving federal student aid
- Be making satisfactory academic progress

Applying for Federal Aid

Individuals who plan to apply for federal aid must complete the Free Application for Federal Student Aid (FAFSA) and are encouraged to apply online at www.fafsa.gov. It is advisable to submit the FAFSA as soon as possible after January 1 of each year to be eligible for NMC's priority consideration on April 1.

The Financial Aid Office will review the FAFSA results received directly from the federal processor and follow federal regulations in determining eligibility and awarding federal aid. Your assistance in forwarding all requested information in a timely manner will enable financial aid staff to give you priority consideration for financial aid.

Students will be advised in writing concerning eligibility for federal aid. (If your financial situation or your family's financial situation has recently changed for the worse because of death, separation or divorce, or loss of job or benefits, you should contact the Financial Aid Office.) Average aid processing time is six weeks (may be longer at the start of the semester).

Students need to access their NMC Self-Service account (www.nmc.edu/selfservice) to accept their financial aid. This includes answering the Title IV Authorization question. Federal financial aid will not disburse without accessing Self Service or completing the required forms in the Financial Aid Office.

Northwestern Michigan College does not participate in the federal Perkins loan program or the Teacher Education Assistance for College and Higher Education (TEACH) grant.

For complete information on federal aid programs visit www.studentaid.ed.gov.

Applying for Institutional/Foundation Aid

Northwestern Michigan College provides a large number of scholarships for students. A list beginning on page 35 summarizes the requirements. Students are encouraged to go online for the most updated information.

Individuals who wish to apply must meet all deadlines and requirements including satisfactory academic progress as defined in the NMC Satisfactory Academic Progress Policies for Financial Aid.

Institutional grants and scholarships have a priority date of April 1. Completed applications received after April 1 will be considered on a "first-come, first-served" basis.

Note: *As most NMC scholarships are need-based, students are encouraged to complete the FAFSA.*

NMC scholarship and grant eligibility criteria are primarily determined by the donor and/or NMC scholarship committee and based on financial need, scholastic ability, and/or other specific stipulations. You will be notified only if you have been awarded a scholarship.

How Aid is Paid

Students receiving any type of financial assistance (federal or institutional) will have their student accounts credited for one-half of the award at the beginning of each semester for which they are eligible, unless otherwise specified by the donor. Grant and scholarship funds from all sources credit first to tuition and fees, unless the specific aid is targeted to other educational costs.

Generally, financial aid funds will be credited to a student's account based on the number of credit hours in which the student is enrolled on the census (freeze aid) date. After the census date, credit balances are paid within 14 days after the credit balance occurs. Please be aware that your financial aid award could change based on credit hour load at the time aid is paid. Students unsure of whether their change in credit hours will affect their financial aid should check with the Financial Aid office prior to dropping classes.

Federal Work-Study/Institutional Employment payments are paid bi-weekly directly to the student.

Enrollment Status

With the exception of Pell grants, a student must enroll for six (6) or more credit hours per semester to receive federal financial assistance.

Change Of Majors

Credit hours accumulated under a previous major(s) at NMC or other postsecondary institution(s) shall be counted in the maximum number of hours allowed for aid eligibility for the currently-sought degree or certificate. Extension of financial aid eligibility may be approved by the NMC Financial Aid committee if the student submits a NMC Petition for Extension to the committee regarding a change in major. Students will be allowed 3 changes in their major prior to filing a Petition for Extension unless they are nearing the 150 percent

completion timeframe. (See Satisfactory Academic Progress policy for further information on the 150 percent rule.)

Work Study

The student's primary purpose for being at NMC must be to further his or her education. Student employees are eligible to work 20 hours per week during the semester and 40 hours per week during break. Student employees must be enrolled at least half-time (6 credits Fall/Spring and 3 credits Summer) throughout each semester and be making satisfactory academic progress. Any student employee who is no longer enrolled at least half time at NMC must be terminated from employment.

Students seeking employment on campus should file for financial aid using the Free Application for Federal Student Aid (FAFSA) and apply for available positions at NMC online at jobs.nmc.edu.

Transfer Students

Students who transfer to NMC from other postsecondary institutions shall be eligible for federal aid in accordance with established NMC guidelines. Hours transferred from any prior institution(s) will be counted in the maximum number of hours allowed for aid eligibility for the currently-sought degree or certificate. Prior student loan accumulation may affect a student's overall loan eligibility at NMC.

Special Note:

If you are transferring to NMC between the fall and spring semesters, please be aware that financial aid does not automatically transfer from one school to another. Contact the Financial Aid office as soon as you have made the decision to transfer so we can assist you with the transfer process.



Satisfactory Academic Progress Requirements

INTRODUCTION

The Education Amendments of 1987 require that a student must be making “satisfactory progress” in his/her course of study to be eligible for aid. In order to satisfy this requirement and prevent abuse of the intentions of the federal aid programs, satisfactory progress guidelines must be adhered to by students who receive any type of Title IV federal aid (Pell, FSEOG, FWS, Direct Stafford Loan, Direct Parent (PLUS) Loan, IASG).

To be eligible for federally-funded financial aid programs and most institutional awards at NMC, all students must meet the following qualitative and quantitative requirements for satisfactory academic progress (SAP).

These standards are for all students applying for assistance for any federal financial aid program administered by the NMC Financial Aid Office. Academic progress requirements for scholarships are defined by the respective donors and maintained in the NMC Financial Aid or NMC Institutional Advancement Office.

FREQUENCY AND INTERVAL OF REVIEW

Satisfactory academic progress will be reviewed prior to the awarding of any federal financial aid. It will also be reviewed and monitored at the end of fall, spring and summer semesters, and prior to the disbursement of aid for the following semester.

ESTABLISHING INITIAL ELIGIBILITY

A student's past academic transcripts will be reviewed according to the following guidelines:

- Students who have never attended NMC will be considered in good standing with regard to minimum semester credits completed and minimum GPA requirements.
- Students who have previously attended NMC will have their past academic transcripts reviewed regardless of whether financial aid was received for previous attendance.
- Transfer credits from other institutions that apply to your current degree program will be considered in determining eligibility under the maximum time frame criteria.

MAINTAINING QUALITATIVE AND QUANTITATIVE ELIGIBILITY

- Minimum grade point average (GPA) requirements (Qualitative): All financial aid students must have a minimum 2.0 semester GPA to be eligible for financial aid for the following semester; and
- Minimum completion factor required (Quantitative): All financial aid students must complete a minimum of 67% of the credits for which they are registered on the census (freeze aid) date. When calculating completion the following designations will be considered as non completion of the class: Incompletes (I), audits (AU), withdrawals (WP/ WF), failures-to-attend (FA), unsatisfactory (U), not-qualified (NQ), in-progress (IP), zeros (0.0) and repeats;

MAXIMUM QUANTITATIVE MEASURE

Only those courses that apply to the program will be considered in the quantitative measure. Once a student has obtained the total hours required for their program, and prior to reaching the 150% maximum of credit hours, students will be required to complete a NMC Petition for Extension. These forms are available on www.nmc.edu/financial-aid and in the financial aid office.

Credit hours accumulated under a previous major(s) at NMC or other postsecondary institution(s) shall be counted in the maximum number of hours allowed for aid eligibility if they apply to the currently sought degree or certificate. All of these credit hours are counted regardless if the student did or did not receive financial aid.

Extension of financial aid eligibility may be approved by the NMC Financial Aid Committee if the student submits a NMC Petition for Extension to the Financial Aid Committee regarding a change in major. Students will be allowed 3 changes in their major prior to filing a Petition for Extension unless they are nearing the 150% completion timeframe.

If a student has already received a degree or certificate, or is changing majors, she/he will need to file a Petition for Extension of Federal Financial Aid. Only those courses that apply to the new program will be considered in the quantitative measure.

Students are allowed a maximum of one appeal for extension of time per major/program.

Program Type	Total Credit Hours Required	Maximum Attempted Hours Allowed for Aid Eligibility
Associate in Applied Science (AAS)	64	96
Associate Degree in Nursing (ADN)	72	108
Associate in General Studies (AGS)	64	96
Associate in Science and Arts (ASA)	64	96
Certificate of Achievement Programs	16-63	24-95

OTHER FACTORS

a. Audits

Classes taken for audit will not be considered when determining semester award amounts or minimum semester credits completed. Classes taken for audit will not be considered as attempted credits toward the maximum time frame for completion.

b. Remedial/Developmental Courses

After a student has attempted 30 hours of remedial/developmental credit hours, he/she cannot receive financial aid for remedial/developmental credit hours. From that point on, remedial/developmental credit hours will count in his/her attempted hours but not in enrollment status or cost of attendance for financial aid purposes.

WARNING AND SUSPENSION

Financial aid warning and suspension apply only to a student's status for purposes of financial aid eligibility at NMC. This does not become part of the student's permanent record and

is not transferable to other institutions. Please be aware, your financial aid status may differ from your academic status.

a. Warning

Students who do not complete the minimum number of credits or who do not possess a satisfactory grade point average will be placed on a warning status for their next semester or term of enrollment. A student remains eligible to receive financial aid while on a warning status. If both the minimum number of credits and GPA requirement are met at the end of the warning, the student will be removed from warning status.

b. Suspension

If a student does not meet the requirements for maintaining eligibility at the end of the warning semester, eligibility for federal financial aid programs will be suspended. Students who have reached or exceed the maximum time frame for completion will be placed on immediate financial aid suspension.

REINSTATING AID ELIGIBILITY

An appeals process is available to students who lose financial aid eligibility based on failure to meet minimum GPA requirements or exceeding the 150 percent timeframe.

If the appeal is approved the student will be notified in writing and reinstated on probationary status.

A student may also regain eligibility for federal student aid if they successfully complete 6 credits at NMC in one semester with at least 2.0 semester GPA at their own expense.

It is the student's responsibility to request that the Financial Aid Office re-evaluate their academic record to determine if aid eligibility has been re-established once suspended from federal financial aid.

WITHDRAWALS AND RETURN OF TITLE IV AID

According to federal regulations, colleges must determine the amount of federal student financial assistance (SFA) a student earns if he or she completely withdraws, either officially or unofficially, from all classes. The date of a student's withdrawal from NMC will generally be the date the student officially withdraws from all their classes.

However, the College may use an earlier last documented date of attendance at an academically related activity if this date more accurately reflects the student's withdrawal date than the date the student begins the school's withdrawal process or notified the school of his or her intent to withdraw. When a student fails to officially withdraw from NMC, the withdrawal date will be assumed to be the mid-point of the semester or the last date of documented activity.

The amount of assistance that the student earned is determined on a prorated basis. That is, if the student completed 30 percent of the payment period, the student earned 30 percent of the assistance he/she was originally scheduled to receive. Once the student has completed more than 61 percent of the payment period, he/she is considered to have earned 100% of his/her federal assistance.

If NMC is required to repay any portion of a federal education loan, the student or parent borrower is responsible for repaying the funds to NMC. The student or parent borrower is responsible for the remainder of the loan in accordance with the terms of the Master Promissory Note.

If the student is responsible for returning grant funds, the student must make arrangements with NMC or the Department of Education to return the funds. Any amount that the student has to return is considered a grant overpayment. If a student withdraws, receives all 0.00 or a combination of both in any semester, the Financial Aid Office is required to determine a last date of attendance and a refund calculation may apply.

The last date of attendance for that semester will be reported to the Department of Education and subsequent disbursements may be cancelled. Written examples of return of funds calculations and additional information are available in the Financial Aid Office upon request.

Loans

Students must have a FAFSA on file in order to receive any type of educational loan.

SHORT-TERM LOANS

Consortium Students - NMC may provide a short-term loan to students who have completed a consortium agreement with certain colleges. The short-term loan can help cover a portion of their on-campus expenses (tuition, fees, and required books/supplies) provided they have remaining funding from their home institution. This loan is interest free provided it is repaid by the due date (usually within 30-60 days).

LONG-TERM LOANS

Students must be enrolled in at least six credits per semester for Federal Loan eligibility.

Federal Direct Stafford Loan Program

www.studentloans.gov

- Subsidized
- Unsubsidized

Federal Direct Parent Loan for Undergraduate Students (PLUS)

www.studentloans.gov

Parent(s) of a dependent student (who has filed a FAFSA) may borrow under this program for their child's educational expenses.

Alternative loans

Alternative loans are credit score-based. Students should use any Federal Direct Loan funds they are offered before applying for an alternative loan. Students should research many lenders to find out interest rates, payment and enrollment requirements before choosing a lender. NMC cannot recommend the best lender for students to select. Students MUST notify the NMC Financial Aid Office that they have applied for an Alternative Loan and the lender's identity.

Scholarships & Grants

Pages 35-41 summarize the types of scholarships and grants available at NMC, including government-sponsored, institutional, and privately donated. The first step to a scholarship is filing the Free Application for Federal Student Aid, available at www.fafsa.gov or in the Financial Aid Office (Tanis 142). The FAFSA is used to determine financial need. Many NMC scholarships require no additional applications.

Since criteria and availability of funds are subject to change, visit www.nmc.edu/scholarships for the most updated Scholarship and Grant information.

GOVERNMENT SPONSORED

Federal Pell Grant - Unlike a loan, Pell Grants do not have to be repaid. Pell grants are awarded usually only to undergraduate students who have not earned a bachelor's or a professional degree. (In some cases, however, a student enrolled in a post-baccalaureate teacher certification program might receive a Pell grant.) Pell grants are considered a foundation of federal financial aid, to which aid from other federal and nonfederal sources might be added.

Students will be allowed to receive the Pell grant for up to 12 full time semesters or the equivalent. Requires FAFSA.

Federal Supplemental Educational Opportunity Grant - For undergraduates with exceptional financial need. Pell grant recipients with the lowest EFCs will be the first to get FSEOGs. Like Pell grants, FSEOGs don't have to be paid back.

U.S. Maritime Administration Student Incentive Payments of \$4,000 per year for four years are available to a select number of qualifying cadets in each entering class at the Great Lakes Maritime Academy. Details on the program are available through the GLMA Department of Naval Science.

Michigan Competitive Scholarship - Provides scholarships up to \$1,300 per year based on ACT scores and financial need. This award is tuition/fee restricted. Requires FAFSA.

Michigan Native American Tuition Waiver - May cover tuition for certified North American Indians (1/4 blood) who enroll in a public college or university and are a MI resident. Contact your tribal association for additional information.

Tuition Incentive Program (TIP) - Student eligibility is determined before high school graduation. This program will pay up to 24 semester credits (will not cover contact hours) per academic year of current in-district resident tuition rates up to a maximum of 80 semester credits or upon completion of an Associate degree, whichever comes first. Students must initiate benefits for enrollment within four years of high school graduation or GED completion.

INSTITUTIONAL SCHOLARSHIPS

Academic Area Scholarships - Provide up to \$2,000 per academic year to second-year students. Application and selection are made through each academic area during Spring Semester for an award for the next academic year. If a Divisional scholar is eligible for other tuition-restricted awards (i.e. TIP, Michigan Competitive Scholarship, Native American Tuition Waiver, etc.) those awards will be applied first. Any remaining balance due for tuition and fees or required books and supplies may be covered by the Divisional Scholarship funds. Details of the application process and eligibility requirements are available in each academic area office.

Adopt-a-Student Grants - Awarded to students enrolled for six or more credit hours who are residents of Antrim, Benzie, Grand Traverse, Kalkaska, Leelanau, or Wexford County. The amounts of the grants vary. Adopt-a-Student Grants are awarded based on financial need and require a cumulative minimum 2.5 grade point average. If a recipient is eligible for other restricted awards (TIP, Michigan Competitive Scholarship, Native American Tuition Waiver, etc.), those awards will be applied first. Scholarship funds may be used for remaining tuition, fees, required books and supplies.

Commitment Scholarships - Awarded to students from school districts in NMC's service area selected in eighth grade by their principals and counselors. These academically promising students with financial need are encouraged to complete high school and attend NMC with scholarship support. Recipients must commit to satisfactory academic progress, effort and citizenship. Upon high school graduation, students who have met all requirements receive scholarships. In order to receive this scholarship the student must apply for financial aid using the FAFSA. If a Commitment award student is eligible for other gift aid, those awards will be applied first toward the student's tuition and fees. Commitment scholarships are for tuition and fees only.

Great Lakes Maritime Revolving Loan Fund - Cadets who are officially enrolled in the Academy can borrow funds to cover a portion of tuition/fees, books and required supplies, on/off-campus room/board or transportation costs. A written recommendation is required from a member of the GLMA Scholarship Committee and repayment is required within 90 days or the end of that respective semester, whichever is first.

Honors Scholarships - Awarded by the Honors Scholarship Committee. Eight scholarships of \$2,000 each are awarded to full-time students (minimum of 12 credit hours) and four scholarships of \$1,000 each are awarded to part-time students (minimum of six credit hours). Candidates must have earned a minimum 20 semester credit hours at NMC with at least a 3.5 grade point average and three credit hours in the Honors Program. For application process details and eligibility requirements: www.nmc.edu/honors or (231) 995-1041.

Occupational Programs Grants - A limited number of awards for students enrolled in approved occupational programs and who demonstrate financial need. It may be used toward the cost of tuition, fees, required books/supplies, transportation and/or daycare.

NMC.
Find it here.

Presidential Scholarships - Awarded each spring to academically superior seniors from the NMC service area high schools. A 3.75 GPA is required, along with a recommendation from the school's principal or counselor. The number of scholarships and the funding may vary each year. If a Presidential scholar is eligible for other tuition-restricted awards (i.e. TIP, Michigan Competitive Scholarship, Native American Tuition Waiver, etc.), those awards will be applied first. Presidential scholarship funds may be used for any remaining balance due at NMC for tuition, fees, or required books and supplies. At NMC, Presidential scholars must maintain a 3.25 grade point average as a full-time student (12 or more credits) to remain eligible. Recipients are also required to perform community volunteer service each semester. For applications and more information, contact NMC's Admissions Office.

SGA Child Care Grant - The NMC Student Government Association provides funding to assist with the cost of child care while students are attending class. Apply using separate application available in Financial Aid Office.

NMC SCHOLARSHIPS

You are encouraged to file the Free Application for Federal Student Aid, available at www.fafsa.gov or in the Financial Aid Office (Tanis 142). The FAFSA is used to determine financial need. Many NMC scholarships require no additional applications.

The chart below summarizes scholarship eligibility criteria. New scholarships are added continuously. Both criteria and availability of funds are subject to change. Visit www.nmc.edu/scholarships for the most detailed and updated criteria for all scholarships.

NMC Scholarship Name	Need Based	Min GPA	Min Term Credits	Residency (District = Grand Traverse County & Service Area = GT, Antrim, Benzie, Kalkaska, Leelanau, & Wexford Counties)	Other Criteria Online	Award
General Scholarships						
50th Anniversary	Y	2.50	6.00	Open	Y	Varies
AMICAE	Y		1.00	Open	Y	\$500
Adopt-a-Student	Y	2.50	6.00	Open		Varies
Agosa-Don	Y	2.00	1.00	Open		\$250
Amical		2.50	6.00	Traverse City	Y	\$600
Antrim Adopt-a-Student	Y	2.50	6.00	Antrim County	Y	Varies
Basset-Vivian J Hedden		2.50	1.00	Open	Y	2 - \$750
Baur-Joanne	Y	3.00	6.00	Service Area	Y	Varies
Beckett-James & Dorothy		2.00	6.00	Service Area	Y	Varies
Beers-Julius & Barbara	Y	3.00	6.00	Service Area		Varies
Benson-Chuck & Barb		3.00	6.00	Open	Y	\$500
Benzie Adopt-a-Student	Y	2.50	6.00	Benzie County	Y	Varies
Benzie Women's History Project	Y	2.50	1.00	Service Area	Y	\$500
Boike-Kristine Sue Memorial		3.00		Grand Traverse or Leelanau County	Y	Varies
Bruce-Kalee		3.00	6.00	Service Area	Y	2 - \$500
Byl Family	Y	3.00	12.00	In District		\$1000
Clancy Family Memorial	Y	2.00	12.00	Grand Traverse, Leelanau, or Antrim County	Y	Varies
Class of 51		3.00	12.00	Service Area	Y	\$500
Comden-George C Alumni	Y		6.00	Service Area		2 - \$1000
Comfort Keepers Caregiver	Y		1.00	Open	Y	2 - \$500
Committment				Open	Y	Varies
Cone Drive/Textron		2.50	6.00	Service Area		\$500
Cox-Barbara		2.00	6.00	Service Area	Y	2 - \$500
Cunningham-William Memorial	Y		6.00	Service Area	Y	Varies
Daisy Chain	Y	2.50	6.00	Service Area	Y	Multi-\$600
DeWitt-Jim Facilities		2.00	1.00	Open		Varies
DeYoung-Lyle		3.00	6.00	Service Area	Y	\$1000
Derbyshire-Edgar & Etta				Wexford County, Manton HS Graduate	Y	Varies
Dickinson Upward Bound		3.00	12.00	Service Area	Y	\$500
Drew-Sandra & Gary		2.50	6.00	Leelanau County, Suttons Bay HS Graduate	Y	\$500
Dunn-Monon	Y	2.50	6.00	Service Area		\$500
Elk Rapids Rotary			6.00	Open	Y	Varies
Elks Lodge Endowment	Y	3.00	6.00	Service Area	Y	Varies
Engstrom-Richard Bracken	Y		1.00	Service Area	Y	20 - Varies
Fivenson			6.00	Open	Y	Varies
Furney-Margaret H Memorial			6.00	Open	Y	Varies
Grand Traverse Adopt-a-Student		2.50	6.00	In District		Varies
Glen Lake Women's Club	Y		6.00	Open		Varies
Gore-Cortland K Memorial		2.50	6.00	In District		\$500
Graceland Fruit				Benzie, Grand Traverse, Leelanau, or Manistee County	Y	2 - \$500
Harry L Weitz MD Memorial	Y		6.00	Open	Y	\$500
Hildorf-Bob & Stella	Y	2.50	6.00	Open		\$389
Holland-Walter		3.00	12.00	Open		\$333
Home Builders		2.50	1.00	Service Area		Varies

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General Scholarships continued						
Honors Full-Time Student		3.50	12.00	Open	Y	Varies
Honors Part-Time Student		3.50	6.00	Open	Y	Varies
Hook-Jay & Joan		2.50	6.00	Leelanau County, Leland HS Graduate	Y	2 - \$500
Immanuel Lutheran Church		2.50	6.00	Open	Y	\$500
International Student		2.50	6.00	International	Y	\$500
Jaquish Journalism		2.00		Open		2 - \$500
Jensen-Lena C	Y	2.00	6.00	Open	Y	Varies
John Lewis Veterans for Peace	Y		12.00	Service Area	Y	\$1000
Jones-Jane & Chester	Y	3.00	12.00	Open	Y	2 - \$2000
KKH Student Experience Abroad			6.00	Open	Y	2 - \$500
Kalkaska Adopt-a-Student		2.50	6.00	Kalkaska County	Y	Varies
Khan-Amjad & Durkhanai	Y		6.00	Open		\$700
Kiker-William	Y	2.00		Open		Varies
Learning Resources & Tech St	Y		6.00	Open	Y	Varies
Lee-Leslie	Y	2.50	6.00	Antrim County, Elk Rapids HS Graduate	Y	\$1000
Leelanau Adopt-a-Student		2.50	6.00	Leelanau County	Y	Varies
Lessard-Arlie Mae		2.50	12.00	Antrim County, Bellaire HS Graduate	Y	2 - \$1000
Lord-Mary Lee Zonta	Y			Open	Y	Varies
Malone Antrim County	Y	2.50	1.00	Antrim County preference	Y	3 - \$1000
McCarthy-Jerry Memorial	Y	3.00	1.00	Open	Y	Varies
McPhall-Clare & Luella	Y		6.00	Service Area	Y	\$1000
Mutual Service Stations	Y	3.00	6.00	Open		\$1000
NMC Apartment Resident		2.50	6.00	Open		\$500
NMC Divisional Full-Time Student		3.00	12.00	Open	Y	Varies
NMC Divisional Part-Time Student				Open	Y	Varies
NMC Faculty	Y	3.00	12.00	Open	Y	2 - \$1000
NMC General				Open		Varies
NMC Presidential			12.00	Open		Varies
NMC Student Government Association		3.25	6.00	Open		\$500
Northern Michigan API		3.00	6.00	Open	Y	2 - \$1000
Northwestern Bank - I Can Do That		3.00	12.00	Specific MI County preferences (list online)	Y	\$1000
Norton-John & Jane	Y	3.00	9.00	Open	Y	Varies
Olson-Dr Travis N & Lucile M	Y	2.50	6.00	Grand Traverse or Leelanau County	Y	\$500
Phi Theta Kappa		3.50	1.00	Open	Y	2 - \$500
Pifer-Allen & Marjorie Family	Y			Open		Varies
Potter-William & Mary	Y		1.00	Open	Y	Varies
Quinn-Richard & Lucy	Y		6.00	Service Area	Y	Varies
Rajkovich-Nick			12.00	Open		\$500
Reffitt	Y	2.00	12.00	Antrim County	Y	Varies
Rogers Moynihan-Evelyn		3.00		In District	Y	\$1000
Rotary Club of Traverse City	Y		1.00	Grand Traverse County - dual enrolled TC Public HS's	Y	Varies
Student Govt Assoc Adopt-a-Student	Y	2.50	6.00	Service Area		Varies
Student Govt Assoc Child Care			6.00	Open		Varies
Schafer-George & Helen Memorial		2.50	6.00	Open	Y	\$1200
Service Learning Internships		2.00	1.00	Open	Y	Varies
Siler-Jessie & Oscar	Y	2.00	12.00	Open	Y	2 - \$1000
Slack-D Jerome & Margery C	Y		6.00	Open		Varies
Spenceley-Molly Jean Memorial	Y	3.00	6.00	Service Area	Y	\$500
Stace-Margaret A Memorial	Y		6.00	In District	Y	Varies
State Savings Bank of Frankfort		2.25	6.00	Open	Y	\$500
Stehouwer Family	Y	3.00	6.00	Open		\$1000
Steiger-Richardson	Y	3.00	12.00	Traverse City West or Central HS Graduate	Y	\$1000
Strive-Kalkaska Rotary			6.00	Open		Varies
Support Staff		2.00	6.00	Open		Varies
Traverse City Central Class of 1965	Y		6.00	Traverse City Central HS Graduate	Y	\$1000
Traverse City Exchange Club	Y	3.00	6.00	Service Area	Y	Varies
Traverse City Rotary/Strive			6.00	Open		Varies
Ted Durga Endowed	Y		6.00	Open	Y	\$1000
Thero-James	Y	2.50	6.00	Open	Y	Varies
Thompson Carless	Y	3.00	6.00	Open		Varies
Thompson-Bobby L & Karen J Veterans	Y		6.00	Open	Y	\$1000
Trevino Hart-Elva Diversity	Y	2.50	6.00	Open	Y	Varies
University Center Endowed	Y	3.00	3.00	Open	Y	\$500
Upward Bound Outstanding Student	Y		6.00	Open	Y	\$1000
Voltz-C E Memorial	Y	2.50	6.00	Benzie County	Y	\$500
Votruba Family		3.00	1.00	Service Area	Y	Varies

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General Scholarships continued

Walker-Nellie A	Y	2.00	12.00	Open	Y	Varies
Walton Junction Sportsman Club	Y	2.50	6.00	Kingsley, Forest Area or Manton HS Graduate	Y	\$500
Wexford County Adopt-a-Student		2.50	6.00	Wexford County	Y	Varies
Wise-Imogene & Harold	Y	3.00	12.00	Open		Varies
Wolin-Maureen Memorial	Y	2.50		Open	Y	2 - \$500
Wright-Norah B	Y	3.00	6.00	Service Area	Y	Varies
Wynkoop-Ralph E & Eva B	Y		6.00	Service Area	Y	Varies
Young-Mary E Memorial	Y		6.00	Service Area	Y	Varies
Zonta-Opportunity for Change				Open		Varies

Aviation Scholarships

Aviation		2.00		Open		Varies
Aviation Student Council		3.00	12.00	Open	Y	\$500
CESSNA Foundation				Open	Y	4 - \$1000
Experimental Aircraft Association			6.00	Open	Y	2 - \$500
Feko-Matthew Memorial		2.75	6.00	Open	Y	Varies
Holtsclaw-Darrell		3.00		Open	Y	Varies
Hoxie-Ben		3.00	6.00	Open	Y	\$500
Mick-Stan Aviation Memorial	Y		6.00	Open	Y	Varies
Rodriguez		3.00	6.00	Open	Y	Varies
Stetson-Steward R	Y	3.00	6.00	Open	Y	\$750
Stulen-Frank & Dorothy MTEC				Open	Y	Varies

Bridge Scholarships

Bridge Circle		3.50	1.00	Open	Y	Varies
Bridge Program		2.00		Open		Varies
Grooters-Mickey			1.00	Open	Y	\$500
Thero-James G	Y	2.50		Service Area	Y	Varies

Business Scholarships

Alfonso-John V Memorial	Y		6.00	Service Area	Y	Varies
Anderson-Glen A		3.25	12.00	Service Area	Y	\$1803
Bay Area Insurance Agents Association			6.00	Open		2 - \$500
Bearup & Judson Legal		3.50	6.00	Service Area		\$350
Bertelsen-Virginia A CCR	Y		6.00	Open	Y	Varies
Biederman Foundation	Y	2.00	6.00	Open	Y	\$2000
Blough-Erich		2.00	3.00	Open	Y	Varies
Business Discipline		2.00		Open		Varies
Chemical Bank	Y	3.00	6.00	Service Area	Y	\$1000
Dennis Gartland Niergarth Accounting			6.00	In District	Y	Varies
Economic Club of Traverse City		3.30	6.00	Service Area	Y	2 - \$1000
Faulk-Wm E Intermediate Accounting		3.50	6.00	In District	Y	\$500
Gaunt-Ernest & Donna		2.50	6.00	Open		Varies
H Cox & Son	Y	3.25	6.00	Service Area		Varies
Hart Accounting		3.00	6.00	Service Area	Y	Varies
Independent Accountants Association		2.50		Open		Varies
Legal Assisting		2.00		Open		Varies
MacPhee-Keith		3.00	6.00	Open		\$500
Martino-William C & Delrose M	Y		12.00	Open	Y	Varies
Niemi-Gordon Business Division		3.00	6.00	Service Area	Y	\$800
Nolf-Angela I	Y	3.00	6.00	Service Area	Y	Varies
Paron Financial Company	Y	3.00	12.00	Open		Varies
Robinson-Glen & Anne	Y	2.50	6.00	Service Area		\$1000
Safety Net Excellence in IT		3.25	6.00	Open	Y	2 - \$500
Schmidt Strom-Zonta		3.00	6.00	Grand Traverse or Leelanau County	Y	Varies
Schmuckal-Art & Mary		3.00	6.00	Service Area	Y	Varies
Schmuckal-Art & Mary	Y	3.00	12.00	Open	Y	Varies
Smith Haughey Rice & Roegge	Y	2.50	6.00	Service Area		\$544
Smith-Schuyler			12.00	Open	Y	Varies
Strom-Zonta	Y		6.00	Service Area	Y	Varies
Stulen-Frank & Dorothy MTEC				Open	Y	Varies
Zipser-Ann P Accounting	Y	3.00	6.00	Service Area	Y	\$500

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Communications Scholarships

Communications		2.00		Open		Varies
Noverr-Joseph			6.00	Open		Varies
Oliver-Harry Theater			1.00	Open	Y	Varies
Olmstead-Laura Memorial		3.00	6.00	Open	Y	Varies
Pahl-John Literary Prize				Open	Y	2 - \$100
Prout-Patricia			3.00	Open	Y	Varies
Spearing-Kaye Memorial		3.00	6.00	Open	Y	\$500

Construction Scholarships

Feyen Zelstra Construction	Y			Open	Y	Varies
HVAC Excellence			1.00	Open	Y	2 - \$500
New York Life Eagle Strategies				Open	Y	Varies

Culinary Arts Scholarships

Adamski-Nick Memorial	Y		6.00	Open	Y	\$1000
Ames-Angela Kay	Y	3.00	6.00	Open	Y	2 - \$1000
Boyd-Adam W		2.50		Open	Y	\$1000
Chef Pierre	Y	3.00	12.00	Open		Varies
Cindy Warner	Y	3.00	6.00	Open		\$1000
Culinary Arts		2.00		Open		Varies
Duchene Foundation	Y	3.00	6.00	Open		2 - \$2000
Great Lakes Culinary Adopt-a-Student		2.50	3.00	Service Area		Varies
Hansen Foods		2.50	6.00	Leelanau County	Y	\$1000
Hofmeister-The Family	Y		6.00	Service Area		\$1000
Lobdell Teaching Restaurant		2.50	6.00	Service Area	Y	2 - \$2500
Lulu's Siren Hall		3.00	6.00	Service Area	Y	2 - \$750
Magnum Hospitality Missy Memorial		2.75	6.00	Service Area, plus Petoskey, Harbor Springs, Boyne City	Y	Varies
Round-Bob & Maybelle Memorial		2.00		Open		\$500
Rudd Culinary		2.00	6.00	Service Area		\$1000
TC Convention & Visitors Bureau	Y		6.00	Service Area		\$1000
Tapawingo Scholarship		3.00	12.00	Open	Y	Varies
Taste of Cherries			12.00	Open		Varies
Tasters' Guild			2.00	Open		Varies

Health Occupations Scholarships

Biederman Foundation	Y	2.00	6.00	Open	Y	\$1000
Chase-Robert & Betty Dental Assistant	Y	3.00	6.00	Service Area	Y	Varies
Cline-Warren W MD Memorial		3.00	6.00	Service Area	Y	Varies
Dental Assisting				Open	Y	Varies
Donnelly-Kathleen Endowment	Y	3.00	12.00	Open	Y	Varies
Drulard-Alice	Y	2.50	6.00	Open	Y	Varies
Eiken-Nied	Y		12.0	In District	Y	\$1000
Ferguson/Osterlin		3.00	6.00	Service Area	Y	Varies
Foster-Ruth & Clifford	Y	3.00	6.00	Service Area	Y	Varies
Gove-Margaret	Y		6.00	Open	Y	\$1000
Great Northern Benefits		2.50	6.00	Service Area	Y	\$350
Hathaway-Earl		2.50	6.00	Open	Y	Varies
Helms Endowment		2.50	12.00	Open	Y	Varies
Kindra-John & Nancy Memorial	Y	2.50	12.00	Open	Y	3 - \$750
Longcore-Olive V Memorial				Service Area, Ostego County	Y	Varies
Marriott-Marlatt	Y		6.00	Antrim County	Y	Varies
Mills-Rita J Memorial	Y	2.00	6.00	Open	Y	\$500
Molvang-Eric & Hettie	Y	2.50	6.00	Service Area	Y	2 - \$1000
Murner-Harold & Ida		3.00	6.00	Service Area	Y	Varies
Nursing		2.00		Open	Y	Varies
Oliver-Ward L Memorial		3.00	6.00	Open	Y	\$500
Parrish-Jan Nursin	Y	3.00	3.00	Open	Y	\$1000
Pronger-Peggy A	Y	3.00	6.00	Open	Y	\$500
Rady-Gordon & Marlene	Y	3.00	6.00	Service Area	Y	Varies
Resort District Dental Society	Y	3.00	1.00	Specific MI County preferences (list online)	Y	Varies
Rothermel-Fred M & Carmen B	Y	3.00	12.00	Specific MI County preferences (list online)	Y	Varies
Schroth Family	Y		6.00	Service Area	Y	Varies
Somers/Alzheimers	Y		6.00	Specific MI County preferences (list online)	Y	\$733.81
Swan-Rhea			6.00	Open	Y	\$500
Swift Nursing Endowment Fund	Y		6.00	Service Area	Y	Varies

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Health Occupations Scholarships continued

Traverse City Exchange Club	Y	2.00		Service Area	Y	Varies
Traverse City Women's Club	Y		12.00	Service Area	Y	Varies
Tompkins-Mabel	Y		12.00	In District	Y	3 - \$500
Weigand-Marion Memorial	Y			Service Area	Y	Varies

Humanities Scholarships

Graphic Arts		2.00		Open	Y	Varies
Hughson-Michael Graphic Design		2.70	6.00	Open	Y	\$200
Knorr Marketing		3.00	6.00	Open	Y	\$500
Music			1.00	Open	Y	Varies
NMC Art		2.00		Open	Y	Varies
NMC Dance Program		4.00	1.00	Open	Y	Varies
Olson-Daniel R				Open	Y	Varies
Prout-Patricia			3.00	Open	Y	Varies
Ross-Walt & Pat Music		3.00	12.00	Open	Y	Varies
Siciliano-Stephen & Peg History		3.25	6.00	Open	Y	2 - \$500
Smith-Schuyler Carrie E				Open	Y	Varies
Spearing-Kaye Memorial		3.00	6.00	Open	Y	\$500
TCCottage.com Visual Communications		3.00	6.00	Open	Y	\$500
Welch-Paul Art Department			6.00	Open	Y	\$500
Wolff-Patricia & Gene Memorial		3.00	6.00	Open	Y	Varies

Maritime Scholarships

Allingham-Henry Maritime	Y	3.00	12.00	Open, United Kingdom preference	Y	2 - \$500
Biederman Foundation	Y	2.00	6.00	Open	Y	\$2000
Biros-George S Jr	Y	3.00		Open		Varies
Branson-Chris & April	Y	2.00	12.00	Open	Y	Varies
Brophy-Arthur W			12.00	Open	Y	\$1000
Crowley-Thomas Sr Memorial			1.00	Open	Y	Varies
G T Bay Power Squadron Maritime		2.50	12.00	Open	Y	Varies
GLMA Adopt-a-Student		2.50	3.00	Service Area		Varies
GLMA		2.00		Open		Varies
GLMA Superintendent	Y		12.00	Open		Varies
Great Lakes Passenger Boat Association				Open	Y	\$500
Great Lakes Task Force		3.00	12.00	Open	Y	\$500
Hurley-Maxine V Memorial		2.00	6.00	Open	Y	Varies
Kamm-Christian P		3.30		Open	Y	Varies
Lightfoot-Gordon			6.00	Open		Varies
Ludington-Captain Lewis				Open	Y	Varies
Marine Engineer's Beneficial Association	Y	3.00		Open	Y	Varies
Maritime Heritage Alliance			3.00	Open	Y	Varies
Maritime Sea Project				Open		Varies
Molvang-Eric & Hettie	Y	2.50	6.00	Service Area	Y	2 - \$1000
Prodigal Cadet	Y	2.00	12.00	Open	Y	\$600
Raymond-George W Memorial	Y	2.75		Open	Y	Varies
Rink-Suzanne V Memorial	Y		6.00	Open	Y	Varies
Sears-Franklin Memorial		3.00	6.00	Open	Y	Varies
Skelton-Captain Ray Memorial		2.00	5.00	Open	Y	\$1000
Staron-Jana License Prep		2.80		Open	Y	\$400
TC Exchange Club	Y	2.00		Specific MI County preferences, resident for 2 years	Y	Varies
Thompson-Barbara H Endowed	Y		1.00	Open	Y	Varies
Thompson-Barbara			6.00	Open	Y	Varies
Trimble-Paul E			6.00	In District	Y	Varies
Williams Engineering		2.50		Open	Y	Varies

Science & Math Scholarships

Alfonso-John V Memorial	Y		6.00	Service Area	Y	Varies
Angell-W R Natural Science		3.00	12.00	Open	Y	Varies
Easling Engineering	Y	3.00	6.00	Service Area	Y	Varies
Easling-Martin & Evon	Y	3.00		Service Area	Y	2 - \$1000
Engineering		2.00		Open	Y	Varies
Gosling Czubak Engineering		3.00	6.00	Service Area	Y	\$1000
Griner Family		2.50	6.00	Service Area	Y	\$1000
Moenkhaus-Art		3.00	6.00	Open	Y	Varies

NMC Scholarship Name	Need Based	Min GPA	Min Term Credits	Residency (District = Grand Traverse County & Service Area = GT, Antrim, Benzie, Kalkaska, Leelanau, & Wexford Counties)	Other Criteria Online	Award
Science & Math Scholarships continued						
Naar-Corinne		3.00	12.00	Open	Y	\$750
Rady-Gordon & Marlene	Y	3.00	6.00	Service Area	Y	Varies
Rogers-Ann Family	Y	3.00		In District	Y	Varies
Rudd-Bob & Grace		2.50	12.00	Open	Y	Varies
Science Math		2.00		Open	Y	Varies
Sheldon-David & Susan	Y		6.00	Service Area	Y	\$1000
Sorensen-F W & Annette	Y	2.50	12.00	In District	Y	\$150
W R Angell		3.00	6.00	Open	Y	Varies
Williams-Peta Memorial		3.00		Open	Y	Varies

Social Science Scholarships

Baur-Joanne	Y	3.00	6.00	Service Area	Y	Varies
Blough-Erich		2.00	3.00	Open	Y	Varies
Finch-Sgt Dennis Memorial		3.00	6.00	Service Area	Y	Varies
Karczewski-Amy	Y	3.00	12.00	Service Area	Y	2 - \$200
Law Enforcement		2.00		Open	Y	Varies
Nugent-Maise L Memorial	Y	2.50	6.00	Benzie County	Y	\$500
Schroth Family	Y		6.00	Service Area	Y	Varies
Spearing-Kaye Memorial		3.00	6.00	Service Area	Y	\$500
Traverse City Women's Club	Y		12.00	Service Area	Y	Varies
Wilmeth Social Science	Y	3.00	6.00	Open	Y	\$294

Technical Scholarships

Alfonso-John V	Y		6.00	Service Area	Y	Varies
Anderson-Dale	Y	2.00	6.00	Open	Y	Varies
Auto Technology			12.00	Open	Y	Varies
Belovich-Otto & Kathy		2.50		Service Area	Y	\$500
Clark-Gary L Machine Tool			6.00	Open	Y	2 - \$1000
Cowell-Wayne G Memorial		3.00	6.00	Service Area	Y	Varies
Drafting		2.00		Open	Y	Varies
MacIntosh-Mike Memorial			6.00	Open	Y	\$500
NMC Technical Careers		2.50		Service Area	Y	Varies
Stulen-Frank & Dorothy MTEC				Open	Y	Varies
TC Exchange Club	Y			Specific MI County preferences, resident for 2 years	Y	Varies
Technical		2.00		Open	Y	Varies
Young-R M Technical		3.00	6.00	Service Area	Y	\$500

Visit www.nmc.edu/scholarships for the most detailed and updated criteria for all scholarships.

NMC.

Find it here.



Graduation

www.nmc.edu/records

Applying for Graduation

Graduation from NMC signifies that you have achieved the educational objectives of the curriculum. You must complete all degree requirements and achieve an overall grade point average of 2.0. One semester before you anticipate completing the requirements for your degree or certificate program, fill out an Application for Degree or Certificate online. You may also pick up a form at the Records and Registration Office. Those participating in the graduation commencement ceremony in May need to contact the NMC Bookstore, in the lower level of West Hall, to order caps and gowns.

Graduation with Honors

www.nmc.edu/honors

Students who have completed all the requirements for their degree, plus at least 16 semester credits in designated honors courses and achieved an overall grade point average of at least 3.5 graduate with honors. The following categories are recognized:

3.50 - 3.75 = With Honor

3.76 - 3.90 = With High Honor

3.91 - 4.00 = With Highest Honor

Students who have completed all the requirements for their certificate and have achieved an overall grade point average of between 3.5 and 4.0 graduate with outstanding performance.

Honors Convocation

At the close of the academic year, NMC holds its annual Honors Convocation to recognize outstanding students. This ceremony for exemplary students and their families is sponsored by the NMC Honors Office and NMC faculty and provides the opportunity to present many scholarships and awards.

Health Services

www.nmc.edu/health-services

Biederman Bldg, room 106, (231) 995-1255

A family nurse practitioner is on duty Monday through Friday, 9 a.m. to 4 p.m., during the fall and spring semesters. A doctor is available by appointment. Referrals to campus and community resources are made if appropriate. Services include but are not limited to:

- Treatment of illness and injuries
- Academic/sports/job physicals
- Sexually Transmitted Infection testing and treatment
- Allergy injections
- Immunizations
- Gynecological exams & contraception
- Tuberculosis testing
- Health information and counseling

- Laboratory testing onsite
- Nutrition advice
- Limited pharmacy

The health fee paid by all students includes the services of the nurse practitioner and doctor, over the counter medications and a reduced fee for some lab tests. In case of illness or injury requiring hospitalization, the use of outpatient facilities, or private physicians' visits, students are responsible for payment through personal insurance coverage or direct payment. All medical records are strictly confidential and are kept for ten years from date of last visit.

Health & Accident Insurance

All students are eligible to enroll in a low-cost health insurance policy specifically for college students. Information and claim forms are available fall and spring semesters. International students are required to have medical insurance to attend NMC. This insurance fulfills this requirement. For more information call (231) 995-1255.

Housing

www.nmc.edu/housing

Residence halls

East Hall, (231) 995-1400

Close, convenient, affordable... fun! NMC's East Hall offers more than 200 students an opportunity to live in a supportive, alcohol- and drug-free community. More than just a place to eat and sleep, East Hall provides educational and social activities to promote your personal development, meet people and make new friends.

ROOMS

Rooms are in suite arrangements - two rooms connected by a bathroom to accommodate four students. Each room has two beds, two desks with chairs and closets with drawer space. Basic cable service, local phone and Internet service is available free in each room. Each wing is equipped with a laundry room with washers and dryers. You have the option of living on a same-gender floor, or a coed floor.

MEALS

The NMC Food Court in neighboring West Hall offers hot breakfasts, lunches and dinners plus a soup, salad and deli bar. The Northwest Grind coffee shop and convenience store offers a menu of ready-made sandwiches, wraps, snacks and drinks.

A range of pre-paid meal plans allow you to choose what works for you. Meal plans are available to all faculty, staff and students, not only residence hall students. For more information visit www.nmcdining.com, or call (231) 995-1678.

ACTIVITIES

The Residence Hall Council and Resident Assistant staff plan a variety of events for residents. If you like to make things happen, get involved with the Residence Hall Council.

TERMS AND CONDITIONS OF OCCUPANCY

The NMC Residence Life Contract contains guidelines for residence hall living and is available to answer all your questions about occupancy, room assignments, and payment.

RESIDENCE HALL HANDBOOK

Complete information about living in the residence hall is contained in the Residence Hall Handbook and Residence Life Contract, including such topics as:

- Room assignments, guests, changes, repairs and occupancy during breaks
- Deposit, charge periods, refund schedule and financial penalty
- Food service, meal options, furniture, electrical appliances, pets
- Rules and regulations, dismissals and contract appeals
- Safety procedures, fire/emergency evacuations
- Fire alarms, firearms/weapons
- Alcohol/Drug policy

RESIDENCE HALL ALCOHOL & DRUG POLICY

The manufacture, use or sale of alcohol, inhalants, and other drugs are prohibited in the residence hall and adjacent areas, including the athletic fields and parking lots. Alcohol containers and drug paraphernalia are also prohibited. These items will be confiscated by the Residence Life staff when found.

The residence hall is not a haven from the law. If a local, state or federal law has been violated, a law enforcement agency will be called. Similar guidelines apply for all campus buildings and grounds. A violation of the Alcohol and Drug policy may result in immediate dismissal from the residence hall, suspension and/or expulsion from Northwestern Michigan College. This may occur on the first infraction of the Alcohol and Drug policy.

The complete policy and procedures are available in the Residence Life Contract, Residence Hall Code of Conduct within the Student Rights & Responsibilities handbook (see page 162) or online at www.nmc.edu/policies.

Campus Apartments

West Hall, (231) 995-1119

NMC has two-bedroom and one-bedroom on-campus apartments that are ideal for students 21 years of age and older. All apartments are non-smoking and pet-free. We are happy to rent to students with families.

Our apartments equipped with major kitchen appliances but otherwise unfurnished. Basic utilities are included in the rent. There are laundry facilities in the basement of each of the three apartment buildings, all located on the east end of campus. Assigned parking is available for tenants and guests.

Intramural Sports/Recreation

Rajkovich Physical Education Bldg, (231) 995-1198

Intramural sports are a series of leagues formed to provide fun competition between NMC students. Fall traditionally means co-ed kickball, co-ed softball and flag-football games. During the winter, leagues move inside for floor hockey, co-ed dodgeball, co-ed indoor soccer and co-ed basketball. After spring break is co-ed volleyball.

Open Recreation hours are scheduled throughout the year in the gymnasium for pick-up games of basketball, volleyball, dodgeball, and indoor soccer. Outdoor courts are available for basketball and sand volleyball. A frisbee/disc golf course surrounds East Hall, Fine Arts, and Physical Education Buildings.

Fitness Center

NMC's Fitness Center offers fitness circuit conditioning to students and community members, promoting cardiovascular fitness, strength, flexibility, and weight control. The Center features Universal weight machines, exercise bicycles, variable speed escalator treadmills, Nordic Track, elliptical trainers, and stair climber machines. To use the Fitness Center, you can either register for the fitness circuit course or purchase a membership and attend the orientation session for training guidelines. (231) 995-1379

Library

www.nmc.edu/library

Osterlin Building, (231) 995-1060

Find the quality information you need to succeed in college. Osterlin Library offers the resources and services you will need to complete your assignments: printed books and magazines, online databases, 50,000+ ebooks available from anywhere, study space, computers, copy machine. Friendly, professional librarians are available to help.

Reference (231) 995-1540

Service..... (231) 995-1060

Email..... library@mail.nmc.edu

Math Center

www.nmc.edu/tutoring

Tanis Building, Room 53 (231) 995-1138

The Tutoring Center is offering drop-in math assistance for students enrolled in NMC math courses. Check with the Tutoring Center for the schedule of availability or a schedule can be picked up in the Tutoring Center in the Osterlin Building, room 152. This is a free service available to all NMC students.

Orientation for New Students

www.nmc.edu/orientation

Office of Student Life, West Hall, (231) 995-1118

When you receive your acceptance letter to NMC, you also receive information about the Orientation and Registration program designed to acquaint new students with campus and to plan for the best schedule of classes to ensure success at NMC.

Orientation and registration for new students is a convenient one-stop process. You will have an opportunity to discuss your COMPASS placement test scores one-on-one with an advisor, transfer possibilities, and other pertinent course information. After selecting the best individual schedule, students then register for classes.

Parking

www.nmc.edu/parking

Campus Safety Office, West Hall, (231) 995-2351

All NMC students, faculty and staff must display a valid parking permit to park in main campus lots during fall and spring semesters. No NMC permit is required on weekends or summer semester. Enforcement of parking rules and regulations will be by the City of Traverse City and Northwestern Michigan College Campus Security.

Permits and a copy of the NMC Parking Policy are available at the Cashier's Office and the NMC Welcome Center. Guest permits are available at the Cashier's Office, the Admissions Office, or the NMC Welcome Center.

Personal Counseling

www.nmc.edu/counseling

Office of Student Life, West Hall, (231) 995-1118

Professional counseling services meet a full spectrum of personal needs. No fees are charged for counseling services. Our staff of licensed professional counselors can assist with crisis intervention and mental health referrals when necessary. All personal counseling is on a short-term basis with continuing support available from area agencies. Our services are designed to help students resolve personal difficulties and acquire the skills, attitudes, and abilities that will enable them to take full advantage of their college experience.

Phi Theta Kappa

Phi Theta Kappa is the internationally recognized honor society for two-year institutions of higher education. Admission is by invitation and is based on completion of 12 semester credit hours toward a degree with at least a 3.5 GPA. The hallmarks of the society are scholarship, leadership, service and fellowship. Phi Theta Kappans are involved in many activities centered around these hallmarks and their work culminates in an Honors in Action project designed by the chapter members and officers. There are opportunities for travel both in the state to three regional conferences and the annual conference held each spring.

Alpha Rho Pi, NMC's chapter of Phi Theta Kappa, was recognized as the Most Distinguished Chapter in the Michigan region for the 2003-2005 academic years and first runner-up in five of the past six years. The officers and members welcome your involvement.

Phi Theta Kappa members wear a gold stole and tassel with their cap and gown at commencement in recognition of their academic achievement. For information on Phi Theta Kappa, call (231) 995-1040.

Records & Registration

www.nmc.edu/records

Tanis Building, (231) 995-1049

The Records and Registration Office assists students with registration, transcripts, grades, enrollment verification, residency information, address changes, Veterans Affairs information, degree audits, graduation and prior credit opportunities.

Registration

Registration begins several months before classes start and continues on a daily basis until the end of the session's add period. There are many sessions: early sessions, 15-week sessions (the main session), late sessions. The dates for the main session will be published in the Registration Guide. All session dates are available online at www.nmc.edu/records under Important Dates.

The first days of registration will be online only. Registration start times will be assigned based on the student's number of earned credit hours. Once the Registration Guide is available online, students will be able to view their assigned registration time. After the initial assigned registration period has ended, all students may register online or in the Records & Registration office.

Registration after the start of any session may take place only if special permission is obtained from the department and the class is not full.

NMC.
Find it here.

Student Government

www.nmc.edu/student-services

Office of Student Life, West Hall, lower level
(231) 995-1118

The NMC Student Government Association represents the student body. Full or part-time students are eligible to become an SGA representative. A student can become a representative three ways: through a signature process, appointment by an academic department, or by election. The student body annually elects three first-year and three second-year students to complete the board. SGA is funded by the student activity fee and is responsible for providing a well-rounded program of activities and events. SGA members meet weekly and represent the student body on several college committees.

Student Life

www.nmc.edu/student-services

Office of Student Life, West Hall, lower level
(231) 995-1118

Student Organizations

The Department of Student Life strives to create an active and meaningful community for students. It promotes learning, cultural and ethnic awareness on campus by organizing student groups, hosting speakers, and co-sponsoring events in the community that include all students, staff and faculty. For a complete list of current student organizations, visit www.nmc.edu/students and click on "Student Groups." Want to start a new student organization? The Student Life Office can help you access facilities and outdoor space for activities and meetings. Your organization can apply for funding assistance to host events or travel to conferences. To form a new group you need to:

1. Complete an application available in Student Life office
2. Recruit a faculty or staff advisor

Get Involved...

For a full list of Student Groups visit
www.nmc.edu/students

Student Media Opportunities

NMC Magazine

www.nmc.edu/nmcmagazine

East Hall, lower level, (231) 995-1252

Serving on the magazine staff offers art, literary and design students exciting opportunities to learn about publishing and to express their creativity. The magazine is published two or three times a year in print, interactive DVD, and/or website versions. The magazine contains essays, poetry, short stories, illustration, photography, graphic design and other visual communication by NMC students and staff. Themed issues are conceived, edited and published by student volunteers, with honors credits optional.

White Pine Press

www.whitepinepress.org

West Hall, Faculty Advisor: (231) 995-1347

This award-winning student newspaper provides the best opportunity in Northwest Lower Michigan for students to gain hand-on experience with the various roles in a news organization, including: news-writing, photography, graphic design, illustration, or advertising sales. The White Pine Press publishes a bi-weekly newspaper, maintains a news website, and recently won an NMC innovation grant to offer students the opportunity to work on broadcast journalism. Several paid positions are available. A successful White Pine Press experience can lead to internships with local news organizations.

WNMC Radio: 90.7 FM

www.wnmc.org

West Hall, lower level, (231) 995-2562

Interested in radio broadcasting? WNMC-FM is a volunteer radio station that invites students and community members to take part in both on-air and production opportunities. Technical training is provided for all volunteers. Call for additional information and to arrange a tour of this facility.



Tuition, Billing & Fees

www.nmc.edu/cashier
Tanis Building, (231) 995-1085

Tuition and fees are established and reviewed by the Board of Trustees on an annual basis and are subject to change without notice. Visit www.nmc.edu/tuition for most current rates.

You may pay any amount at any time prior to the due date, but the final balance must be paid by 5 p.m. on the dates listed online or in the Registration Guide or your enrollment may be cancelled. After final payment day, tuition is due at the time of registration. For online registration only, payment can be made by credit card or ACH (electronic) transfer from your bank account. Otherwise payment must be received within 24 hours. Note: If you decide not to attend, you must officially withdraw or you will be liable for tuition/fees. In the event that your check or ACH transfer is returned unpaid for non-sufficient or uncollected funds we will charge a \$25 NSF fee. An NSF charge may affect your enrollment.

Billing

Tuition charges are based on contact hours with the instructor. Exceptions are MDK, MNG, MNS, Applied Music, Ensembles and private lessons. The tuition charge is the contact hour multiplied by your tuition rate plus any applicable fees as shown below.

Fees

APPLICATION FEE: \$20
One-time, non-refundable fee for processing Application for Admission to NMC.

CLASS FEES: See online class schedule.
Fees are charged for specific courses involving additional materials, laboratory supplies and/or network services provided by instructors, Flexible Learning Options courses, or private studio lessons (Music Department). See course schedule (column "Ext Fee") for these charges. For aviation flight fees, please contact the Aviation Department.

FACILITIES FEE: \$4/contact hour
Provides for maintenance and upkeep of campus facilities. (Excludes Grand Traverse County residents as they currently pay the NMC millage.)

GENERAL FEE: \$11/contact hour
This fee provides partial support for the cost of orientation, placement, career testing, Student Government Association, and other student services and activities. *Note: The general fee charge for maritime classes only is based on credit hours, not contact hours.*

HEALTH FEE: \$24/semester
The fee is paid in Fall and Spring semesters by all students taking 6 or more contact hours and includes services of a

nurse practitioner, medical assistant, doctor, and reduced fees for some medications and lab tests. (Refundable if student withdraws from all courses during the 100% refund period, nonrefundable thereafter.) Students who are enrolled for less than 6 hours may pay a \$40/semester health fee to obtain services. Call (231) 995-1255 for more information.

MARITIME TECHNOLOGY FEE: \$500/semester
This fee is paid in Fall and Spring semesters.

REGISTRATION FEE: \$25/semester
Per semester, non-refundable.

TECHNOLOGY FEE: \$8/contact hour
Contributes to the availability and maintenance of technology for classroom and student use. (Excludes Maritime, Culinary, and Nursing program courses.)

APARTMENTS

Rent is paid monthly and due the first day of the month. Late payments will result in a late fee.

RESIDENCE HALL

Fees for the semester must be paid by final payment day or a completed and signed deferment form must be submitted to the Cashier's Office.

Billing Procedure

It is your responsibility to pay any charges by applicable due dates whether or not a bill is received. We will attempt to bill you for tuition and fee charges prior to applicable due dates. However, if you register late in the registration process, this may not be possible. In case of errors or questions about your bill, contact the Cashier's Office as soon as possible. Any collection costs incurred by NMC as a result of non-payment of any charges will be added to the outstanding balance and will become the student's responsibility. Paper bills are no longer mailed to the student. Email notices directing students, or any other authorized user, to access the NMC Self-Service to view their e-bills are sent out monthly. We encourage you to access your account at www.nmc.edu/selfservice to view or print account information and make credit card or ACH transfer payments.

Financial & Other Obligations

Financial Aid Students: All tuition and fees in excess of your anticipated aid and/or third party authorizations must be paid by the designated due date. If you decide not to attend, you must officially withdraw or you will be liable for tuition/fees. Third party authorizations must be received in the Cashier's Office with payment by the deadlines listed online and in the Registration Guide.

VISA, MasterCard and Discover are accepted for tuition, fees and books. You may pay by mail or in person, utilize the drop boxes (located in the Tanis Building outside the Cashier's Office) or online at www.nmc.edu/selfservice to pay with your credit card or ACH transfer. All college debts and "holds" must be cleared to register.

Refunds

Refunds for courses dropped are based on the number of weeks in the session that the course is offered. The refund percentage is determined by the date the withdrawal or drop form is received and processed in the Records and Registration Office or entered by the student online. Students who officially drop all or part of their classes before the start date of the session that their course(s) is in will receive a 100 percent refund of tuition and related fees. Sessions that are 1 day to 6.5 weeks will receive no refund once the session has begun. Sessions that are 7-15 weeks will receive a 100 percent refund until the end of the session's add period. Each semester the refund schedule for each session is available at www.nmc.edu/records or in the Records and Registration Office.

Refund checks will be mailed to the student's on-campus or local address unless the student requests the check be mailed elsewhere. It is the student's responsibility to update this information if it changes. If a credit/debit card is used to pay a bill, then financial aid and tuition refunds will be refunded back to the credit card that was used to pay on the account. Students can also enroll online to have their refunds deposited directly into their bank account instead of waiting for a check to arrive in the mail.

Tutoring

www.nmc.edu/tutoring

Osterlin Building, room 152, (231) 995-1138

Any student who is experiencing academic difficulties in a class can request free one on one concept tutoring. We also have additional resources available online in many courses.

Upward Bound

nmc.edu/upwardbound

West Hall, lower level (231) 995-1393

Funded by the U.S. Department of Education, Upward Bound is a free college-preparation program which began at NMC in 1989 and serves students from grades 9-12 in Traverse City and Suttons Bay public schools. Student eligibility is determined by several factors, the most significant of which is that neither parent has received a four-year college degree. Another important criterion is the student's commitment to pursue a college preparatory program in high school and to complete a college degree.

This year-round program offers weekly academic tutoring, study assistance, college visits, cultural and personal enrichment activities, assistance in preparing admissions and financial aid papers and career exploration. During the summer, students must be willing to attend a six-week program on the NMC campus which provides an intensive academic focus as well as career education to prepare students for college. Classes include English, literature, lab science, math to pre-calculus and foreign language.

Veterans

www.nmc.edu/veterans

Records & Registration Office, Tanis Bldg, (231) 995-1057

Educational Benefits

NMC's Veterans Office assists veterans in exploring educational benefits, in preparing requests for benefits, and provides certifications of enrollment. Determination of veterans' educational benefits lies with the regional office in St. Louis, Missouri. There are currently six active categories of benefit programs under which veterans and eligible dependents are classified:

Chapter 30	Montgomery G.I. Bill
Chapter 31	VA Vocational Rehabilitation
Chapter 33	Post - 9/11 GI Bill
Chapter 35	Eligible Dependents and Survivors
Chapter 1606	Reservists - Montgomery G.I. Bill
Chapter 1607	REAP

Tuition and Fees

Disabled veterans using the Vocational Rehabilitation benefits approved under Chapter 31 are given a waiver for tuition and fees, books, and approved supply expenses. Veterans enrolled in the Post-9/11 GI bill are given a waiver for tuition and fees.

The amount of veteran or dependent educational benefits varies according to the chapter of eligibility. Standard credit load requirements for determining rate-of-payment are:

Full-time	minimum of 12 credit hours
Three-quarter time	9 to 11 credit hours
Half-time	6 to 8 credit hours
Less than half-time	1 to 5 credit hours; eligible for tuition and fee reimbursement only.

Check with the NMC Veterans representative for summer and partial semester credit load requirements.

Veteran Responsibilities

1. Register for classes early. Certification can only be granted towards those courses required to satisfy degree requirements as indicated on VA form 1990, 1995, or 5490.
2. In order to receive educational benefits in a timely manner you must provide a copy of your schedule of courses each semester to the NMC Veterans Office before certification can be sent to the Regional Processing Office, St. Louis, MO.
3. Monthly Verification - Veteran students who receive benefits under Chapter 30, 1606, and 1607 must verify their enrollment monthly to insure prompt payment of their VA benefits. The earliest a student can self-certify is the last day of the month either at www.gibill.va.gov or by phone: (877) 823-2378. Select "certify your attendance" from the "Information for Benefit Recipients" menu.
4. Report changes in address, phone number, number of dependents, and changes regarding eligibility to the NMC Veterans Office immediately.

Continued on next page.

5. Promptly inform the Veterans Office of any changes in your enrollment that would affect your benefits or program. If you reduce your course load, fail to attend, or withdraw from all classes, benefits will ordinarily be reduced or discontinued from the beginning of the semester, except in special circumstances.
6. Benefits can be paid for courses you are currently taking and that are required for your degree program.
7. Veterans and other eligible persons receiving educational benefits must conform to the College Regulations and Standards of Progress as specified by NMC. These Standards of Progress include academic achievement (maintain a 2.0 GPA) and attendance as well as standards of conduct.
8. A report will be made to the VA if unsatisfactory progress is made which may result in termination of VA benefits. A reinstatement of benefits may be possible only after the cause for unsatisfactory progress has been removed and there is a reasonable likelihood of academic success.
9. A veteran's eligibility for educational benefits expires ten years from the date of discharge from the last period of active duty.

Welcome Center

Lobby of Health and Science Building, (231) 995-1135

Parking permits, campus tours, information, directions, lost and found.

Writing and Reading Center

www.nmc.edu/writingcenter

Scholars Hall, Room 221, (231) 995-1189

When you visit the Writing and Reading Center, peer editors or "readers" will carefully read your paper and analyze its content, organization, mechanics and evidence. You conference with the reader to exchange ideas about writing in a more effective manner and you will receive a summary of the strengths of your paper and suggestions on what you might do to improve it. Readers are students from all areas of study who have had success in writing. Writing and Reading Center services are free.

NMC. Find it here.





Program Information

Charting Your Course of Study

Decide on career goals and course of study

- ☐ Determine what degree your desired career requires on the following pages.
- ☐ Review your options with your advisor.

Review specific degree requirements

- ☐ Understand what is required for your degree or certificate.
- ☐ Review English and Math competency, Group 1 courses, electives, pre-requisite courses, grade point average and credit requirements.

Choose your Group 1 courses

- ☐ Check the Registration Guide each semester to see which Group 1 courses are offered.
- ☐ Follow the Guidelines for Group 1 courses in Communications, Humanities, Science/Mathematics and Social Science based on your degree. Choose your Group 1 courses from the list on pages 56-57.
- ☐ If you're planning on transferring to a public university in Michigan, inquire about the MACRAO stamp. See an advisor for more details. When MACRAO requirements are met, contact the Records and Registration Office.

Select your degree electives

- ☐ Choose your major area courses and degree electives to meet your degree requirements.
- ☐ Plan for pre-requisites for major area courses. Review the transfer guides available in the Advising office or online at www.nmc.edu/advising for your chosen four-year institution.

Register early

- ☐ Register as early as possible. Some courses are offered one semester every year or two and many courses fill up quickly.
- ☐ Register online at www.nmc.edu/register or in Records and Registration on the first level of Tanis Building.
- ☐ Meet with your advisor as soon as class listings are available. First semester students have a hold on their registration until they meet with a counselor or advisor.

Apply for graduation

- ☐ Apply for graduation at least one semester before you anticipate completing requirements for your program.
- ☐ Complete an Application for degree or certificate at www.nmc.edu/records.
- ☐ Remember to order your cap and gown from the NMC Bookstore during February or March, if you plan on participating in the commencement ceremony in May.

Be prepared to transfer

- ☐ Many NMC students transfer to a four-year institution. You can complete your degree in Traverse City through NMC's partners at the University Center. See page 59.

General Education

Philosophy

General Education at Northwestern Michigan College promotes the acquisition of knowledge, skills and attitudes needed to function effectively in a changing world. This fosters intellectual curiosity, essential to lifelong learning.

Outcomes

To ensure students experience the benefits of our philosophy of general education, the faculty of NMC commits to instilling these practices throughout the curriculum.

COMMUNICATION: Students will practice effective communication with an awareness of audience and sense of purpose.

CRITICAL THINKING: Students will skillfully conceptualize, apply, analyze, synthesize, and evaluate information gathered from observation, experience, reflection, reasoning, or communication.

QUANTITATIVE REASONING: Students will accurately use numbers, symbols, measurements, properties, and the relationships of quantities to make sound decisions, judgments, and/or predictions.

Assessment

General Education outcomes are measured in several ways:

- Each year faculty members in designated courses submit selected student work to the Office of Research, Planning & Effectiveness. Faculty teams assess the level of achievement represented by the student work.
- Graduates are surveyed annually and are asked to provide their perceptions of achieving the outcomes.

The Curriculum Committee is charged with using the results of assessment to make curricular improvements.



Degrees & Certificates

NMC students may select from several educational options. Associate degrees and certificates are awarded to those students who complete a prescribed set of courses in specific areas of study. Many programs, especially in occupational areas, also lead to additional career licenses or certifications. Maritime programs require four years of full-time study, including summer sessions and result in a bachelor's degree with Ferris State University. Associate degree programs generally take two years of full-time study to complete. Certificate programs range from 16 to 48 credits.

NMC offers the following degree and certificate options:

- Certificate of Achievement Programs
- Associate in Applied Science (AAS)
- Associate Degree in Nursing (ADN)
- Associate in General Studies (AGS)
- Associate in Science and Arts (ASA)

Earning a Second Associate Degree

Students may earn additional degrees at NMC. A minimum of 15 earned hours (credits) shall be earned from NMC in addition to the required credits for the previous degree.

Students seeking an additional associate degree shall be governed by the following stipulations:

- Students may earn only one Associate in Science and Arts degree
- Students may earn the Associate in General Studies degree only as their first associate degree
- Program requirements for the additional degree will be based on the catalog that is in effect when the student officially switches to the new program
- Previous credits will be evaluated by the Records Office for transfer to the additional degree as applicable
- This policy does not apply to certificates

Catalog of Record

When you enroll for academic credit at NMC, your graduation requirements are governed by the catalog in effect at the time of enrollment. This changes:

1. If you are not enrolled for three or more consecutive semesters (excluding summer), or
2. If the catalog is revised (print or web) and you wish to follow the newer catalog, or
3. If you change your program of study, you would be governed by the catalog in effect when the change is made.

When you do not enroll for three or more consecutive semesters, you will be governed by the catalog in effect when you re-enroll.

Cultural Perspectives and Diversity

In order for NMC graduates to engage as educated and informed citizens of a diverse society, students pursuing the ASA and AGS degrees are required to take one Cultural Perspectives and Diversity (CPD) course. These courses are listed on page 57.

Certificate Requirements

Certificate Programs typically include specialty courses and may include some core education requirements. In most cases, they are designed for concentrated proficiency in specialized areas. In some cases, certificates are designed for students who are seeking to complete their core general education requirements for their AAS or ASA degrees. Certificates may range from 16 to 63 credit hours as established by individual program areas and/or the Curriculum Committee. Many certificate courses may apply toward an associate degree.

Certificate Program requirements include:

1. A specified group of credit hours in an area of specialization, as determined by the appropriate NMC academic area. These three levels are possible:
 - Level I: A minimum of 16 credits in a speciality area;
 - Level II: A minimum of 32 credits in a speciality area;
 - Level III: A minimum of 48 credits in a speciality area.
2. A minimum cumulative grade point average of 2.0. Higher GPA standards may be required for specific courses within individual academic areas.
3. Level I and II certificate programs require that a minimum of 8 credit hours be completed at NMC (this may be waived in extenuating circumstances; contact the registrar). Level III certificate programs require that a minimum of 12 credit hours be completed at NMC (this may be waived in extenuating circumstances; contact the registrar).
4. Competency testing by the responsible academic area if the course work was not completed at NMC.

**Competency credit: Students with competency in a specific area should consult with their program coordinator for possible testing and/or credit.*

Certificate programs are listed in the Occupational Specialty Programs section of this catalog.

Group 1 & 2 Courses

Group 1 General Education courses are designed to enhance skills and knowledge for students to succeed in academic, career and life goals. Students pursuing a two-year degree will need to fulfill specific general education requirements by selecting courses from Group 1 based on the degree requirements listed on the following pages. The Group 1 courses are listed on pages 56-57 of this catalog.

Group 2 courses are all remaining 100-level courses or above which may fulfill occupational specialty program requirements, major area requirements, and elective requirements for degree and certificate programs.

NMC.
Find it here.

Degree Requirements

Associate in Science & Arts Degree (ASA)

The Associate in Science and Arts degree is generally pursued by students who are planning to transfer to a four-year college or university to complete a baccalaureate degree. Students who are deciding on a major area and want to explore the curriculum also frequently pursue the ASA degree.

Communications	6-8 credits	
ENG 11/111 or ENG 111 English Composition and ENG 112 English Composition.		
Humanities	8 credits	<p>A combination of 34 credits from Group 1 or Group 2.</p> <p>One Cultural Perspectives and Diversity course from list on page 57.</p> <p>Math Competency required.* Reading Competency required.**</p> <p>A list of courses in Group 1 and 2 begins on page 56.</p>
8 credits from at least 2 departments in Group 1 Humanities courses.		
Science/Mathematics	8 credits	
8 credits from at least 2 departments in Group 1 Science/Math courses. One must be a Science lecture/lab course.		
Social Science	8 credits	
8 credits from at least 2 departments in Group 1 Social Science courses.		
Total Degree Credits: Minimum of 64		

MATH AND READING COMPETENCY

- * Math Competency may be fulfilled in one of two ways:
 - COMPASS placement into MTH 121 or higher, or
 - Successful completion of MTH 111 or higher with a grade of 2.0 or higher.
- ** Reading Competency:
Guide available from academic advisors.

OTHER REQUIREMENTS

- Complete at least 64 credit hours with a 2.0 or higher cumulative grade point average.
- Complete a minimum of 16 of the 64 credits through NMC classes.

NOTES

- A maximum of two physical education credits, two professional development seminar credits, and four Academic Service Learning Internship credits may be used toward a degree.
- Courses with numbers below 100 level do not count toward graduation, even though they may be prerequisites for other courses needed to complete degree or certificate requirements. Some courses may require prerequisites which may add to the total number of credits taken. Review course prerequisites carefully.
- To count toward graduation, a course must be completed with a grade of 1.0 or higher. See page 42 for Applying for Graduation.

Associate in General Studies Degree (AGS)

The Associate in General Studies Degree is designed for students interested in obtaining a degree that can be customized based on varying areas of interest.

Note: This degree is not designed to meet the needs of the transfer student. Consult a advisor to discuss your educational goals and determine if this degree is right for you.

Communications	6-8 credits	
ENG 11/111 or ENG 111 English Composition and either BUS 231, ENG 112 or ENG 220.		
Humanities	3 credits	
3 credits of a Group 1 Humanities course.		
Science/Mathematics	4 credits	
4 credits of a Group 1 Science lecture/lab course.		
Social Science	3 credits	
3 credits of a Group 1 Social Science course.		
Total Degree Credits: Minimum of 64		

Electives
46-48 semester credits chosen from any credit course in the college curriculum.
One Cultural Perspectives and Diversity course from list on page 57.
Math Competency required.* Reading Competency required.**
A list of courses in Group 1 and 2 begins on page 56.

MATH AND READING COMPETENCY

- * Math Competency may be fulfilled in one of two ways:
- COMPASS placement into MTH 111 or higher, or
 - Successful completion of MTH 23 with a grade of 2.0 or higher.
- ** Reading Competency:
Guide available from academic advisors.

OTHER REQUIREMENTS

- Complete at least 64 credit hours with a 2.0 or higher cumulative grade point average.
- Complete a minimum of 16 of the 64 credits through NMC classes.

NOTES

- A maximum of two physical education credits, two professional development seminar credits, and four Academic Service Learning Internship credits may be used toward a degree.
- Courses with numbers below 100 level do not count toward graduation, even though they may be necessary to prepare for other courses needed to complete degree or certificate requirements. Some courses may require prerequisites which may add to the total number of credits taken. Review course prerequisites carefully.
- To count toward graduation, a course must be completed with a grade of 1.0 or higher. See page 42 for Applying for Graduation.

Associate in Applied Science Degree (AAS)

The Associate in Applied Science degree is generally pursued by those students who plan to enter the workforce following graduation from NMC. A career specialty emphasis is the dominant characteristic of the Applied Science Degree. View the list of specialty programs on pages 64-94. Although some students pursuing the AAS degree may transfer to a four-year college or university to pursue a baccalaureate degree, many AAS courses are not granted transfer equivalency credit at Michigan universities. Students considering the AAS degree who may wish to transfer should see an advisor.

Communications	6-8 credits	Major Area Requirements 27 or more semester credits. See specific Programs of Study on pages 64-94. Math Competency required.* Reading Competency required.** A list of courses in Group 1 and 2 begins on page 56.
ENG 11/111 or ENG 111 English Composition and either ENG 220, BUS 231, or ENG 112. (Program of Study may specify.)		
Humanities	3 credits	
3 credits of a Group 1 Humanities course. (Program of Study may specify.)		
Science/Mathematics	4 credits	
4 credits of a Group 1 Science/Math lecture/lab course. (Program of Study may specify.)		
Social Science	3 credits	
3 credits of a Group 1 Social Science course. (Program of Study may specify.)		
Total Degree Credits: Minimum of 64		

MATH AND READING COMPETENCY

- * Math Competency may be fulfilled in one of two ways:
- COMPASS placement into MTH 111 or higher, or
 - Successful completion of MTH 23 with a grade of 2.0 or higher.
- ** Reading Competency:
Guide available from academic advisors.

OTHER REQUIREMENTS

- Complete at least 64 credit hours with a 2.0 or higher cumulative grade point average.
- Complete a minimum of 16 of the 64 credits through NMC classes.

NOTES

- A maximum of two physical education credits, two professional development seminar credits, and four Academic Service Learning Internship credits may be used toward a degree.
- Courses with numbers below 100 level do not count toward graduation, even though they may be necessary to prepare for other courses needed to complete degree or certificate requirements. Some courses may require prerequisites which may add to the total number of credits taken. Review course prerequisites carefully.
- To count toward graduation, a course must be completed with a grade of 1.0 or higher. See page 42 for Applying for Graduation.

Associate Degree in Nursing (ADN)

The Associate Degree in Nursing program is generally pursued by those students who plan to enter the nursing workforce following graduation. After successful completion of this program, graduates take the National Council Licensure Examination (NCLEX-RN). With passing scores, graduates are awarded licensure as a Registered Nurse.

Some students pursuing the ADN degree may decide to transfer to a four-year college or university to pursue a baccalaureate degree. Students considering the ADN degree who may wish to transfer should see an advisor.

Communications	6-8 credits	Major Area Requirements 45 semester credit hours in HNR and HAH courses as listed in the Associate Degree Program requirements. Math Competency required.* Reading Competency required.** Computer Competency required.*** Admission requirements are on page 89 of this catalog.
ENG 11/111 or ENG 111 English Composition and ENG 112 English Composition.		
Humanities	3 credits	
PHL 202 Contemporary Ethical Dilemmas.		
Science/Mathematics	13 credits	
BIO 227-228 Human Anatomy and Physiology I and II, and BIO 240 Normal and Clinical Nutrition.		
Social Science	3 credits	
PSY 101 Introduction to Psychology.		
Total Degree Credits: Minimum of 70-72		

MATH AND READING COMPETENCY

- * Math Competency may be fulfilled in one of two ways:
 - COMPASS placement into MTH 121 or higher, or
 - Successful completion of MTH 111 with a grade of 2.0 or higher
- ** Reading Competency:
Guide available from academic advisors.
- *** Computer Competency:
CIT 122A Computer and Internet Basics, 1 credit

OTHER REQUIREMENTS

- Complete a minimum of 70-72 credit hours with a cumulative grade point average of 2.0. Complete each nursing course at 2.0 or higher.
- Complete a minimum of 16 degree credits through NMC classes.
- Be enrolled at NMC the semester of graduation. Petitions for exceptions should be in writing and directed to the Registrar.

NOTES

- A maximum of two physical education credits, two professional development seminar credits, and four Academic Service Learning Internship credits may be used toward a degree.
- Courses listed below 100 level do not count toward graduation, even though they may be necessary to prepare for other courses needed to complete degree or certificate requirements. Some courses may require prerequisites which may add to the total number of credits taken. Review course prerequisites carefully.
- To count toward graduation, a course must be completed with a grade of 1.0 or higher. Grades of 2.0 or higher are required for courses with the HNR prefix, CHM 101, ENG 111 and PSY 101. Grade point average of 2.5 or higher required for each of the courses in Anatomy and Physiology sequence (BIO 227, BIO 228). See page 42 for Applying for Graduation.

Group 1 Courses

Excess credits may be applied toward Group 2 requirements.

Communications

The MACRAO Agreement requires 2 semesters of English Composition.

ENGLISH DEPT.

	Credits
ENG 111 English Composition	4
ENG 112 English Composition	4

***Note:** Transfer students with Composition transfer credits totaling less than 5, choose one of the ENG Literature Department courses below. For Communications: Excess Literature credits may be applied to Group 1 Humanities requirements or Group 2 requirements.*

Humanities

The MACRAO Agreement requires 8 credits from more than one department.

ART DEPT.

ART 100 Art Appreciation	3
ART 111* History of Western Art I	4
ART 112* History of Western Art II	4
ART 213 Modern Art History	3
ART 214* Women in Art	3

HISTORY DEPT.

HST 101* Western Civilization to 1500 AD	4
HST 102* Western Civilization from 1500	4
HST 111* US History to 1865	4
HST 112* US History Since 1865	4
HST 211* Native American History	3
HST 212* African-American History	3
HST 213* American Women's History	3
HST 225 American Civil War	3
HST 228 The Vietnam War	3
HST 230 A History of Michigan	3
HST 235 20th Century Europe	3

HUMANITIES DEPT.

HUM 101* Introduction to Humanities I	3
HUM 102* Introduction to Humanities II	3
HUM 111 American Experience	4
HUM 112 American Experience	4
HUM 116* World Cultures	4

WORLD LANGUAGE (INTERMEDIATE LEVEL) DEPT.

FRN 201* Intermediate French I	4
FRN 202* Intermediate French II	4
SPN 201* Intermediate Spanish I	4
SPN 202* Intermediate Spanish II	4

***Note:** Not all four-year schools will accept second year Foreign Language courses as Humanities Distribution credits.*

LITERATURE DEPT.

ENG 210* Children's Literature	3
ENG 240 Introduction to Literature	3
ENG 241* Mythology	3
ENG 242* Women in Literature	3
ENG 245* Native American Literature	3
ENG 254 Shakespeare	3
ENG 256 Environmental Literature	3
ENG 261 British Literature	3
ENG 262 American Literature	3
ENG 263* World Literature	3
ENG 264 Detective Fiction	3
ENG 265 Science Fiction and Fantasy	3
ENG 266 Popular Culture	3
ENG 267 Film as Literature	3
ENG 271* Adolescence and Cultural Diversity	3

MUSIC DEPT.

MUS 110 Music Appreciation Standard Literature	3
MUS 111 Music Appreciation Jazz	3

PHILOSOPHY/RELIGION DEPT.

PHL 101* Introduction to Philosophy	3
PHL 105* Critical Thinking	3
PHL 121* Western Religions	4
PHL 122* Eastern Religions	4
PHL 181 Old Testament	4
PHL 182 New Testament	4
PHL 201* Ethics	3
PHL 202* Contemporary Ethical Dilemmas	3
PHL 222 The World of Jesus	4
PHL 223 Jesus and Early Christianity	4

Science/Math

The MACRAO Agreement requires 8 credits from more than one department including a lab class.

ASTRONOMY DEPT.

AST 109-AST 109L Planetary Astronomy	4
AST 119-AST 119L Astronomy	4

BIOLOGY DEPT.

BIO 106 - BIO 106L Human Biology	4
BIO 107 - BIO 107L Field Biology	4
BIO 108 - BIO 108L Plant Biology	4
BIO 110 - BIO 110L Essential Biology	4
BIO 115 - BIO 115L Cell, Plant and Ecosystem Biology	4
BIO 116 - BIO 116L Cell and Animal Biology	4
BIO 208 - BIO 208L Microbiology	4
BIO 215 Genetics (no lab)	3
BIO 216 Genetics Lab	1
BIO 227 - BIO 227L Human Anatomy and Physiology I	5
BIO 228 - BIO 228L Human Anatomy and Physiology II	5
BIO 250 - BIO 250L Natural History of Vertebrates	4
BIO 260 - BIO 260L General Ecology	5
BIO 268 Biochemistry (no lab)	3
BIO 270A Ecological Field Studies (lab only)	2
BIO 270B Campus Botany (lab only)	2

CHEMISTRY DEPT.

CHM 101 - CHM 101L	Introductory Chemistry.....	4
CHM 150 - CHM 150L - 150R	General Chemistry I.....	5
CHM 151 - CHM 151L - 151R	General Chemistry II.....	5
CHM 250 - CHM 250L	Organic Chemistry I.....	5
CHM 251 - CHM 251L	Organic Chemistry II.....	5

ENVIRONMENTAL SCIENCE DEPT.

ENV 103 - ENV 103L	Earth Science	4
ENV 104 - ENV 104L	Life of the Past	4
ENV 111 - ENV 111L	Physical Geology	4
ENV 112 - ENV 112L	Historical Geology	4
ENV 117 - ENV 117L	Meteorology and Climatology	4
ENV 131 - ENV 131L	Oceanography	4
ENV 140 - ENV 140L	Watershed Science	4
ENV 210 - ENV 210L	Fundamentals of Soil Science	4
ENV 231 - ENV 231L	Environmental Science	4
ENV 270A	Michigan Basin Geology (lab only).....	2
ENV 270B	Field Mapping Techniques (lab only).....	2
ENV 270C	Pre-Cambrian Geology of MI (lab only).....	2

MATHEMATICS DEPT.

MTH 116	Intro to Computer Science	4
MTH 121	College Algebra.....	4
MTH 122	Trigonometry.....	3
MTH 131	Intro to Probability and Statistics.....	3
MTH 140	College Algebra and Trigonometry.....	5
MTH 141	Calculus I	5
MTH 142	Calculus II	5
MTH 241	Calculus III	4
MTH 251	Differential Equations	4

PHYSICS DEPT.

PHY 105 - PHY 105L	Physics of the World Around Us.....	4
PHY 121 - PHY 121L	General Physics I	4
PHY 122 - PHY 122L	General Physics II	4
PHY 221 - PHY 221L - 221R	Prob & Prin of Physics I	5
PHY 222 - PHY 222L - 222R	Prob & Prin of Physics II.....	5

Social Science

The MACRAO Agreement requires 8 credits from more than one department.

ANTHROPOLOGY DEPT.

ANT 112	Introduction to Physical Anthropology	3
ANT 113*	Introduction to Cultural Anthropology	3

ECONOMICS DEPT.

ECO 121	Basic Economics	3
ECO 201	Principles of Macroeconomics	3
ECO 202	Principles of Microeconomics	3

GEOGRAPHY DEPT.

GEO 101*	Introduction to Geography	3
GEO 105-105L	Physical Geography with Lab	4
GEO 108	Geography of U.S. and Canada.....	3
GEO 109*	World Regional Geography.....	3
GEO 110	Economic Geography	3

POLITICAL SCIENCE DEPT.

PLS 101*	Intro to American Politics	3
PLS 132*	Comparative Politics	3
PLS 211*	International Relations	3
PLS 222	Intro. to Political Theory.....	3

PSYCHOLOGY DEPT.

PSY 101	Introduction to Psychology	3
PSY 211	Developmental Psychology	3
PSY 212	Psychology/Exceptional Child	3
PSY 221	Psychology of Personality	3
PSY 223	Intro to Social Psychology	3
PSY 225	Human Sexuality	3
PSY 231	Psychology of Adjustment	3
PSY 250	Abnormal Psychology	3

SOCIOLOGY DEPT.

SOC 101*	Introduction to Sociology	3
SOC 201	Modern Social Problems	3
SOC 211	Marriage and the Family	3
SOC 220*	Gender and Society	3
SOC 231*	Deviance and Criminal Behavior	3

***Cultural Perspectives & Diversity**

(CPD) - One CPD course is required for the ASA and AGS degrees. To meet this requirement, choose any course marked with an asterisk (*) or a 100 level French or Spanish course.

MACRAO Transfer Stamp

Upon completion of all Group 1 requirements in each of the areas listed above, students must request the Records Office stamp their transcript. It will state, "MACRAO Agreement satisfied."

CPD is not required for the MACRAO Stamp.

Group 2 Courses

All 100-level or higher courses not listed in the Group 1 section are Group 2 courses.



Course Learning Options

Linked Courses

This approach offers students an opportunity to “link” the content of a course such as the reading and writing of composition to the content of classes in areas such as business and science. Sections are generally small to allow for individual attention, and when the same students take the same sections of a composition and business class, for example, they become a “learning community” and can write composition papers about business topics, enhancing the learning in both classes. For more information, contact the Business, Communications or Humanities academic areas.

Work-Based Learning

NMC provides various work-based learning options.

Internships

Internship opportunities are offered for students who wish to integrate academics with professional work experience. Students can earn college credit while working in positions related to their academic and career goals. Contact the Office Manager in the academic area where you would like to pursue your internship.

Service Learning

(For credit or non credit)

A Service Learning Internship is a method of earning college credit in a supervised field experience. It is an opportunity for students who want to explore career or interest areas, apply classroom theory to a real situation, or gain practical experience for resume building. It is also an opportunity to earn credits while giving some of your talents to the community as a volunteer. Service Learning Internships are arranged between the student, supervising faculty, field supervisor, and service learning coordinator in any academic area. Up to four internship elective credits can be applied to graduation. Students may also do non-credit volunteering using the same process. For more information, (231) 995-1294.



MACRAO Transfer Agreement

The Michigan Association of College Registrars and Admissions Officers (MACRAO) has adopted an agreement to help students transfer more easily from Michigan community colleges to participating four-year colleges and universities. The agreement provides for transferability of up to 30 semester credits to meet many (in some cases all) of the General Education Requirements at participating Michigan institutions. Some participating institutions include provisos with limitations and exceptions, which may be based on the student's program of study. Students should check with NMC advisors and admissions personnel at the transfer institution to learn about an institution's level of participation. Also, go to www.macrao.org for more information.

The following courses satisfy the MACRAO agreement requirements:

1. English Composition: MACRAO specifies minimum of 6 credit hours, which can be fulfilled through completion of NMC's ENG 111 and 112 English Composition.
2. Humanities: 8 credits from Group 1. Courses must be taken in more than one department.
3. Natural Science: 8 credits from Group 1 Natural Sciences (with at least one lecture/laboratory course). Mathematics may be included in this category. Courses must be taken in more than one department.
4. Social Sciences: 8 credits from Group 1 Courses must be taken in more than one department.

All courses which meet MACRAO requirements are listed as “Group 1 Courses” on pages 56-57 of this catalog.

When students have completed the MACRAO requirements, they should notify the NMC Records Office so their transcripts will be noted “MACRAO AGREEMENT SATISFIED.” Completion of the ASA degree will fulfill the MACRAO requirements. However, it is not necessary to complete the entire associate degree to satisfy the MACRAO agreement or to transfer to four-year schools.

If you've received the MACRAO stamp from another Michigan community college, NMC will honor this agreement. However, courses transferred in below a 2.0 will not count toward the total credits required for the degree.

NMC.
Find it here.

Be Prepared to Transfer

About half of NMC students enroll with the intention of transferring to a four-year school to complete their degree. This checklist will help you transfer smoothly. If you want to complete your degree in Traverse City, you can choose from more than 50 programs offered through NMC's University Center partners. More information is on page 22-23.

Meet with an NMC Counselor or Academic Advisor

- ☐ Discuss your transfer plan including associate degree requirements, general education, and transferability of courses.
- ☐ Right from the beginning, be sure you take NMC courses that will transfer.

Evaluate Colleges and Decide Early!

- ☐ Investigate entrance and degree requirements for four-year institutions.
- ☐ Consider the options available for colleges including setting and character, cost, size of school, teacher/student ratio, educational opportunities, program options and accreditation status.
- ☐ Visit the Advising Center to review four-year institution transfer guides and resource materials, or visit www.nmc.edu/advising. Ask about the MACRAO Transfer Agreement.
- ☐ Visit with representatives of four-year transfer institutions visiting NMC.
- ☐ Investigate the web page of your transfer institution.

Seek Advising

- ☐ Contact the transfer school admissions office and speak with an advisor specializing in transfer.
- ☐ Note the name of the advisor you spoke with - remember to keep accurate records of your discussions (who, what, when) and make copies of everything you send.
- ☐ Review application procedures and time lines for admission and financial aid.

Visit Transfer School

- ☐ Call the Admissions Office and schedule a visit. Request a meeting with a student and/or advisor in your major area and a campus tour.
- ☐ Do this as early in your academic career at NMC as possible.

Apply Early!

- ☐ Complete your applications for admission and financial aid.
- ☐ Determine deadlines for financial aid, including scholarships and transfer funding, as well as major and housing applications.
- ☐ Send necessary documents including transcripts from NMC and all other colleges attended, high school transcripts, ACT scores and other scores as required. (Keep copies for your file.)
- ☐ Send a final copy of your transcripts from NMC to the school after completion of your courses at NMC.
- ☐ Verify that your transfer school received a complete file.

Transfer Options

Some students select a course of study that requires a four-year degree of which two years may be completed at NMC through completion of the Associate in Science and Arts degree (ASA). See page 52 for ASA degree requirements. Visit www.nmc.edu/advising for additional information.

Accounting

NMC Code 733

The Accounting Program contains a blend of specialized classes and liberal arts studies to prepare students for today's competitive, complex, and changing business world. Students who plan to pursue a bachelor's degree should refer to NMC's degree requirements for the Associate in Science and Arts (ASA) degree. Also, transfer students should familiarize themselves with the requirements of the school where they plan to complete their bachelor's degree. Students interested in a bachelor's degree may also elect to stay in Traverse City and transfer to the University Center.

Anthropology

Anthropology is the study of humanity. Archaeology is the study of the material humans leave behind. Students planning to pursue degrees in anthropology or archaeology at four-year colleges or universities should take these courses. Introduction to cultural anthropology is a required course for many areas of study.

NMC offers specialty courses in Nautical and Underwater archaeology that may not be found at larger institutions. The Nautical Archaeology Society courses that are taught at NMC offer and internationally recognized certificate in nautical archaeology. This area of study can include field-work and research activities in Northwestern Michigan, as well as, application of advanced technologies. Students planning careers in the following field may find these courses useful: offshore oil and gas industry, underwater search and recovery (such as police divers), maritime and naval, university research, homeland security, commercial surveying, remote sensing (applied water-related technologies), cultural heritage development and management. Contact Mark Holley for more information at mholley@nmc.edu. See page 98 for course listings.

Art/Fine Arts

NMC Code 711

The Fine Arts courses are designed for students who plan to transfer to a four-year college or university for a Bachelor's or Master's in Fine Arts (BFA or MFA). Careers for students specializing in Fine Arts with a bachelor's or master's degree include education, museum/gallery management, or self-employment as an artist.

Students specializing in Fine Arts while completing an Associate of Science and Arts degree at NMC will pursue a program of study which includes Drawing, Design (2-D and 3-D Design), Life Drawing, and Art History and may be able to specialize in one or more of the following areas: ceramics, computer graphics, painting, photography, and watercolor painting. Students are urged to discuss course

selection early with transfer schools since portfolio requirements for admission vary. See page 52 for Associate in Science and Art degree requirements.

Astronomy

NMC Code 717

NMC offers courses that focus on Observational, Planetary, and Stellar Astronomy. Students planning on transferring to pursue a bachelor's degree in this area should also take course work in Mathematics and Physics. See page 101.

Biology

NMC Code 702

Individuals planning to pursue a four-year degree in Biology should select from courses beginning on page 105. In addition, students should select courses in Mathematics, Chemistry and Physics.

Business Administration

NMC Code 734

Students planning to pursue a four-year degree in Business Administration should follow NMC's degree requirements for the ASA or AAS degree (depending on the transfer institution) AND familiarize themselves with the requirements of the school of choice for their bachelor's degree.

Chemistry

NMC Code 727

Students planning on transferring to pursue a bachelor's degree in Chemistry will pursue course work which includes credits selected from those beginning on page 109. In addition to taking Chemistry courses, students with an emphasis in Chemistry gain a solid background in Math and Physics.

Child Development

NMC Code 722

Child Development courses, such as Early Childhood Education and Guiding Young Children are designed to prepare students to work with children and their families. Students may be seeking a career as the director of a child care program, a paraprofessional/teacher's aide in the school system, a lead teacher in a daycare/preschool setting, a daycare teacher's aide, or preparing for a Bachelor's degree in Child Development. CD 101, CD 202, CD 203, CD 204, CD 206, CD 220, CD 230, PSY 212 and SOC 211 are required classes to meet the Child Development concentration. If you are pursuing elementary education, please consult the transfer guide from the transferring school, or see an advisor.

Communications

NMC Code 704

Communications as a separate field of study may include a variety of careers and specialties, ranging from media and public relations to technical writing. It is also an important component of other programs of study or careers, including computer science, human services, health occupations and art therapy.

Criminal Justice

NMC Code 706

NMC now offers a Criminal Justice program in collaboration with other colleges through the Michigan Community College Virtual Learning Collaborative. This program may

involve agreements that lead to a four-year degree from another college/university. Visit www.nmc.edu/flo for current information on the status of this program, the courses, program requirements, or articulation agreements.

Economics

NMC Code 712

The most basic and enduring strength of economics is that it provides a logical and orderly way of looking at contemporary issues. It draws upon geography, history, philosophy and mathematics to address topics ranging from how an individual, household or firm, can make sound decisions to social issues, such as how to confront unemployment, inflation or environmental decay. As a result, economics is widely recognized as a solid background for many jobs and professions in the private and public sectors. Students interested in this field of study will select courses from among those on page 118.

Education

NMC Code 708

NMC offers an introductory course to teaching as a career and prepares student for further study in education at transfer institutions. Transfer requirements vary greatly. Go to www.nmc.edu/advising to view NMC transfer guides.

Engineering

NMC Code 709

The NMC engineering curriculum parallels engineering programs offered during the first two years at other colleges and universities. Traditionally, these first two years emphasize the tools and theories that provide background for all engineering fields. Completion of the following program requirements will prepare most students for transfer to a four-year engineering program.

Northwestern Michigan College has joined with Michigan Technological University, Kettering University, and Lake Superior State University to offer a two plus two program whereby a student attends NMC for the first two years and then completes the final two years of an engineering degree at one of the participating four-year institutions. A student admitted into the two plus two program at NMC has the added advantage of a guaranteed place in the major of their choice at one of the four year institutions.

ENGINEERING REQUIREMENTS Credits: 82-84

General Education Credits as required for ASA.....	30-32
Chemistry*: CHM 150.....	5
Mathematics**: MTH 141, 142, 241, and 251.....	18
Physics: PHY 221 <i>and</i> 222.....	10
Engineering: EGR 101, 113, 131, 201, 202, 203.....	19

Note: Use this list of courses as a guide only. It is not applicable for all engineering specialties or all schools of engineering. It is important to follow specific requirements for each engineering program available in transfer guides at www.nmc.edu/advising or in the Advising Center. Students who plan to earn an associate degree at NMC before transferring should consult an advisor for assistance in modifying this schedule.

Engineering Certificate

NMC Code 079

ENGINEERING REQUIREMENTS

Credits: 52

Chemistry: CHM 150	5
Mathematics: MTH 141, 142, 241, and 251.....	18
Physics: PHY 221 <i>and</i> 222.....	10
Engineering: EGR 101, 113, 131, 201, 202, 203.....	19

English

NMC Code 710

Students wishing to concentrate their studies in the field of English may be preparing for careers in writing or teaching. English is also crucial to many other careers since writing and reading are high-demand skills in most professions. Students planning to transfer to complete a bachelor's degree in English should pursue an Associate in Science and Arts degree program that includes credits selected from among the courses beginning on page 121.

Environmental Science

NMC Code 717

The study of Environmental Science includes courses in Geology, Biology, Meteorology, Chemistry, Soils, Oceanography and Watershed Science. Students planning on transferring to pursue a bachelor's degree in any of these areas will choose a program of study which includes courses selected from those beginning on page 124. Students are encouraged to contact a faculty member in the Environmental Science department to learn more about employment opportunities and for assistance with class scheduling.

Freshwater Studies

Economy and Society

NMC Code 592

Global Freshwater Policy and Sustainability

NMC Code 591

Science and Technology

NMC Code 593

Students planning to pursue a four-year degree in Freshwater Studies should follow NMC's degree requirements for the ASA degree on page 52. Students are strongly encouraged to consult a Freshwater Studies advisor for scheduling guidelines and degree selection.

General Liberal Arts/Science NMC Code 712

Students interested in transferring to pursue a bachelor's degree should enroll in the General Liberal Arts/Science area of study if they are undecided. Students planning on pursuing this avenue will select liberal arts and sciences courses from the course descriptions beginning on page 97.

General Studies Certificate

Students are able to have a certificate that would be used for the general education basis for the AAS degree. The certificate can either be connected with occupational specialty courses to meet the requirements of other certificates, a specific AAS, or stand-alone until the students determine which direction they wish to pursue beyond the certificate.

COURSE REQUIREMENTS

Credits: 17-18

ENG 111 <i>and</i> ENG 112 <i>or</i> BUS 231 <i>or</i> ENG 220	7-8
Social Science Group 1	3
Science Lab	4
Humanities Group 1.....	3
Math competency of AAS degree.....	(4)

Geography*NMC Code 726*

NMC offers course work in Physical Geography and Introduction to Geography. Regional courses are also offered that focus on the United States and Canada and the World. In addition, a tools course concentrating on Geographic Information Systems (GIS) is offered. Students planning on pursuing a rewarding career in Geography are encouraged to meet with the Geography Department Head for help in course selection. See page 126 for course listings in Geography.

Geology*NMC Code 717*

Students interested in pursuing a career as a Geologist will take Environmental Studies courses, including Physical and Historical Geology. In addition, students will complete course work in Chemistry, Physics, and Mathematics.

History*NMC Code 730*

As a separate field of study within the humanities, history will prepare students to enter secondary education, journalism, the archival and museum professions, and a variety of public history positions upon completion of at least a bachelor's degree. It will also prepare students for entering professional and graduate schools in law and in fields that will enable graduates to teach and do research in institutions of higher learning.

Mathematics*NMC Code 715*

Students planning on transferring to complete a bachelor's degree in Mathematics will pursue course work that includes MTH 141, MTH 142, MTH 241, and MTH 251. Other suggested courses include PHY 221, PHY 222 & MTH 116.

Music*NMC Code 716*

Professional opportunities for a skilled musician are endless in that music, in some way, touches our lives every day in many ways. The study of music offers a vast variety of career options including: music education, instrumental music, vocal performance, conducting, composing, music for worship, music business, instrument making and repair, music publishing, music communications, recording industry, and in the TV and radio industry.

NMC offers students the opportunity to complete the first two years of music-major coursework in a creative and supportive environment. Students receive individualized instruction from our dynamic faculty in classes designed for students' success. Standard music-major coursework includes: Music Theory, Sight Singing and Ear Training, Group Piano Instruction, Applied Instruction (private lessons), and participation in NMC Music Ensembles. Upon successful completion of the two-year program, students will have earned an Associate in Science and the Arts degree that is transferable to most four-year institutions of higher learning.

Students interested in careers in music production and sound recording may enroll in our Audio Tech program – a program that will prepare students for a career in the audio technology field. Those studying Audio Tech would enroll in our sequence of courses, including: Music Theory, Sight Singing

and Ear Training, Group Piano Instruction, Applied Instruction, Sound and Recording Techniques, Signal Processing, Midi Processing, and Recording Practicum. Students will have the opportunity to learn, and work with, industry-standard hardware and software recording platforms including: Pro Logic, Digital Performer, and Pro Tools. While completing coursework in the Audio Tech program, students will have the opportunity to earn platform-specific certification, professional credentials of value, and an Associate degree.

NMC also offers many opportunities for those students pursuing non-music degree paths, but interested in continuing their participation in a music program. Any NMC student (music-major or not) may enroll for Applied Instruction and may participate in any of our NMC Music Ensembles: NMC Chamber Singers, NMC Grand Traverse Chorale, NMC Concert Band, NMC Jazz Ensemble, and the NMC Vocal Jazz Ensemble. Other opportunities (chamber groups, percussion ensembles, jazz combos, etc.) are also available for interested NMC students.

Performing Arts**DANCE***NMC Code 707*

Students wishing to pursue an interest in the field of dance should take the courses in dance on page 117 and consult with an advisor and the dance faculty member before their first semester at NMC.

THEATER*NMC Code 707*

Students interested in the field of theater at NMC will study acting and play production. Course work in this area will also include credits chosen from the public speaking, communications, and literature areas. Students planning to transfer to complete a bachelor's degree in theater should pursue an Associate in Science and Arts degree program that includes credits from the courses on page 157.

Philosophy and Religion*NMC Code 729*

Careers in the fields of philosophy and religion include college teaching and research, secondary education, as well as positions as ministers, priests, or rabbis. Other potential careers for those who specialize in religion are pastoral administration, religious education, church office management, and church mission work. The fields of clinical medicine and medical research as well as commercial business fields like accounting are employing ethicists, a specialized branch of philosophy.

Students seeking to transfer to a four-year college or university to major in philosophy or religion may complete basic course work while at NMC. That course work will include credits selected from those courses on page 152-153.

Physical Education

Physical Education activity courses are offered to students wishing to expand personal interests, health and fitness, recreation, and sports skills. Most Physical Education courses provide a starting point for students transferring to four-year institutions and who seek a Physical Education major or minor.

Physics

NMC Code 717

Students planning on transferring to complete a bachelor's degree in Physics will pursue course work which includes credits selected from those beginning on page 153. These students should also include Calculus I, II, & III, Differential Equations, and General Chemistry I & II.

Plant Science, Applied

FRUIT PRODUCTION

NMC Code 581

LANDSCAPE & NURSERY

NMC Code 582

TURFGRASS MANAGEMENT

NMC Code 583

VITICULTURE

NMC Code 580

Students interested in pursuing a four-year degree in Plant Science should follow a general education curriculum with courses in science, including Chemistry and Biology. In addition, students may take technical courses in soils, plants and plant diseases from Michigan State University at the NMC University Center. See page 92 for course requirements.

Political Science

NMC Code 725

Political science as a field includes the study of American politics, comparative politics, international relations, political theory, and political economy. Undergraduate courses in political science are an important component of any liberal arts education as students gain important knowledge concerning the political structures that shape our world. Courses in political science are especially useful for students pursuing careers or advanced degrees in public policy, law, business, economics, social work, education, history, and, of course, politics. Bachelors and graduate degrees in political science and public policy offer career opportunities in a variety of areas such as education, policy research, law, and international business. Students interested in political science courses, see page 154.

Pre-Law

NMC Code 718

Pre-law is a major often selected by students interested in pursuing careers in government or law.

Pre-Med, Pre-Dental, Pre-Vet

NMC Code 713

The medical sciences major is designed for pre-professional students interested in graduate training in the medical field.

Psychology

NMC Code 724

Students interested in the following fields of psychology, such as counseling, social work, research or teaching, may select from courses such as Introduction to Psychology, Introduction to Social Psychology, Developmental Psychology, Exceptional Child, Human Sexuality, Abnormal Psychology Psychology of Personality and Psychology of Adjustment.

Science & Arts Certificate

Students are able to use the general education requirements as the basis of an ASA or as a one-year transfer program since it fulfills the state's MACRAO agreement.

COURSE REQUIREMENTS

Credits: 32

- ENG 111 *and* ENG 112 8
- Group 1 Courses from two different
Social Science Disciplines 8
- Group 1 Courses from two different
Humanities Disciplines 8
- Group 1 Courses from two different
Science/Math Disciplines 8
- Math competency of ASA degree:..... (4)
- COMPASS placement into MTH 121 *or* higher, *or*
- Successful completion of MTH 111 or higher with a 2.0

Social Work

NMC Code 723

The social work courses are designed to transfer to other four-year schools with certified social work programs. It is specifically designed to fit into the Ferris State University Social Work Program at the University Center in Traverse City and on the Ferris main campus in Big Rapids. When choosing this program of study, it is highly recommended to meet with the social work coordinator; call (231) 995-1294. This will assist you in building a program that will transfer smoothly. Social work is a rapidly growing field that employs people in many different areas of work and requires very specific training and course work. Students interested in this field of study will select courses from among those beginning on page 157.

Sociology

NMC Code 720

Sociology is the study of the social context of human behavior. It includes the study of social change; socialization of group attributes such as social class, race, gender and age; and the workings of our social institutions. Courses in sociology are an important component of any liberal arts education, especially involving critical thinking and an understanding of diversity. It is also a major study for those interested in a wide variety of careers including teaching, social work, public policy, criminal justice, law, non-profit organizations, and social research. See page 156 for course listings.

Visual Communications

NMC Code 728

Students completing the Visual Communications program at NMC earn an Associate in Applied Science degree. After completion of the AAS degree, students can take a third-year option in Visual Communications and earn an AAS in Creative Management in Art Direction that will aid in local employment/internship while exposing the student to marketing and business-related classes. See page 158 for course listings.

World Languages

NMC Code 731

World Languages as a field of study at NMC includes specialization in American Sign Language, French, and Spanish. In a world of international telecommunications and interdependent economies, language specialization is an important component for those planning careers in business, communication, or teaching.

NMC.
Find it here.

Occupational Programs

Occupational degrees and certificate programs prepare students to enter the workforce through development of technical specialties and related skills appropriate to the chosen occupational area. See the following program listings for specific program requirements.

Each Occupational program has specific learning outcomes that are assessed each year. Assessment methods vary from program to program. Specific outcomes are available from the academic chair. Students who would like to know how a specific academic area meets these outcomes should contact the academic chair of that area.

Accounting

Associate in Applied Science Degree *NMC Code 103*

This program will prepare students to begin a career in accounting. Graduates will be prepared to work as bookkeepers and entry-level accountants in accounts receivable, accounts payable, payroll, and other entry-level areas of accounting. Students considering transfer should see an advisor.

General Education Requirements **Credits: 21-22**

Communications: ENG 111 *and either* BUS 231
or ENG 1127-8
 Humanities: PHL 201 *or* PHL 202.....3
 Mathematics: Placement into MTH 121 *or* higher,

or completion of MTH 111*4

Science: Any Group 1 course with a lab4

Social Sciences: ECO 2013

* These credits may be used as directed electives.

Occupational Specialty Requirements **36**

ACC 121 Accounting Principles I4

ACC 122 Accounting Principles II4

ACC 221 Intermediate Accounting I.....4

ACC 222 Intermediate Accounting II4

BUS 101 Introduction to Business3

BUS 105 Business Math**3

BUS 155 Interpersonal Communications3

BUS 261 Business Law I.....3

CIT 100 Computers in Business-An Intro3

CIT 210 Microsoft Office - Excel3

CIT 216 Computerizing Accounting Systems.....2

Directed Electives (Choose any combination) **11**

ACC 225 Cost/Management Accounting.....3

ACC 290 Accounting Internship.....3

ECO 202 Principles of Microeconomics.....3

MGT 241 Principles of Management3

MKT 201 Principles of Marketing3

MTH 111 Intermediate Algebra***4

MTH 131 Probability and Statistics3

** It is recommended that BUS 105 be taken before
 or concurrently with ACC 121.

***Or a higher level math course, excluding MTH 116.

Program Requirements **68-69**

Administrative Support Specialist

Certificate of Achievement (Level III) *NMC Code 003*

Well-trained office professionals continue to be in demand and play an integral role in the successful operation of an organization. They work as a team with managers, professionals, and other support staff to control and manage administrative operations.

The Administrative Support Specialist Certificate builds on the Computer Studies-Office Applications Specialist Certificate and focuses on specific skills which area employers consider essential.

Certificate Requirements **Credits: 50**

Completion of all courses required for the
 Office Applications Specialist Certificate (see page 73) 16

ACC 121 Accounting Principles I4

BUS 101 Introduction to Business3

BUS 155 Interpersonal Communications3

BUS 231 Professional Communications3

BUS 290 Business Administration Internship.....3

CIT 109B Keyboarding II*2

CIT 119 Microsoft Office - Word.....3

CIT 122A Computer and Internet Basics I.....1

CIT 122B Computer and Internet Basics II1

CIT 124 Microsoft Office - PowerPoint.....2

CIT 170 Microsoft Office - Access.....3

CIT 210 Microsoft Office - Excel3

PHL 105 Critical Thinking3

* CIT 109A Keyboarding I or equivalent skills of 32 WPM
 with 5 or fewer errors required.



Automotive - Automotive Service Technology

Associate in Applied Science Degree NMC Code 560

This program is designed for either the person with little or no prior experience or the skilled technician who needs to keep pace with current technology. Students may take the classes they need to update skills, pursue an Associate in Applied Science degree which combines automotive technician classes with courses in the liberal arts and sciences, or work toward a Master Technician Certificate which qualifies graduates to enter the workplace as entry-level state-certified technicians. Students may also choose from three specialized certificates: Hybrid Technology, Under Car Specialist or Electrical and Drivability Specialist. The certificates are explained in more detail in the proceeding pages. All eight state or ASE certifications must be passed to be awarded the AAS degree or Master Technician Certificate.

Day and evening classes allow technicians at every level to develop new skills at convenient times. The program is a series of modules, each designed to teach an individual system. This flexibility allows the more experienced technician to learn a specific system while the beginning technician can combine the modules for a complete course in automotive technology.

Foundation Requirements

For successful completion of the AT courses, placement into ENG 111 and completion of MTH 08 or placement into MTH 23 is recommended.

Certificate Requirements Credits: 17-18

Communications: ENG 111 *and either* BUS 231 *or*

ENG 112 *or* ENG 220.....7-8

Humanities: Any Group 1 course3

Mathematics: Placement into MTH 111 *or* higher, *or* completion of MTH 23* (4)

Science: Any Group 1 course with lab4

Social Sciences: Any Group 1 course3

* These credits do not count toward degree requirements.

Occupational Specialty Requirements 59

AT 100** Automotive Service Basics2

AT 110 Automotive Brake Systems5

AT 120** Automotive Electrical I5

AT 220 Automotive Electrical II5

AT 130 Engine Performance I.....5

AT 230 Engine Performance II.....4

AT 140 Suspensions and Steering.....4

AT 150 Automatic Transmissions.....6

AT 160 Engine Repair.....6

AT 170 Heating and Air Conditioning4

AT 180 Manual Drivetrain and Axles.....6

AT 200 Service Department Management2

AT 210 Hybrid Technology.....5

All eight state or ASE certifications must be passed to be awarded the AAS degree or Master Technician Certificate.

**May be waived with appropriate work experience or education.

Program Requirements 76-77

Automotive - Electrical & Drivability Specialist

Certificate of Achievement (Level II) NMC Code 031

This certificate is designed to train students in the automotive systems related to the operation of the engine and its control systems. Emphasis is placed on the automotive electrical and electronic control systems. For students to be awarded this Electrical and Drivability Specialist certificate, they must pass the related State of Michigan exams or ASE test for all five of the required automotive courses.

Foundation Requirements

For successful completion of the AT courses, placement into ENG 111 and completion of MTH 08 or placement into MTH 23 is recommended.

Certificate Requirements Credits: 32

AT 100* Automotive Service Basics2

Required Courses

AT 120 Automotive Electrical I5

AT 220 Automotive Electrical II5

AT 130 Engine Performance I.....5

AT 230 Engine Performance II.....4

AT 160 Engine Repair.....6

Elective course.....5

* May be waived with appropriate work experience or education.

Program Completion Requirements

A minimum of 32 AT credit hours are required to receive this certificate. Students must choose elective courses from the Automotive Program course list to reach the required credit level.

Must pass the related State of Michigan or ASE test for all of the required automotive courses.



Automotive - Hybrid Technology Specialist

Certificate of Achievement (Level II) NMC Code 034

Foundation Requirements

For successful completion of the AT courses, placement into ENG 111 and completion of MTH 08 or placement into MTH 23 is recommended.

Certificate Requirements

Credits: 32-34

Required Courses

AT 100	Auto Service Basics*	2
AT 120	Automotive Electrical I.....	5
AT 130	Engine Performance I.....	5
AT 150	Automatic Transmission or	
AT 230	Engine Performance II	4-6
AT 160	Engine Repair.....	6
AT 210	Hybrid Technology.....	5
AT 220	Automotive Electrical II	5

*May be waived with appropriate work experience or education.

Program Completion Requirements

A minimum of 32 AT credit hours are required to receive this certificate. Students must choose elective courses from the Automotive Program course list to reach the required credit level.

Must pass the related State of Michigan or ASE test for all of the required automotive courses.

Automotive - Master Automotive Technician

Certificate of Achievement (Level III) NMC Code 001

State and federal levels of certification are offered.

Foundation Requirements

For successful completion of the AT courses, placement into ENG 111 and completion of MTH 08 or placement into MTH 23 is recommended.

Certificate Requirements

Credits: 59

AT 100*	Automotive Service Basics	2
AT 110	Automotive Brake Systems	5
AT 120*	Automotive Electrical I	5
AT 220	Automotive Electrical II	5
AT 130	Engine Performance I.....	5
AT 230	Engine Performance II.....	4
AT 140	Suspensions and Steering.....	4
AT 150	Automatic Transmissions.....	6
AT 160	Engine Repair.....	6
AT 170	Heating and Air Conditioning	4
AT 180	Manual Drivetrain and Axles.....	6
AT 210	Hybrid Technology.....	5
AT 200	Service Department Management	2

Must pass all eight (8) State or ASE certification tests to be awarded this certificate.

*May be waived with appropriate work experience or education.

Automotive - Under Car Specialist

Certificate of Achievement (Level II) NMC Code 032

This certificate is designed to train students in the systems underneath the automobile. These systems include brakes, suspension, and drive train. For students to be awarded this Under Car Specialist certificate, they must pass the related State of Michigan or ASE test for all five of the required automotive courses.

Foundation Requirements

For successful completion of the AT courses, placement into ENG 111 and completion of MTH 08 or placement into MTH 23 is recommended.

Certificate Requirements

Credits: 32

AT 100*	Automotive Service Basics	2
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Required Courses

AT 110	Automotive Brake Systems	5
AT 120	Automotive Electrical I.....	5
AT 140	Suspension and Steering.....	4
AT 150	Automatic Transmissions.....	6
AT 180	Manual Drive train and Axles.....	6
	Elective course.....	4

*May be waived with appropriate work experience or education.

Program Completion Requirements

A minimum of 32 AT credit hours are required to receive this certificate. Students must choose elective courses from the Automotive Program course list to reach the required credit level.

Must pass the related State of Michigan or ASE test for all of the required automotive courses.



Aviation

Associate in Applied Science Degree *NMC Code 562*

General Education Requirements **Credits: 17-18**

Communications: ENG 111 <i>and either</i> ENG 112 <i>or</i> ENG 220 <i>or</i> BUS 231	7-8
Humanities: Any Group 1 Course	3
Mathematics: Placement into MTH 111 <i>or</i> higher, <i>or</i> completion of MTH 23*	(4)
Science: Any Group 1 Course with lab	4
Social Sciences: Any Group 1 course	3

* These credits do not count toward degree requirements.

Occupational Specialty Requirements **23**

AVF 111 Private Flight	5
AVG 101 Private Pilot Ground School	5
AVF 118 Instrument Flight I	1
AVF 130 Instrument Flight II	2
AVG 202 Advanced Aircraft Systems	3
AVG 252 Instrument Ground School	4
AVG 161 Mechanics for Pilots	3

Choose at least 24 credits from the following list of courses:

AVF 230 Commercial Flight I	2
AVF 232 Commercial Flight II	3
AVF 234 Commercial Flight III	2
AVG 251 Commercial Ground School	4
AVF 271 Multi-Engine Rating	1
AVG 190 Aviation Weather	3
AVF 141 Introduction to UAS	2
AVG 261 UAS Ground School	4
AVF 241 UAS Flight School	4
AVG 240 Corporate Aviation Ground	3
AVG 204 Airline Aircraft Ground School	3
AVG 381 Instructor Ground School	5
AVF 274 Tailwheel Flight	1
AVF 275 Seaplane Flight	2
AVF 281 Advanced Cross Country Flight	2
AVF 283 Upset Maneuver Training	1
AVF 284 Instrument Flight Instructor	2
AVF 285 CRM Flight	2
AVF 382 Flight Instructor Rating	4

Students seeking an AAS Degree in Aviation from NMC shall earn the required aviation credits listed for their degree or a combination of three methods:

1. Aviation courses listed in the NMC catalog;
2. Approved transfer credit;
3. NMC competency testing - maximum of 17 aviation credits may be obtained through competency testing, not to include AVF 271, AVF 284, AVF 382 and AVG 381. Testing allowed only with director's approval.

To obtain the Associate in Applied Science Degree, students must complete a minimum of three flight courses listed in this catalog through the normal process for obtaining credit, and complete a minimum of 64 credit hours. All AVF and AVG courses must be completed with a 2.0 grade or higher. Please consult an aviation advisor for scheduling guidelines.

Independent study and specialty courses are also available. Examples: Airline Transport Pilot (ATP), BE-20 Systems, Piper PA-31 Systems, de havilland DHC-6 Systems, Advanced Turbo-prop Systems.

Before beginning flight training, students must obtain a medical certificate from an FAA-approved doctor. Visit www.flightphysical.com or www.faa.gov for a list of FAA - approved doctors. Students must be cleared to fly by the TSA before receiving flight instruction.

Program Requirements

64-65

Bridge Learning Community

Academic and Workforce Training

The NMC Bridge Learning Community is designed for the nontraditional adult learner's transition into higher education or to upgrade workforce skills. This academic program offers skill set development through intensive, hands-on curricula in mathematics, communications (writing, speaking, listening) and technology in a learning community environment. Learners opt for industry-recognized Microsoft certifications and prepare to become online learners as well as lifelong learners as they work through a career development process with employability activities that determine career pathways.

Foundational Bridge Classes **Credits: 15**

BPC 094*	Bridge to Communication	4
BPC 096*	Bridge to Technology	4
CIT 109A	Keyboarding I	2
CIT 118	Microsoft Office - Word Intro	1
CIT 119	Microsoft Office - Word	3
CIT 124	Microsoft Office - PowerPoint	2
MTH 06*	Basic Numerical Skills	2
MTH 08*	Pre-Algebra	4

* Denotes developmental classes.



Business Administration

Associate in Applied Science Degree

Computer Applications	NMC Code 122
Entrepreneur	NMC Code 151
General	NMC Code 105
Management	NMC Code 115
Marketing	NMC Code 107

This program prepares students for the challenges of the ever-changing world of business. Specialized courses and liberal arts studies provide students with a foundation needed to pursue careers characterized by technology, constant change, and increasing competition.

The order in which courses are taken is not critical except where prerequisites are involved. Course substitutions may be made only with the approval of the program coordinator or the academic area chair. Students considering transfer should see an advisor.

General Education Requirements Credits: 17

Communications: ENG 111 <i>and</i> BUS 231	7
Humanities: PHL 202 <i>or</i> PHL 201	3
Mathematics: Placement into MTH 111 <i>or</i> higher, <i>or</i> completion of MTH 23*	(4)
Science: Science Group 1 course with a lab	4
Social Sciences: ECO 201	3

* These credits do not count toward degree requirements.

Occupational Specialty Requirements 35

ACC 121 Accounting Principles I	4
ACC 122 Accounting Principles II	4
BUS 101 Introduction to Business	3
BUS 105 Business Math	3
BUS 155 Interpersonal Communications	3
BUS 261 Business Law I	3
CIT 100 Computers in Business-An Intro	3
CIT 210 Microsoft Office - Excel	3
MGT 241 Principles of Management	3
MGT 251 Human Resources Management	3
MKT 201 Principles of Marketing	3

General Business 12

Any 12 credits from the other four concentration areas.

Areas of Concentration 12

Select at least 12 credits from your area of concentration:

Computer Applications

CIT 124 Microsoft Office - PowerPoint	2
CIT 155 Personal Computer Maintenance	2
CIT 170 Microsoft Office - Access	3
CIT 180 HTML and CSS Programming	2
CIT 213 Networking Technologies	4
CIT 216 Computerized Accounting Systems	2
CIT 233 Project Management	3
CIT 290 CIT Internship	3

Entrepreneur

BUS 262 Business Law II	3
CIT 216 Computerized Accounting Systems	2
CIT 233 Project Management	3
MGT 245 Principles of Entrepreneurship	3
MGT 246 Entrepreneur Marketing/Finance	3
MKT 210 Principles of Selling	3

Management

BUS 262 Business Law II	3
BUS 290 Business Administration Internship	3
CIT 124 Microsoft Office - PowerPoint	2
CIT 216 Computerized Accounting Systems	2
CIT 233 Project Management	3
ECO 202 Principles of Microeconomics	3
ENG 112 English Composition	4
MGT 245 Principles of Entrepreneurship	3
MTH 111* Intermediate Algebra	4
MTH 131 Probability and Statistics	3

Marketing

BUS 262 Business Law II	3
BUS 290 Business Administration Internship	3
CIT 124 Microsoft Office - PowerPoint	2
ECO 202 Principles of Microeconomics	3
ENG 112 English Composition	4
MGT 245 Principles of Entrepreneurship	3
MKT 210 Principles of Selling	3
MKT 241 Principles of Advertising	3
MTH 111* Intermediate Algebra	4
MTH 131 Probability and Statistics	3

* Or a higher level math course, excluding MTH 116

Program Requirements

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Business Administration - Online

Associate in Applied Science Degree

Computer Applications	NMC Code 122
General Studies	NMC Code 105
Management	NMC Code 115
Marketing	NMC Code 107

Online Option for the General Business Concentration:

NMC offers an online alternative for students pursuing an Associate in Applied Science degree with a Business Administration - General concentration. It includes a hands-on internship and computer lab experiences in addition to online classes. Students are strongly encouraged to meet with an academic advisor because not all classes are offered online every semester.

General Education Requirements

Credits: 17

Communications: ENG 111 <i>and</i> BUS 231	7
Humanities: PHL 202 <i>or</i> PHL 201	3
Mathematics: Placement into MTH 111 <i>or</i> higher, <i>or</i> completion of MTH 23*	(4)
Science: Science Group 1 course with a lab	4
Social Sciences: ECO 201	3

* These credits do not count toward degree requirements.

Occupational Specialty Requirements

35

ACC 121 Accounting Principles I	4
ACC 122 Accounting Principles II	4
BUS 101 Introduction to Business	3
BUS 105 Business Math	3
BUS 155 Interpersonal Communications	3
BUS 261 Business Law I	3
CIT 100 Computers in Business-An Intro	3
CIT 210 Microsoft Office - Excel	3
MGT 241 Principles of Management	3
MGT 251 Human Resources Management	3
MKT 201 Principles of Marketing	3

General Area of Concentration

12

Any 12 credits from the following:

BUS 262 Business Law II	3
BUS 290 Business Administration Internship	3
(workplace based - not online)	
CIT 170 Microsoft Office - Access	3
CIT 180 HTML and CSS Programming	2
CIT 213 Networking Technologies	4
ECO 202 Principles of Microeconomics	3
ENG 112 English Composition	4
MTH 111 Intermediate Algebra	4
MTH 131 Probability and Statistics	3

If you are seeking online courses for your specific program that are not currently offered online, check out the Michigan Community College Virtual Learning Consortium at www.vcampus@mccvlc.org for online course options.

CAD/CAM - Advanced Manufacturing

Associate in Applied Science Degree NMC Code 555

As an NMC Advanced Manufacturing student, you will study drafting and design standards, 2D AutoCAD and 3D Solid-Works CAD software, manual machining, CNC and CAM programming, and other related topics. You may seek job opportunities as a CAD drafter or 3D modeler, CNC or CAM programmer, CNC operator, or a blend of these technologies. Manufacturing companies employing the latest technology use 3D parametric modeling (CAD) to create part and assembly models. Computer Numerical Controlled (CNC) machines or dedicated mass production machines are then used to make the parts. Computer Aided Machining software (CAM) generates cutter paths for the machines based on the solid models. Advanced Manufacturing graduates are ready to begin rewarding careers or transfer for a bachelor's degree.

General Education Requirements

Credits: 21-22

Communications: ENG 111 <i>and either</i> ENG 112* <i>or</i> ENG 220	7-8
Humanities: Any Group 1 course	3
Mathematics: Placement into MTH 121 <i>or</i> higher <i>or</i> Completion of MTH 111**	4
Science: PHY 105 <i>or</i> PHY 121*	4
Social Sciences: Any Group 1 course	3

* Recommended for students planning to transfer.

** Students testing out of math or transferring in courses with fewer credits must complete the minimum degree requirements of 64 credits with elective credits from any department.

Occupational Specialty Requirements

43-44

DD 101 Print Reading and Sketching, Mfg.	3
DD 110 Basic Metallurgy	3
DD 120 Computer Aided Drafting (AutoCAD)	2
DD 125 Mechanical Drafting (AutoCAD)	2
DD 150 Detail Drafting	4
DD 160 Tolerancing and GD&T	3
DD 170 Part and Assembly Modeling	4
DD 240 Adv. Part and Assembly Modeling	4
DD 295 Advanced Manufacturing Project <i>or</i> Internship (permission required)	3-4
MFG 111 Math for Manufacturing	3
MFG 113 Machining I	3
MFG 114 Machining II	3
MFG 211 CNC Programming	3
MFG 212 Computer-Aided Machining	3

Program Requirements

64-66

NMC. Find it here.

CAD/CAM - CAD Drafter, Mechanical

Certificate of Achievement (Level II) *NMC Code 027*

Certificate completers learn 2D mechanical drafting and 3D part and assembly modeling using AutoCAD and SolidWorks software. Threads, fasteners, conventional tolerancing, and geometric tolerancing are presented in the context of detail drawings for tooling assemblies. Applied mathematics and conventional machining are also presented. Students are prepared for entry level CAD drafting positions in companies that produce their own products or companies that produce components for other companies.

Certificate Requirements

Credits: 34

DD 101	Print Reading and Sketching, Mfg.....	3
DD 110	Basic Metallurgy.....	3
DD 120	Comp. Aided Drafting (AutoCAD).....	2
DD 125	Mechanical Drafting (AutoCAD).....	2
DD 150	Detail Drafting.....	4
DD 160	Tolerancing and GD&T.....	3
DD 170	Part and Assembly Modeling.....	4
DD 240	Advanced Part and Assembly Modeling.....	4
MFG 111	Math for Manufacturing.....	3
MFG 113	Machining I.....	3
MFG 114	Machining II.....	3
MTH 23	or placement into MTH 111 or higher.....	(4)

CAD/CAM - CAD Trainee, Mechanical

Certificate of Achievement (Level I) *NMC Code 028*

Certificate completers learn basic AutoCAD and SolidWorks functions and demonstrate their abilities by applying these functions to mechanical drafting projects. They are prepared to work under supervision to update CAD drawings or create new drawings similar to a given example. With instruction, completers can learn company standards, practices, and product lines which will increase their value.

Certificate Requirements

Credits: 18

DD 101	Print Reading and Sketching, Mfg.....	3
DD 120	Comp. Aided Drafting (AutoCAD).....	2
DD 125	Mechanical Drafting (AutoCAD).....	2
DD 150	Detail Drafting.....	4
DD 170	Part and Assembly Modeling.....	4
MFG 111	Math for Manufacturing.....	3
MTH 23	or placement into MTH 111 or higher.....	(4)

Child Development

Certificate of Achievement (Level II) *NMC Code 002*

This program is designed to be a building block program. By adding certain classes, a student may complete the requirements for an associate's degree and students may transfer to a college or university to complete a bachelor's degree. Students may also elect to stay in Traverse City and transfer to the University Center.

Receiving NMC's Certificate of Achievement (Level II) in Child Development qualifies individuals to meet the Early Childhood Lead Teacher requirements for the State of Michigan Licensing Rules for Child Care Centers. In addition, the following classes are approved by the National Child Development Associates (CDA) Program. Students completing NMC's Child Developmental certificate program and the CDA credentialing process will meet qualifications for Michigan's Licensing Rules for Early Childhood and/or School Age Care Program Director. A chart showing the breakdown of hours for the CDA functional areas is available in the Social Science Academic Area Office.

Students are encouraged to work closely with the Child Development coordinator to complete this certificate. A 2.0 GPA must be maintained to receive the certificate and 20 of the 36 credits must be earned at NMC.

Child Development Certificate of Achievement Outcomes

Students completing the Child Development Certificate will be able to reliably demonstrate a working knowledge of child development from conception to twelve years of age; possess observation skills and tools to assess, evaluate, and build individualized plans for children; apply curriculum development knowledge to provide age appropriate/ multi-cultural activities and materials; apply environment design knowledge; demonstrate a working understanding of special need children/families in inclusion/self-contained classrooms; possess working knowledge and skills in discipline management, development of self-esteem and prosocial behaviors; apply knowledge of program management and philosophy building; apply knowledge in working with families, including diverse/multi-cultural systems.

Certificate Requirements

Credits: 35-36

CD 101	Early Childhood Education.....	3
CD 202	Human Growth and Development.....	5
CD 203	Guiding Young Children.....	3
CD 204	Early Childhood Curriculum.....	3
CD 206	Infant/Toddler Development.....	3
CD 220	Childhood Program Management.....	3
CD 230	Early Language and Literacy.....	3
CD 290	Service Learning Internship Experience*.....	2-3
ENG 111	English Composition.....	4
PSY 101	Intro to Psychology.....	3
PSY 212	Psychology/Exceptional Child.....	3
MTH 23	or placement into MTH 111 or higher.....	(4)

* This internship can be split over more than one semester.

Computer Studies - Computer Information Technology - General

Associate in Applied Science Degree NMC Code 106

This program gives students comprehensive computer instruction in addition to a background in business and liberal arts. Successful Associate Degree graduates are qualified for entry-level positions as computer technicians, programmers, and other information technology positions.

Students enrolled in this program will be exposed to many facets of the Computer Information Technology Industry which includes programming, web development, databases, hardware, networking, and operating systems. Students will develop software using the latest programming languages and web development tools, create and develop databases using Microsoft Access and SQL, acquire skills needed to assemble/disassemble PCs and troubleshoot hardware and software issues, configure and setup local area networks and work with the latest client and server operating systems.

General Education Requirements Credits: 21-22

Communications: ENG 111 <i>and either</i> BUS 231 <i>or</i> ENG 112	7-8
Humanities: PHL 202 <i>or</i> PHL 105	3
Mathematics: Placement into MTH 121 <i>or</i> higher, <i>or</i> completion of MTH 111*	4
Science: Any Group 1 course with a lab	4
Social Sciences: Any Group 1 course (ECO 201 recommended)	3

* These credits may be used as directed electives.

Occupational Specialty Requirements 51-52

ACC 121 Accounting Principles I	4
ACC 122 Accounting Principles II <i>or</i>	
BUS 101 Introduction to Business	3-4
CIT 110 Programming Logic & Design	3
CIT 156 CompTIA A+® Certification I	3
CIT 157 CompTIA A+® Certification II	3
CIT 170 Microsoft Office - Access	3
CIT 180 HTML and CSS Programming	2
CIT 190 JavaScript Programming	2
CIT 195 .NET Application Programming	3
CIT 210 Microsoft Office - Excel <i>or</i>	
CIT 233 Project Management	3
CIT 213 Networking Technologies	4
CIT 215 Windows Server Environment	3
CIT 248 SQL Server Databases	3
CIT 255 .NET Object-Oriented Programming	3
CIT 256 Linux Administration	3
CIT 280 Systems Analysis and Design	3
CIT 290 CIT Internship*	3

Program Requirements 72-74

* Two competencies are required for the Internship course: a 3.0 GPA in CIT classes (with 20 credits and an overall average of 2.5 and department approval) and a keyboarding competency.

While a 3.0 GPA in CIT classes is required for this internship, an alternative, campus-based internship opportunity is available for those students who do not meet this requirement.

Computer Studies - Computer Information Technology - Developer

Associate in Applied Science Degree NMC Code 108

As everyone and everything becomes networked, the demand for software applications continues to expand. The CIT Developer program targets this need by producing graduates who are effective programmers and solution architects. The Microsoft .NET framework is utilized to deliver practical knowledge of data access and application development, with the goal of getting you as deep as possible into the patterns and practices of modern programming. A solid understanding of good design enables students to easily transition into other development platforms such as Java. Students considering transfer should see an advisor.

General Education Requirements Credits: 21-22

Communications: ENG 111 <i>and either</i> ENG 112 <i>or</i> ENG 220	7-8
Humanities: PHL 105 <i>or</i> PHL 202	3
Mathematics: Placement into MTH 121 <i>or</i> higher, <i>or</i> completion of MTH 111*	4
Science: Any Group 1 with a lab	4
(PHY 105 recommended)	
Social Sciences: Any Group 1 course	3
(ECO 201 recommended)	

* These credits may be used as directed electives.

Occupational Specialty Courses 49

BUS 101 Introduction to Business	3
BUS 155 Interpersonal Communications	3
CIT 110 Programming Logic and Design	3
CIT 170 Microsoft Office - Access	3
CIT 180 HTML and CSS Programming	2
CIT 185 XML Programming	2
CIT 190 JavaScript Programming	2
CIT 195 .NET Application Programming	3
CIT 213 Networking Technologies	4
CIT 215 Windows Server Environment	3
CIT 218 Web App Programming ASP .NET	3
CIT 233 Project Management	3
CIT 248 SQL Server Databases	3
CIT 255 .NET Object-Oriented Programming	3
CIT 275 .NET Solutions Development	3
CIT 280 Systems Analysis and Design	3
CIT 290 CIT Internship	3

Program Requirements 70-71

NMC. Find it here.

Computer Studies - Computer Information Technology-Infrastructure

Associate in Applied Science Degree NMC Code 125

Students receive a comprehensive background in computer hardware, operating systems, local area networking, and inter-network routing and switching. This degree prepares students for the following internationally recognized certifications:

- CompTIA A+® IT Certification
- CompTIA Network+® Certification
- CompTIA Security+® Certification
- Cisco CCNA (Cisco Certified Network Associate)
- MCTS - Microsoft Certified Technology Specialist
- MCITP - Microsoft Certified Information Technology Professional
- MTA - Microsoft Technology Associate

Successful Associate Degree graduates are qualified for entry-level positions as hardware technicians, network administrators, and infrastructure support specialists. Students considering transfer should see an advisor.

General Education Requirements Credits: 17-18

Communications: ENG 111 <i>and either</i> ENG 112 <i>or</i> ENG 220	7-8
Humanities: PHL 105 <i>or</i> PHL 202	3
Mathematics: Placement into MTH 121 <i>or</i> higher, <i>or</i> completion of MTH 111*	4
Science: Any Group 1 course with a lab	4
Social Sciences: Any Group 1 course	3
(ECO 201 recommended)	

* These credits may be used as directed electives.

Occupational Specialty Courses 52

BUS 155	Interpersonal Communications	3
CIT 156	CompTIA A+® Certification I	3
CIT 157	CompTIA A+® Certification II	3
CIT 160	Cisco Internetworking I	4
CIT 161	Cisco Internetworking II	4
CIT 213	Networking Technologies	4
CIT 215	Windows Server Environment	3
CIT 233	Project Management	3
CIT 240	Network Security Management	3
CIT 242	Windows Client Administration	2
CIT 246	Windows Server Infrastructure	3
CIT 247	Windows Server Administration	3
CIT 256	Linux Administration	3
CIT 260	Cisco Internetworking III	4
CIT 261	Cisco Internetworking IV	4
CIT 290	CIT Internship*	3

* Two competencies are required for the Internship course: a 3.0 GPA in CIT classes (with 20 credits and an overall average of 2.0 and department approval), and a keyboarding competency.

While a 3.0 GPA in CIT classes is required for this internship, an alternative, campus-based internship opportunity is available for those students who do not meet this requirement.

Program Requirements 69-70

Computer Studies - Infrastructure Specialist I

Certificate of Achievement (Level I) NMC Code 033

The Infrastructure Specialist I Certificate of Achievement prepares computer professionals to assemble, upgrade, maintain and repair personal computers and work with local area networks. The program is designed to prepare students for the following internationally recognized certifications:

- CompTIA A+® Certification
- CompTIA Network+® Certification
- Microsoft MCTS Certification
- Microsoft MTA Certification

Certificate Requirements Credits: 18

BUS 155	Interpersonal Communications	3
CIT 242	Windows Client Administration	2

For CompTIA A+® Certification:

CIT 156	CompTIA A+® Certification I	3
CIT 157	CompTIA A+® Certification II	3

For CompTIA Network+® Certification:

CIT 213	Networking Technologies	4
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For Microsoft MCTS Certification:

CIT 215	Windows Server Environment	3
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Computer Studies - Infrastructure Specialist II

Certificate of Achievement (Level II) NMC Code 030

Students completing the Infrastructure Specialist I certificate may elect to continue their education and obtain a level II certificate. The Cisco CCNA certification is an industry recognized certification in internetwork routing and switching.

Certificate Requirements Credits: 34

Completion of Infrastructure Specialist I certificate.....			18
CIT	160	Cisco Internetworking I	4
CIT	161	Cisco Internetworking II	4
CIT	260	Cisco Internetworking III	4
CIT	261	Cisco Internetworking IV	4

NMC.
Find it here.

Computer Studies - Infrastructure Specialist III

Certificate of Achievement (Level III) NMC Code 024

After completing the Infrastructure Specialist II certificate students may elect to obtain a level III certificate. The Microsoft MCTS and MCITP certifications are industry-recognized focusing in server and infrastructure environments.

Certificate Requirements		Credits: 52
Completion of Infrastructure Specialist I certificate.....	18	
Completion of Infrastructure Specialist II certificate.....	16	

For Microsoft MCTS and MCITP Certification

CIT 246	Windows Server Infrastructure	3
CIT 247	Windows Server Administration	3

For CompTIA Network+® Certification:

CIT 240	Network Security Management	3
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Occupational Requirements

CIT 233	Project Management	3
CIT 256	Linux Administration	3
CIT 290	CIT Internship	3

Computer Studies - Office Applications Specialist

Certificate of Achievement (Level I) NMC Code 035

The Office Applications Specialist certificate helps meet the demand for qualified and knowledgeable people in today's workplace. It helps students to acquire the desktop applications expertise and basic computer skills needed to work more productively and efficiently with Microsoft Office.

This NMC credential also serves to train candidates for the globally recognized Microsoft Specialist series of certifications. NMC is a Microsoft Office approved testing center, and the certification exams are administered at the Aero Park campus. For more information, please call (231) 995-2247.

Certificate Requirements		Credits: 16
BUS 155	Interpersonal Communications	3
CIT 119	Microsoft Office - Word	3
CIT 122A	Computer and Internet Basics I	1
CIT 122B	Computer and Internet Basics II	1
CIT 124	Microsoft Office - PowerPoint	2
CIT 170	Microsoft Office - Access	3
CIT 210	Microsoft Office - Excel	3

* CIT 109A Keyboarding I of equivalent of 32 WPM with 5 or fewer errors required.

Computer Studies - Computer Support Specialist

Certificate of Achievement (Level III) NMC Code 006

Students complete course work in business and computer operations leading to a certificate. This program is designed to provide students with the necessary skills to work as support specialist or computer technician. Students will have an opportunity to acquire skills using current operating system and application software and gain experience using Local Area Networks. Students will also learn troubleshooting methodologies and develop project management skills.

Certificate Requirements		Credits: 49
BUS 105	Business Math	3
BUS 155	Interpersonal Communications	3
BUS 231	Professional Communications	3
CIT 119	Microsoft Office - Word	3
CIT 122A	Computer and Internet Basics I	1
CIT 122B	Computer and Internet Basics II	1
CIT 124	Microsoft Office - PowerPoint	2
CIT 156	CompTIA A+ Certification I	3
CIT 157	CompTIA A+ Certification II	3
CIT 170	Microsoft Office - Access	3
CIT 210	Microsoft Office - Excel	3
CIT 213	Networking Technologies	4
CIT 215	Windows Server Environment	3
CIT 233	Project Management	3
CIT 242	Windows Client Administration	2
CIT 292	Support Specialist Internship	3
ENG 220	Technical Writing	3
PHL 105	Critical Thinking	3

* CIT 109A Keyboarding I or equivalent skills of 32 WPM with 5 or fewer errors required.



Computer Studies - Industry Certifications

Industry Certifications

For additional information on testing and/or training for any of the certification opportunities listed below, please call (231) 995-1169 or email CIT@nmc.edu. NMC is an authorized Certipoint, Pearson-Vue, and Prometric testing center.



Cisco CCNA Certification - The CCNA certification (Cisco Certified Network Associate) indicates a foundation in, and apprentice knowledge of networking. CCNA certified professionals can install, configure, operate LAN, WAN and dial access services for small networks (100 nodes or fewer), including but not limited to use of these protocols: IP, EIGRP, OSPF, Frame Relay, IP RIP, VLANs Rip, Ethernet, Access Lists.

Cisco Internetworking I through Cisco Internetworking IV are courses offered by the NMC Cisco Networking Academy and provide training for the CCNA Exam.



CompTIA A+® Certification - The CompTIA A+® certification is the industry standard for validating vendor-neutral skills expected of an entry-level IT technician. CompTIA A+® Certification I and CompTIA A+® Certification II are NMC courses and provide the necessary preparation to pass the A+ Essentials and A+ IT Technician Certification exams.

CompTIA Network+ Certification - The CompTIA Network+® certification validates technical competency in network infrastructure and support. Those holding Network+ certification demonstrate critical knowledge of network concepts, network installation and configuration, network media and topologies, network management and network security. Network Technologies is an NMC course that provides the necessary preparation to pass the Network+ Certification exam.

CompTIA Security+ Certification - The CompTIA Security+® certification tests for security knowledge of an individual with experience in networking. The CompTIA Security+® certification validates technical competency in security and covers industry-wide topics, including networking security, compliance and operational security, threats and vulnerabilities, application, data and host security, access control and identity management,

and cryptography. Network Security Management is an NMC course that provides the necessary preparation to pass the Security+ Certification exam.

CompTIA Strata IT Fundamentals Certification - The CompTIA Strata IT Fundamentals certification ensures a knowledge of PC components, functionality, compatibility and related technology topics. The Strata IT Fundamentals certification is ideal for individuals and students preparing to enter the IT workforce and professionals changing careers to IT or technology-related fields. The certificate can be a stepping stone to higher certifications. Personal Computer Maintenance is an NMC course that provides the necessary preparation to pass the Strata IT Fundamentals certification exam.

Microsoft® IT Academy Program Member

Microsoft Certified Technology Specialist (MCTS) and **Microsoft Certified Information Technology Professional (MCITP)** internationally recognized certifications focusing on Microsoft Windows, server and infrastructure environment. Windows Server Environment, Windows Server Infrastructure, and Windows Server Administration are NMC courses that provide the necessary preparation to pass the MCTS Windows Active Directory, MCTS Windows Server Infrastructure, and MCITP Window Server Administration certification exam.



Microsoft Office Specialist - Microsoft Office Specialist certification proves expertise in Microsoft applications. Holders of these credentials stand out as truly knowledgeable people. NMC'S approved Microsoft testing center offers online training classes in Microsoft Word, Excel, Access and PowerPoint.



Microsoft Technology Associate - Microsoft Technology Associate (MTA) certification is a new entry-level credential from Microsoft that validates essential technology knowledge, enabling students to explore academic and career options, and take the first step toward building a successful career in technology. MTA certifications are embedded into the CIT Developer, CIT General, and CIT Infrastructure degree programs and certificates.

Computer Studies - Web Developer I

Certificate of Achievement (Level I) NMC Code 039

This series of Web Developer certificates provides an introduction to both website design and website development. Visual Communication courses enable students to create visually effective sites using graphic design principles and tools. Information Technology courses provide the technical ability to develop interactive, data-driven sites and applications. Students interested in this profession are usually detail and result oriented, self-directed and enjoy working with both people and technology. The certificates may be completed as stand-alone certificates, taken in order, or applied to electives or major area requirements for an Associate in General Studies or an Associate in Applied Science.

Level I Certificate Requirements		Credits: 20
ART 131	2-D Design	3
CIT 110	Programming Logic and Design	3
CIT 180	HTML and CSS Programming	2
CIT 190	JavaScript Programming	2
VCA 127	Digital Imaging	3
VCA 147	Web Design I	3
VCA 150	Digital Graphic Design I	4

Computer Studies - Web Developer II

Certificate of Achievement (Level II) NMC Code 040

Prerequisites: Completion of all Web Developer Certificate Level I courses (20 credits)

Level I Certificate Requirements		Credits: 20
Level II Certificate Requirements		38
BUS 231	Professional Communications <i>or</i>	
BUS 155	Interpersonal Communications	3
CIT 170	Microsoft Office - Access	3
CIT 185	XML Programming	3
CIT 195	.NET Applications Programming	3
VCA 125	Typography I	3
VCA 146	Interactive Animation	3

Computer Studies - Web Developer III

Certificate of Achievement (Level III) NMC Code 041

Prerequisites: Completion of all Web Developer Certificate Level I (20 credits) and Level II (18 credits) courses.

Level I Certificate Requirements		Credits: 20
Level II Certificate Requirements		18
Level III Certificate Requirements		53
CIT 218	Web App Programming ASP .NET	3
CIT 248	SQL Server Databases	3
CIT 255	.NET Object-Oriented Programming	3
CIT 291	Web Internship*	3
VCA 246	Interactive Animation II <i>or</i>	
VCA 247	Web Design II	3

**Two competencies are required for the Internship course: a 3.0 GPA in CIT classes (with 20 credits and an overall average of 2.0 and department approval), and a keyboarding competency.*

While a 3.0 GPA in CIT classes is required for this internship, an alternative, campus-based internship opportunity is available for those students who do not meet this requirement.

NMC.
Find it here.



Construction Technology - Carpentry Technology

Certificate of Achievement (Level I) *NMC Code 061*

Skilled carpenters must knowledgeably use specialized tools; read blueprints; frame structures; install doors, windows, cabinets, insulation, and finish trim; and construct roofs, decks, and stairways. Being versatile opens a wide range of employment opportunities. The curriculum is designed by the industry and aligned with national competency standards. Students receive hands on training in our state-of-the-art science lab. Information: (231) 995-2768.

Certificate Requirements

Credits: 18

CAR 101	Introduction to Carpentry.....	3
CAR 103	Construction Blueprint Reading.....	3
CAR 105	Foundations and Framing	3
CAR 121	Exterior Construction	3
CAR 125	Interior Construction	3
CMT 107	Construction Supervision.....	3

Construction Technology - Electrical Technology

Certificate of Achievement (Level I) *NMC Code 062*

Qualified electricians install, troubleshoot, and repair electrical systems in residential and commercial settings. There is high demand for well-trained electricians nationwide. The curriculum is designed by the industry and aligned with national competency standards. Students receive hands-on training in our state-of-the-art science lab. Information: (231) 995-2768.

Certificate Requirements

Credits: 24

ELE 101	Introduction to Electrical	3
ELE 105	Residential Electrical	3
ELE 121	Electrical Applications.....	3
ELE 125	Electrical Components	3
ELE 131	Electrical Distribution.....	3
ELE 135	Motor Control Circuits.....	3
ELE 141	Commercial Electrical Systems.....	3
ELE 145	Commercial Electrical Controls.....	3

Construction Technology - Facilities Maintenance

Certificate of Achievement (Level II) *NMC Code 063*

Performing facilities maintenance requires knowledge in several areas. This level II certificate covers reading blueprints, general carpentry, tools of the trade, electrical wiring and schematics, and thermodynamics of refrigeration. Also required will be 14 technical electives that can range from drafting to alternative energy integration into a facility. The curriculum is designed by the industry and aligned with national competency standards. Students receive hands on training in our state-of-the-art science lab. Information: (231) 995-2768.

Certificate Requirements

Credits: 32

CAR 101	Introduction to Carpentry.....	3
CAR 105	Foundations and Framing	3
ELE 101	Introduction to Electrical	3
ELE 105	Residential Electrical	3
HVA 101	Introduction to HVAC/R.....	3
HVA 105	Thermodynamics of HVAC/R	3
Technical Electives (See Elective list on page 78)		14

Construction Technology - HVAC/R Technology

Certificate of Achievement (Level I) *NMC Code 064*

There is high demand for qualified technicians in the heating and cooling industry. HVAC/R technicians install, maintain, and repair heating, ventilating, air-conditioning, and refrigeration systems. Because of continuing demand, HVAC/R technicians can usually find employment with good beginning salaries. The curriculum is designed by the industry and aligned with national competency standards. Students receive hands on training in our state-of-the-art science lab. Information: (231) 995-2768.

Certificate Requirements

Credits: 18

HVA 101	Introduction to HVAC/R.....	3
HVA 105	Thermodynamics of HVAC/R	3
HVA 121	Fundamentals of Heating	3
HVA 125	A/C Applications.....	3
HVA 131	Gas Heating Diagnostics	3
HVA 135	Commercial HVAC/R.....	3



NMC.
Find it here.

Construction Technology - Renewable Energy Technology- Electrical

Associate in Applied Science Degree NMC Code 655

Renewable energy is one of the most vital resources of the 21st century. NMC offers professional certificates and an Associate of Applied Science degree in this exciting, growing field. Renewable Energy Technology - Electrical focuses on how to harness wind and solar-generated electricity and its use by residential consumers and utilities. Among the NMC resources you'll use in the program are: mobile solar lab, four wind turbines (located at the University Center and Aero Park campuses), and 8 kw, grid-interconnected solar array. Information: (231) 995-2768.

General Education Requirements Credits: 25-26

Communications: ENG 111 *and either* BUS 231 *or*

ENG 112 *or* ENG 220.....7-8

Humanities: PHL 2023

Mathematics: MTH 111 *and* MTH 1218

Science: ENV 117 *or* PHY 1214

Social Sciences: Any Group 1 course3

Technical Core Requirements 9

EGY 101 Principles of Renewable Energy.....3

EGY 105 Sustainable Building Design.....3

EGY 115 Residential Energy Efficiency3

Electrical Track Requirements 18

EGY 141 Solar Photovoltaic Technology I3

EGY 161 Wind Power Technology3

ELE 101 Introduction to Electrical3

ELE 105 Residential Electrical3

ELE 121 Electrical Applications.....3

ELE 125 Electrical Components3

Any 12 credits from the approved Construction Technology Elective list on page 78.

Program Requirements 64-65

Construction Technology - Renewable Energy Technology- Electrical

Certificate of Achievement (Level II) NMC Code 065

Certificate Requirements Credits: 34

EGY 101 Principles of Renewable Energy.....3

EGY 105 Sustainable Building Design.....3

EGY 115 Residential Energy Efficiency3

EGY 141 Solar Photovoltaic Technology I3

EGY 161 Wind Power Technology3

ELE 101 Introduction to Electrical3

ELE 105 Residential Electrical3

ELE 121 Electrical Applications.....3

ELE 125 Electrical Components3

MTH 111 Intermediate Algebra.....4

Technical Elective (See Elective list on page 78).....3

Construction Technology - Renewable Energy Technology- HVAC

Associate in Applied Science Degree NMC Code 656

Renewable Energy Technology - HVAC/R (heating, ventilation, air conditioning and refrigeration) emphasizes the use of solar and geo-thermal energy production in heating and cooling in residential applications. Among the NMC resources you'll use in the program are: mobile solar lab, geothermal heat pump lab, solar thermal system and 8 kw, grid-interconnected solar array. Information: (231) 995-2768.

General Education Requirements Credits: 25-26

Communications: ENG 111 *and either* BUS 231 *or*

ENG 112 *or* ENG 220.....7-8

Humanities: PHL 2023

Mathematics: MTH 111 *and* MTH 1218

Science: ENV 117 *or* PHY 121 *or* ENV 1034

Social Sciences: Any Group 1 course3

Technical Core Requirements 9

EGY 101 Principles of Renewable Energy.....3

EGY 105 Sustainable Building Design.....3

EGY 115 Residential Energy Efficiency3

HVAC Track Requirements 18

EGY 143 Solar Thermal Technology I3

EGY 145 Geothermal Technology3

HVA 101 Introduction to HVAC/R.....3

HVA 105 Thermodynamics of HVAC/R3

HVA 121 Fundamentals of Heating.....3

HVA 125 A/C Applications.....3

Any 12 credits from the approved Construction

Technology Elective list on page 78.

Program Requirements 64-65



Construction Technology - Renewable Energy Technology- HVAC

Certificate of Achievement (Level II) NMC Code 066

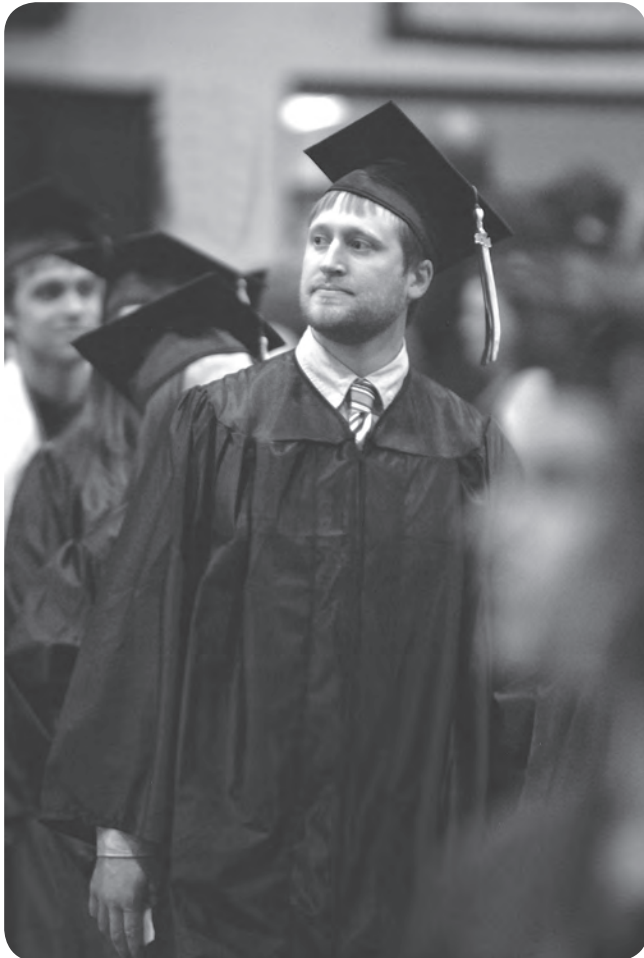
Certificate Requirements		Credits: 34
EGY 101	Principles of Renewable Energy.....	3
EGY 105	Sustainable Building Design.....	3
EGY 115	Residential Energy Efficiency	3
EGY 143	Solar Thermal Technology I	3
EGY 145	Geothermal Technology	3
HVA 101	Introduction to HVAC/R.....	3
HVA 105	Thermodynamics of HVAC/R	3
HVA 121	Fundamentals of Heating	3
HVA 125	A/C Applications.....	3
MTH 111	Intermediate Algebra.....	4
Technical Elective (See Elective list on right)		3

Construction Technology

Approved Electives

Credits

CAR 101	Introduction to Carpentry.....	3
CAR 103	Construction Blueprint Reading.....	3
CAR 105	Foundations and Framing	3
CAR 121	General Carpentry Practices	3
CAR 125	Interior Construction	3
CMT 107	Construction Supervision.....	3
DD 120	Computer Aided Drafting (AutoCAD).....	2
DD 130	Architectural Drafting I (AutoCAD)	2
EET 103	Electrical Studies I.....	3
EET 104	Electrical Studies II.....	3
EET 221	Industrial Controls	3
EET 232	Programmable Logic Controllers	3
EGY 101	Principles of Renewable Energy.....	3
EGY 105	Sustainable Building Design.....	3
EGY 115	Residential energy Efficiency	3
EGY 141	Solar Photovoltaic Technology I	3
EGY 143	Solar Thermal Technology I	3
EGY 145	Geothermal Technology	3
EGY 151	Solar Photovoltaic Technology II	3
EGY 161	Wind Power Technology	3
ELE 101	Intro to Electrical	3
ELE 105	Residential Electrical	3
ELE 121	Electrical Applications.....	3
ELE 125	Electrical Components	3
ELE 131	Electrical Distribution	3
ELE 135	Motor Control Circuits.....	3
ELE 141	Commercial Electrical Systems.....	3
ELE 145	Commercial Electrical Controls.....	3
HVA 101	Introduction to HVAC/R.....	3
HVA 105	Thermodynamics of HVAC/R	3
HVA 121	Fundamentals of Heating.....	3
HVA 125	A/C Applications.....	3
HVA 131	Gas Heating Diagnostics	3
HVA 135	Commercial HVAC/R.....	3
PLU 101	Introduction to Plumbing	3
PLU 105	Plumbing Components	3
PLU 121	Commercial Plumbing	3
PLU 125	Plumbing Installation	3
PLU 131	Advanced Plumbing Practices.....	3
PLU 135	Plumbing Systems and Pumps.....	3
WPT 110	Oxy-Fuel Process.....	3



NMC.
Find it here.

Culinary Arts

Great Lakes Culinary Institute

Associate in Applied Science Degree NMC Code 109

The Great Lakes Culinary Institute believes in the principle of learning by doing. Extensive hands-on training will give you the competitive advantage in this highly competitive field.

This program is designed to provide rigorous and concentrated study for those students who plan careers in the rapidly-growing food service industry. The program's main emphasis is to prepare students for entry-level chef and kitchen management positions. Consideration is given to the science and techniques associated with the selection, preparation, and serving of foods to large and small groups.

The Great Lakes Culinary Institute's facility is located on NMC's Great Lakes Campus. It is comprised of five culinary labs including a bakery, introductory and food skills kitchen, an advanced cooking kitchen, a garde manger kitchen, an á la carte kitchen and Lobdell's, a 90-seat training restaurant. Upon graduation, students will have an unbeatable combination of knowledge, skills and work experience.

The Great Lakes Culinary Institute is accredited by the American Culinary Federation and is one of more than 200 colleges in the U.S. to receive this distinction. Students are eligible for certification as Certified Culinarians upon graduation. Students wishing to pursue a baccalaureate degree may transfer to institutions with which NMC has transfer agreements.

Note: Admission to the Culinary Arts program requires COMPASS test scores of Writing 70, Reading 82 or co-requisite of ENG 111 + 11, and Pre-Algebra 21. All culinary students are required to take CUL 100. A waiver may be obtained by documenting attendance at a career technical center with a minimum GPA of 2.5 and/or relevant industry experience. Students must submit appropriate documentation to department chair at least two weeks prior to the start of the semester they plan to attend.

General Education Requirements Credits: 17-18

Communications: ENG 111 *and either* BUS 231
or ENG 1127-8
 Humanities: Any Group 1 course3
 Mathematics: Placement into MTH 111 *or* higher, *or*
 completion of MTH 23* (4)
 Science: Any Group 1 course with a lab.....4
 Social Sciences: Any Group 1 course3

* These credits do not count toward degree requirements.

Occupational Specialty Requirements 57

CIT 100 Computers in Business-An Intro3
 CUL 100 Intro to Professional Cookery.....1
 CUL 101 Today's Hospitality Industry.....3
 CUL 110 Safety and Sanitation.....2
 CUL 111 Professional Cookery.....6
 CUL 118 Introduction to Baking.....4
 CUL 121 Purchasing and Receiving.....2
 CUL 190 Culinary Internship.....2
 CUL 210 Nutrition for Culinary Arts2

CUL 211 Menu Planning3
 CUL 213 World Cuisine.....6
 CUL 215 Garde Manger.....4
 CUL 217 Kitchen and Dining Room Mgmt.....3
 CUL 218 Advanced Baking.....4
 CUL 295 Contemporary Service & Cuisine.....12

Program Requirements

74-75

Culinary Arts

Great Lakes Culinary Institute

Certificate of Achievement (Level III) NMC Code 029

Certificate Requirements Credits: 54

CUL 100 Intro to Professional Cookery.....1
 CUL 101 Today's Hospitality Industry.....3
 CUL 110 Safety and Sanitation.....2
 CUL 111 Professional Cookery.....6
 CUL 118 Intro to Baking.....4
 CUL 121 Purchasing.....2
 CUL 190 Culinary Internship.....2
 CUL 210 Nutrition for Culinary Arts2
 CUL 211 Menu Planning3
 CUL 213 World Cuisine.....6
 CUL 215 Garde Manger4
 CUL 217 Kitchen and Dining Room Mgmt3
 CUL 218 Advanced Baking.....4
 CUL 295 Contemporary Service and Cuisine12



Dental Assistant

Associate in Applied Science Degree *NMC Code 300*

Dental Assistants are members of a highly qualified health team whose varied duties require knowledge of the basic dental sciences, proficiency in laboratory and clinical skills, and practical experience in meeting patient needs. Both the associate and the certificate programs are accredited by the Commission on Dental Accreditation (CODA) and approved by the Michigan Board of Dentistry.

Few jobs offer the diversity and flexibility found in Dental Assisting. While most dental assistants work as chairside or business assistants in general or specialty dental practices such as orthodontics or oral surgery, other career paths include the following: lab technicians; sales representatives in dental supply companies; and as teachers in vocational or college dental auxiliary programs. It is suggested that students begin this program in fall semester. However, students wanting to begin spring, or a part-time program should contact the program director for academic advising. Students must be admitted to both the college and the Dental Assistant Program. Program admission requires a 2.0 minimum GPA on high school or college transcript, or pass GED.

General Education Requirements **Credits: 21-22**

Communications: ENG 111 <i>and</i> ENG 112	8
Humanities: Any Group 1 course	3
Mathematics: Placement into MTH 111 <i>or</i> higher, <i>or</i> completion of MTH 23*	(4)
Science: BIO 106	4
Social Science: PSY 101	3
Electives: Group 1 or 2 courses	3-4

*These credits do not count toward degree requirements.

Occupational Specialty Requirements **42-43**

BUS 155	Interpersonal Communications <i>or</i>	
COM 111	Public Speaking	3-4
HAH 120	Infection Control	2
HDA 101	Introduction to Dentistry	2
HDA 112	Dental Materials	2
HDA 113	Dental Materials Lab	1
HDA 120	Dental Anatomy	3
HDA 140	Oral Pathology/Pharmacology	2
HDA 150	Dental Office Management	2
HDA 160	Dental Emergencies	1
HDA 170	Preventive Dentistry	2
HDA 240	Chairside Procedures	5
HDA 241	Chairside Procedures Lab	2
HDA 242	Dental Radiography	2
HDA 243	Dental Radiography Lab	1.5
HDA 251	Dental Assistant Internship I	4
HDA 252	Dental Assistant Internship II	4
HDA 282	CDA/RDA Written Exam Prep	2
HDA 286	RDA Clinical Exam Prep	1
HPD 110	Basic Life Support for Health Care Providers	0.5

Note: A 2.0 grade or higher is required in HDA & HAH courses.

Program Requirements

64-65

Dental Assistant

Certificate of Achievement

NMC Code 070

The following coursework may be taken in order to qualify for the Certificate of Achievement in Dental Assisting. Completion of the program qualifies students for the state board exam and after passing the exam, they may practice as Registered Dental Assistants. In addition, program completers are eligible for the National Certification exam which is recognized nationwide. While the associate degree is not required for either of these exams, the majority of students complete the associate degree after completion of the certificate.

Placement Requirements (to complete certificate)

Mathematics: Placement into MTH 111 *or* higher, *or* successful completion of MTH 23*

Communications: Placement into ENG 111, *or either* completion of ENG 99* *or* ENG 108

*These credits do not count toward degree requirements.

Certificate of Achievement

Credits: 42-43

BUS 155	Interpersonal Communications <i>or</i>	
COM 111	Public Speaking	3-4
HAH 120	Infection Control	2
HDA 101	Introduction to Dentistry	2
HDA 112	Dental Materials	2
HDA 113	Dental Materials Lab	1
HDA 120	Dental Anatomy	3
HDA 140	Oral Pathology/Pharmacology	2
HDA 150	Dental Office Management	2
HDA 160	Dental Emergencies	1
HDA 170	Preventive Dentistry	2
HDA 240	Chairside Procedures	5
HDA 241	Chairside Procedures Lab	2
HDA 242	Dental Radiography	2
HDA 243	Dental Radiography Lab	1.5
HDA 251	Dental Assistant Internship I	4
HDA 252	Dental Assistant Internship II	4
HDA 282	CDA/RDA Written Exam Prep	2
HDA 286	RDA Clinical Exam Prep	1
HPD 110	Basic Life Support for Health Care Providers	0.5

Note: 2.0 grade or higher is required in HDA, HAH courses.

NMC.
Find it here.

Engineering Technology

Associate in Applied Science Degree

Electronics.....	NMC Code 557
Environmental Testing	NMC Code 558
General	NMC Code 556
Photonics	NMC Code 559

Engineering technology education focuses primarily on the applied aspects of science and engineering aimed at preparing graduates for practice in that portion of the technological spectrum closest to product improvement, manufacturing, construction, and engineering operational functions.

The NMC Engineering Technology degree offers students a broad based curriculum across all areas of technical education, preparing the graduates for emerging job markets and highly technical fields. The program is designed to allow students to focus on three areas of specializations: Electronics, Environmental Testing, and Photonics.

General Education Requirements Credits: 21

Communications: ENG 111 <i>and</i> ENG 220	7
Humanities: PHL105.....	3
Mathematics: Placement into MTH 121 <i>or</i> higher <i>or</i> Completion of MTH 111	4
Science: PHY 105	4
Social Science: Any Group 1 course.....	3

Technical Core Requirements Credits: 25

BUS 101 Introduction to Business	3
BUS 155 Interpersonal Communications	3
DD 101 Print Reading and Sketching	3
DD 120 Computer Aided Drafting.....	2
DD 125 Mechanical Drafting	2
EET 103 Electrical Studies I.....	3
MFG 113 Machining I	3
MTH 121 College Algebra	4
WPT 140 GMAW (MIG) Welding	2

General Engineering Technology 19

At least 19 credits from the approved technical courses or as developed with your academic advisor.

Areas of Specialization 19-22

Select at least 19-22 credits from your area of specialization:

Electronics

EET 104 Electrical Studies II.....	3
EET 221 Industrial Controls.....	3
EET 232 Programmable Logic Controllers.....	3
EGY 101 Principles of Renewable Energy.....	3
EGY 141 Solar Photovoltaic Tech I.....	3
MTH 116 Intro to Computer Science.....	4
MTH 131 Intro to Probability and Statistics	3

Environmental Testing

CHM 101 Introductory Chemistry	4
EET 104 Electrical Studies II.....	3
ENV 115 Intro to GIS	2
EGR 131 Elementary Surveying.....	5
ENV 210 Fundamentals of Soil Science	4
MTH 131 Intro to Probability and Statistics	3

Photonics

DD 110 Basic Metallurgy.....	3
EET 104 Electrical Studies II.....	3
EET 161 Fundamentals of Light and Lasers	4
EET 212 Elements of Photonics.....	4
MTH 116 Intro to Computer Science.....	4
MTH 131 Intro to Probability and Statistics	3

Program Requirements

65-68

Engineering Technology

Approved Electives

Credits

CHM 101 Introductory Chemistry	4
CHM 150 General Chemistry I.....	5
DD 110 Basic Metallurgy.....	3
DD 150 Detail Drafting.....	4
DD 160 Tolerancing and GD&T.....	3
DD 170 Part and Assembly Modeling.....	4
DD 240 Advanced Part and Assy Modeling.....	4
DD 295 Advanced Manufacturing Project	4
EET 104 Electrical Studies II.....	3
EET 161 Fundamentals of Light and Lasers	4
EET 212 Elements of Photonics.....	4
EET 221 Industrial Controls	3
EET 232 Programmable Logic Controllers	3
EGR 131 Elementary Surveying.....	5
EGY 101 Principles of Renewable Energy.....	3
EGY 141 Solar Photovoltaic Tech I.....	3
EGY 143 Solar Thermal Tech I.....	3
EGY 145 Geothermal Technology	3
EGY 161 Wind Power Technology	3
ENV 105 Intro to Freshwater Studies.....	3
ENV 111 Physical Geology	4
ENV 115 Intro to GIS	3
ENV 131 Oceanography	4
ENV 210 Fundamentals of Soil Science	4
ENV 290 Freshwater Studies Internship.....	3
MFG 114 Machining II.....	3
MFG 211 CNC Programming.....	3
MFG 212 Computer-Aided Machining (CAM).....	3
MTH 131 Intro to Probability and Statistics	3
PHY 121 General Physics I.....	4
WPT 102 Combined Welding (ARC).....	2
WPT 110 Oxy-Fuel Process	3
WPT 120 GTAW (TIG) Welding I	2
WPT 121 GTAW (TIG) Welding II.....	2
WPT 130 SMAW (Arc) Welding I.....	3
WPT 131 SMAW (Arc) Welding II	2
WPT 140 GTAW (MIG) Welding I	2
WPT 141 GTAW (MIG) Welding II.....	2
WPT 142 Flux Cored Arc Welding.....	2
WPT 160 Welding Qualification Prep.....	2

Entrepreneurship Certificate

Certificate of Achievement (Level I) *NMC Code 051*

The Entrepreneurship Certificates help students manage and market a business and take an entrepreneurial perspective of business management. They offer an entrepreneur tool set of business knowledge and practices needed for competing in today's global marketplace. These certificate courses apply to the course requirements for the Entrepreneurship Concentration of the Business Administration AAS degree.

Certificate Requirements Credits: 18

ACC 121	Accounting Principles I	4
BUS 101	Introduction to Business	3
CIT 216	Computerized Accounting Systems	2
MGT 245	Principles of Entrepreneurship.....	3
MGT 246	Entrepreneur Marketing/Finance.....	3
MKT 201	Principles of Marketing	3

Entrepreneurship Certificate

Certificate of Achievement (Level II) *NMC Code 052*

Level I Certificate Requirements Credits: 18

Certificate Requirements 12

BUS 105	Business Math	3
BUS 155	Interpersonal Communications	3
BUS 261	Business Law I.....	3
BUS 290	Business Admin Internship.....	3

Required Elective Any one of the following:

BUS 262	Business Law II	3
CIT 233	Project Management	3
MGT 241	Principles of Management	3
MGT 251	Human Resource Management	3
MKT 241	Principles of Advertising.....	3

Total Credits for Level II 33

Freshwater Studies

Associate in Applied Science Degree

Economy and Society	<i>NMC Code 492</i>
Global Freshwater Policy and Sustainability.....	<i>NMC Code 491</i>
Science and Technology.....	<i>NMC Code 493</i>

The Freshwater Studies program is offered by NMC's Great Lakes Water Studies Institute. Designed to prepare students for emerging career paths, the program is truly one-of-a-kind - the only associate level degree with emphasis in freshwater studies in the United States. Students have a choice of three general streams or emphasis areas: Global Freshwater Policy and Sustainability, Economy and Society or Science and Technology. The Freshwater Studies degree program combines unique courses and opportunities for field experiences available through Northwestern Michigan College and our University partners. In addition to the partners in the Great Lakes region, our program has collaborators in selected sites overseas.

This freshwater focused program has an interdisciplinary approach designed to offer students the ability to gain unique competencies and credentials of value. The core program of study includes Introduction to Freshwater Studies, Watershed Science, Geographic Information Systems (GIS), Oceanography, Meteorology and Climatology, and an Internship experience either locally or overseas. The degree is intended both for students who plan to enter professional fields as well as those who wish to further their studies and complete a bachelors degree with University partnerships located in Traverse City and offsite.

General Education Requirements Credits: 17-18

Communications: ENG 111 <i>and either</i> BUS 231 <i>or</i> ENG 112 <i>or</i> ENG 220	7-8
Humanities: Group 1 course	3
Mathematics: Placement into MTH 111 <i>or</i> higher, <i>or</i> completion of MTH 23*	(4)
Science: Science Group 1 course with a lab	4
Social Sciences: Group 1 course.....	3

* These credits do not count toward degree requirements.

Core Requirements** 24

ENV 105	Introduction to Freshwater Studies.....	3
ENV 115	Intro to GIS	3
ENV 117	Meteorology and Climatology	4
ENV 131	Oceanography	4
ENV 140	Watershed Science	4
ENV 290	Freshwater Studies Internship	3
PHL 105	Critical Thinking <i>or</i>	
PHL 202	Contemporary Ethical Dilemmas	3

Areas of Concentration:**

Economy and Society

BIO 110	Essential Biology	4
BUS 101	Introduction to Business	3
ECO 201	Principles of Macroeconomics	3
ENG 256	Environmental Literature	3
MGT 241	Principles of Management	3
MGT 245	Principles of Entrepreneurship.....	3
MTH 131	Intro to Probability and Statistics	3

Global Freshwater Policy and Sustainability

BIO 110	Essential Biology	4
GEO 109	World Regional Geography	3
MTH 131	Intro to Probability and Statistics	3
SPN 222	Intermediate Spanish II <i>or</i>	
SPN 227A	Spanish for Environmental Mgmt	3-4

Science and Technology

BIO 115	Cell, Plant & Ecosystem Biology <i>or</i>	
CHM 150	General Chemistry I <i>or</i>	
PHY 121	General Physics I.....	4-5
MTH 141	Calculus I.....	5

**Core and Concentration credits can also be applied to General Education requirements.

Please consult an NMC Freshwater Studies program advisor for scheduling guidelines.

Program Requirements Minimum credit hours: 64

Law Enforcement

Associate in Applied Science Degree *NMC Code 352*

Graduates of this program are eligible to take the state law enforcement officer examination. Students who anticipate transferring to a four-year college or university need to see an NMC advisor during their first semester, as some courses may be acceptable for transfer credit. Students may enroll in the Law Enforcement Preservice Police Academy in the programs second year, or upon completing first year requirements or with a college degree. Completion of the Police Academy (LWE courses) must occur within two semesters, beginning fall semester and completed the following spring semester. A minimum grade of 2.0 must be achieved in each LWE course, satisfying prerequisites for licensing and qualifying the student to take the state examination to be hired by a law enforcement agency, which activates the license. The Police Academy is approved and regulated by the Michigan Commission on Law Enforcement Standards (MCOLES).

It is mandatory that students meet with the Law Enforcement Coordinator a minimum of four weeks prior to beginning LWE courses to register with MCOLES. Students must pass MCOLES reading/writing and physical agility tests prior to starting the LWE courses. Call (231) 995-1283 with questions and visit www.michigan.gov/mcoles for online registration.

General Education Requirements	Credits: 21
Communications: ENG 111 <i>and</i> ENG 112	8
Humanities: PHL 201 <i>or</i> PHL 202	3
Mathematics: Placement into MTH 111 <i>or</i> higher, <i>or</i> completion of MTH 23*	(4)
Science: Any Group 1 course with lab	4
Social Sciences: PLS 101 <i>or</i> PLS 132	3
Additional Core Course: PSY 101	3

* These credits do not count toward degree requirements.

Occupational Specialty Requirements	49
CJ 101 Introduction to Criminal Justice	4
HAH 200 Emergency Assessment and Intervention	3
LWE 102 Police Operations	4
LWE 210 Cultural Awareness/Diversity	2
LWE 212 Criminal Investigation	3
LWE 214 Firearms	4
LWE 215 Defensive Driving	3
LWE 216 Traffic Enforcement and Investigation	3
LWE 218 Physical Training/Wellness	4
LWE 225 Defensive Tactics	4
LWE 226 Michigan Criminal Law	3
LWE 227 Criminal Procedures	3
LWE 228 Speed Measurement/PBT	3
PSY 250 Abnormal Psychology <i>or</i>	
SOC 231 Deviance and Criminal Behavior	3
SOC 101 Introduction to Sociology	3

Recommended Courses:

LWE 195* Police Practicum	4
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* Recommended for students with no police field experience.

Program Requirements 65-67

Legal Assistant

IMPORTANT NOTICE REGARDING THE DISCONTINUANCE OF NMC'S LEGAL ASSISTANT PROGRAM:

On July 26, 2010, the NMC Board of Trustees approved a plan for the discontinuance of NMC's Legal Assistant Program. Under this discontinuance plan, no PAR courses will be offered after the Spring 2012 semester.

The period of approval of NMC's Legal Assistant Program by the American Bar Association was from August 8, 2005 to August 8, 2012, and, in light of this discontinuance plan, NMC did not apply for ABA reapproval of the program beyond that period. Thus, if you are actively completing non-PAR courses toward a degree and you graduate from NMC after August 8, 2012, you will not be graduated from an ABA approved paralegal education program and may not represent yourself as having graduated from an ABA approved paralegal education program. If you are actively completing non-PAR courses toward a degree, you should refer to your catalog of record for the degree requirements and you should contact the program coordinator for academic advising.

NMC. Find it here.



Manufacturing Technology

Associate in Applied Science Degree NMC Code 584

The Manufacturing Technology program is designed to provide a multi-disciplined technical background in fields for which NMC does not offer a specific degree program. For instance, students interested in pursuing careers in Machine Tool or Welding may enroll in the Manufacturing Technology program and design a model schedule that emphasizes their major area of interest. The program has the flexibility to match the student's interest with the skills necessary for job entry.

Students, with assistance from an advisor or instructor, will select a major area of technical emphasis. These technical courses plus supporting courses from other disciplines comprise the Manufacturing Technology degree requirements.

Each student's proposed Manufacturing Technology program must be approved by a committee consisting of the appropriate Department Head, the Academic Chair, and the Registrar.

General Education Requirements Credits: 17-18

Communications: ENG 111 *and either*

ENG 112 *or* ENG 220*7-8

Humanities: Any Group 1 course3

Science: Any Group 1 course with a lab4

Social Sciences: Any Group 1 course3

Mathematics: Placement into MTH 111 *or* higher, *or* completion of MTH 23 (4)

* *Students intending to transfer to another college or university should take ENG 112.*

Occupational Specialty Requirements 39

Electives 7-8

Choose any courses from Group 1 and/or Group 2.

Program Requirements 64-65

Maritime

Great Lakes Maritime Academy

Associate in Applied Science Degree w/Bachelor of Science - Business Administration through Ferris State University NMC Code 550 / 551

The Great Lakes Maritime Academy is more than just a college experience. As Michigan's State Maritime Academy, our college educates and trains the finest Deck and Engineering Officers available to the commercial shipping industry.

As you learn more about us, you will discover a professional environment based on pride and tradition. The Academy prepares future merchant marine officers/business professionals for the challenge of operating ships of unlimited tonnage. Our training ship, *State of Michigan*, is utilized daily as a floating classroom and hands on learning environment. We set sail with our ship at various times throughout the academic year to reinforce the skills taught shore side. As cadets progress through the Academy, they learn our industry first hand by completing essential sea time aboard the training ship and commercial vessels of the Great Lakes and Oceans.

The Academy enjoys a unique relationship with our partner institution, Ferris State University. While classes are held in Traverse City, cadets simultaneously earn their maritime credentials and a Bachelor's Degree in Business Administration. It has long been apparent this combination enables graduates to better compete for management level positions in any area of employment. We also offer a core maritime curriculum for those who enter the Academy with a Bachelor's Degree. Upon completion of all requirements, cadets are prepared to write the U.S. Coast Guard examination for licensing as Third Mate Great Lakes and Oceans Unlimited Tonnage and First Class Great Lakes Pilot (Deck Officer), or Third Assistant Engineer, Steam and Motor Vessels of any Horsepower (Engineering Officer). Graduates are fully compliant with STCW '95 (Standards of Training, Certification and Watchkeeping).



Great Lakes Maritime Academy is proud of the quality education and training we have provided since 1969. Curricula range from seamanship, navigation and piloting to steam and diesel engineering together with up to 276 days of sea time. Our alumni sail with the fleets of the Great Lakes and Oceans with many having reached the pinnacle of their professions as a Captain or Chief Engineer. With exceptional employment and salaries upon graduation, the time is now to consider a career as a professional mariner. The Admissions Office is open weekdays from 8:00 am to 5:00 pm. Please visit www.nmc.edu/maritime for additional information.

This program is approved by the U.S. Maritime Administration, the U.S. Coast Guard, and the Michigan Department of Education. A new class begins each year in mid August (Fall semester).

ADMISSION REQUIREMENTS

Admission to the Great Lakes Maritime Academy **requires** candidates meet the following:

1. Be at least 17 years of age with a high school diploma or GED.
2. United States Citizen
3. Academic placement at Freshman English and Intermediate College Algebra level determined by minimum composite ACT score of 20, SAT score of 1440, transferable college credits or COMPASS placement testing.
4. No misdemeanors, felonies or legal expungements.

Acceptance to the Great Lakes Maritime Academy is competitive, with the incoming class of 60 cadets beginning in the fall of each year. Admissions decisions are made without regard to age, sex, marital status, national origin, or ethical/racial background. Applicants may apply at www.nmc.edu/maritime to submit online application. An application checklist is provided. If you have questions, please call the Maritime Admissions Office at (231) 995-1200.

GENERAL PROGRAM REQUIREMENTS

In addition to Northwestern Michigan College/Ferris State University rules and regulations, Maritime cadets comply with the rules and regulations specified in the booklet, "Maritime Cadet Rules and Regulations."

DEPARTMENT OF NAVAL SCIENCE

The Department of Naval Science is staffed by an active duty Naval officer. The Department offers training designed to acquaint the cadet with the mutual dependence of the Navy and Merchant Marine in accomplishing their common objectives through the MNS 100 course. Additionally, Merchant Marine Reserve Midshipmen will receive Navy professional development training through the MNS 200 and MNS 250 courses.

GRADUATION REQUIREMENTS

In addition to NMC graduation requirements, Academy cadets must:

1. Successfully complete all components of the Maritime program.
2. Pass the U.S. Coast Guard license exam in the program selected.
3. Achieve a 2.0 (76%) grade or higher in all Maritime, NMC and FSU courses.

CURRICULUM

The Great Lakes Maritime Academy and NMC offer two four-year programs of study:

- Maritime Technology (Deck Officer)
 - Associate's Degree;
 - Bachelor's Degree
- Marine Engineering Technology (Engineering Officer)
 - Associate's Degree;
 - Bachelor's Degree

Each program provides the cadet with a background in business administration, mathematics, physical science, humanities and social studies, in addition to the required maritime subjects.

Federal regulations require that each cadet obtain up to 276 sailing days of practical training as a cadet observer aboard ship. Sea time is arranged by the Academy and spread over the program. In addition to shipboard duties, the cadets are required to complete written assignments, sea projects, for evaluation and grading. Great Lakes Maritime reserves the right to revise the program in accord with industry needs and government agency requirements.

The following program requirements are for a high school graduate or a person without transfer credits from another institution.



NMC.
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Maritime - Deck Officer Great Lakes Maritime Academy

**Associate in Applied Science Degree
w/Bachelor of Science - Business Administration
through Ferris State University** *NMC Code 550*

General Education Requirements Credits: 21-22

Communications: ENG 111 <i>and either</i> ENG 112 <i>or</i> ENG 220	7-8
Humanities: Any Group 1 course <i>or</i> FSU Cultural Enrichment Elective.....	3
Mathematics: MTH 121	4
Science: PHY 105	4
Social Science: ECO 201.....	3

Maritime Requirements 95

ECO 202 Principles of Microeconomics.....	3
ENV 117 Meteorology & Climatology	4
MDK 100 Survival at Sea	1
MDK 104 Rigging and Ship Maintenance Lab.....	1
MDK 106 Watchstanding I	1
MDK 111 Marine Communications	2
MDK 112 Rules of the Nautical Road.....	2
MDK 121 Navigation I	3
MDK 122 Navigation I Lab	1
MDK 149 Damage Control & Safety.....	2
MDK 200 Ships Business & Labor Relations.....	3
MDK 204 Marine Supervisory Lab	1
MDK 206 Watchstanding II.....	1
MDK 210 Sea Project.....	6
MDK 221 Lakes Piloting.....	2
MDK 222 River Piloting.....	3
MDK 224 Navigation III	3
MDK 231 Electronic Navigation.....	3
MDK 232 Electronic Navigation Lab	1
MDK 233 Automatic Radar Plotting Aids.....	1
MDK 241 Ship Construction.....	2
MDK 242 Ship Stability.....	3
MDK 244 Dry Cargo Stowage	3
MDK 245 Liquid Cargo Stowage	2
MDK 311 Sea Project Deck	6
MDK 312 Sea Project Deck	6
MDK 330 STCW Elementary First Aid	2
MDK 344 Cargo Systems.....	2
MDK 346 Bridge Team Management.....	2
MDK 348 Pilot/Mate License Prep	2
MGT 241 Principles of Management	3
MKT 201 Principles of Marketing	3
MNG 100 Introduction to Marine Engineering.....	1
MNG 105 Shipboard Information Systems.....	3
MNS 100 Naval Science I.....	2
MTH 122 Trigonometry	3
MTH 131 Intro to Probability & Statistics.....	3
Any NMC Group 1 Humanities Elective	3

Ferris State University Requirements* 30

BLAW 301 Legal Environment of Business.....	3
COMM221 Small Group Decision Making.....	3

ENGL 325 Advanced Business Writing	3
BUSN 499 Integrating Experience.....	3
PLSC 331 Comparative World Governments.....	3
INTB 310 International Business Systems	3
INTB 320 International Logistics	3
INTB 335 Cross-Cultural Business.....	3
MGMT 350 Tools for Decision Making.....	3
Ferris Cultural Enrichment Elective.....	3

* See www.nmc.edu/maritime for Ferris course descriptions.

Program Requirements 146-147

Maritime - Engineering Officer Great Lakes Maritime Academy

**Associate in Applied Science Degree
w/Bachelor of Science - Business Administration
through Ferris State University** *NMC Code 551*

General Education Requirements Credits: 21-22

Communications: ENG 111 <i>and either</i> ENG 112 <i>or</i> ENG 220.....	7-8
Humanities: Any Group 1 course	3
Mathematics: MTH 121	4
Science: PHY 105	4
Social Science: ECO 201.....	3

Maritime Requirements 92

CHM 101 Introductory Chemistry	4
ECO 202 Principles of Microeconomics.....	3
MDK 100 Survival at Sea	1
MDK 149 Damage Control & Safety.....	2
MDK 241 Ship Construction.....	2
MDK 250 Stability for the Engineer.....	1
MDK 330 STCW Elementary First Aid	2
MGT 241 Principles of Management	3
MGT 251 Human Resources Management.....	3
MKT 201 Principles of Marketing	3
MNG 100 Introduction to Marine Engineering	1
MNG 104 Engine Systems Graphics.....	2
MNG 105 Shipboard Information Systems.....	3
MNG 110 Engineering Mechanics	3
MNG 175 Refrigeration	3
MNG 210 Diesel Engineering	7
MNG 221 Marine Boilers.....	3.5
MNG 222 Marine Turbines.....	2.5
MNG 223 Steam Lab	1
MNG 234 Electronics Fundamentals.....	4
MNG 235 Electric Machines and Controls.....	4
MNG 236 Electric Machines and Controls Lab.....	2
MNG 250 Unloading Systems	3
MNG 317 Engineering Sea Project I.....	3
MNG 318 Engineering Sea Project II	6
MNG 319 Engineering Sea Project III.....	6
MNG 355 Watchstanding	2
MNG 366 Engine Room Business	2
MNG 396 License Preparation Engine	2

MNS 100	Naval Science	2
MTH 122	Trigonometry	3
MTH 131	Intro to Probability & Statistics.....	3

Ferris State University Requirements* 34

BLAW 301	Legal Environment of Business.....	3
COMM 221	Small Group Decision Making.....	3
ENGL 325	Advanced Business Writing	3
BUSN 499	Integrating Experience.....	3
PLSC 331	Comparative World Governments.....	3
MGMT 302	Organizational Behavior.....	3
MGMT 350	Decision Making Tools.....	3
MGMT 447	Business Ethics	3
MFGT 150	Manufacturing Processes	2
WELD 146	Intro to Welding	2
Ferris Cultural Enrichment Elective (2 courses)	6

* See www.nmc.edu/maritime for Ferris course descriptions.

Program Requirements 147-148

Maritime - Power Plant Facilities Operator Great Lakes Maritime Academy

Associate in Applied Science Degree NMC Code 554

The Power Plant Facilities Operator Program is designed to prepare individuals for the maintenance and power production industries such as power plants, hospitals, industrial plants, and manufacturing plants. Operators in such industries read, interpret and adjust meters and gauges to make sure plant equipment and processes are working properly. Some operate chemical-feeding devices, take samples of the water or liquid waste, perform chemical and biological laboratory analysis and adjust the amount of chemicals such as chlorine in the water. Some use a variety of instruments to sample and measure water quality and common hand and power tools to make repairs. Operators also make repairs to valves, pumps and other equipment. As facilities become more sophisticated and industry demands more from those individuals who maintain and operate these physical plants, there is a need for intense technical training for these positions. Students at the Great Lakes Maritime Academy obtain these goals through coursework in mathematics, science and occupational courses. They also have hands-on experience through labs and internships for practical training that is beneficial to the application and understanding of the career path they have chosen.

General Education Requirements Credits: 22-25

Communications: ENG 111 <i>and either</i> ENG 112	
<i>or</i> ENG 220	7-8
Humanities: Any Group 1 Course.....	3
Mathematics: Completion of MTH 121 and	
MTH 122 <i>or</i> Placement into MTH 141	5-7
Science: CHM 101 <i>or</i> PHY 105	4
Social Science: Any Group 1 Course	3

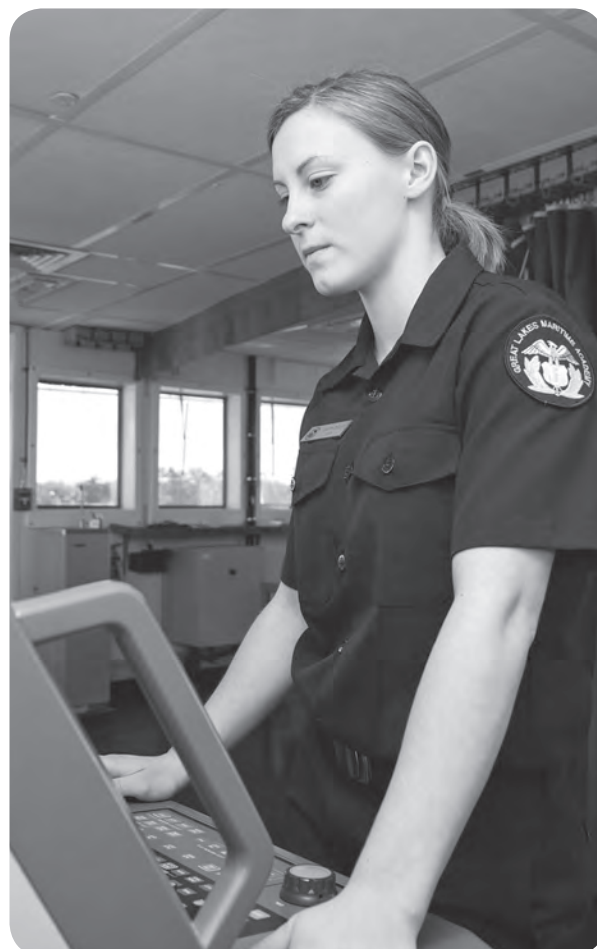
Occupational Specialty Requirements 53

MGT 241	Principles of Management.....	3
MNG 100	Intro to Marine Engineering	1
MNG 104	Engine Systems Graphics.....	2
MNG 105	Shipboard Information Systems.....	3
MNG 110	Engineering Mechanics	3
MNG 175	Refrigeration	3
MNG 210	Diesel Engineering	7
MNG 221	Marine Boilers.....	3.5
MNG 222	Marine Turbines.....	2.5
MNG 223	Steam Lab	1
MNG 234	Electronic Fundamentals	4
MNG 235	Electric Machines and Controls.....	4
MNG 236	Electric Machines and Controls Lab.....	2
MNG 250	Unloading Systems.....	3
MNG 270	Issues in Power Production.....	3
MNG 290	Power Systems Internship.....	5
Elective Credits		3

Recommended Elective 3

MGT 251	Human Resource Management	3
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Program Requirements 75-78



Nursing - Associate Degree Program Requirements

Associate Degree in Nursing

NMC Code 302

Nursing Students admitted to the nursing program prior to fall 2009 must follow the catalog requirements in effect the year they began unless they are returning as re-admitted students.

The NMC Associate Degree in Nursing (ADN) offers students the advantage of college-level academic and professional instruction in the classroom and clinical areas, and the preparation needed for employment after graduation. The associate degree program is a two-year course of study that begins each fall and spring semesters. All nursing courses in the ADN program must be completed within five years. Student clinical experiences may include assignments at Munson Medical Center and a variety of other agencies.

The program is approved by the Michigan Board of Nursing. Graduates are eligible to apply for the National Council Licensure Examination (NCLEX-RN) for licensing as a registered nurse.

ADMISSION REQUIREMENTS

Enrollment in any Nursing (HNR) course requires admission to the nursing program OR approval of the nursing department director. HNR 100 may be taken ahead of program admission if course prerequisites are met. Consideration for admission is on a "rolling" basis and requires satisfactory completion of program prerequisites. Space in the nursing program is limited. Completion of prerequisites does not guarantee admission to the nursing program. Should qualified applicants exceed space available, competitive admission criteria may apply. Submit completed applications to the Admissions Office.

The following are required for application:

1. *A 2.5 college GPA.
2. *A 2.0 grade or above in each of the following prerequisite courses and/or demonstrated competency or equivalent college course transfer:
 - English Composition (ENG 111)
 - Introduction to Psychology (PSY 101)
 - Introductory Chemistry (CHM 101) or equivalent college chemistry course with a 2.0 GPA or above within ten years of program entry. Students with a year of high school chemistry (with a combined GPA of 2.5 or above) or college chemistry older than 10 years may waive the CHM 101 requirement by passing the Chemistry competency examination.
3. *Human Anatomy and Physiology I (BIO 227), with a 2.5 GPA, within five years of program entry or successfully complete a competency exam.
4. Human Anatomy and Physiology II (BIO 228), with a 2.5 GPA, within five years of program entry.
5. *COMPASS Test Scores:
 - Math-66 or above in Algebra
 - COMPASS students must place into MTH 121-College Algebra. If not, students must take MTH 111-Intermediate Algebra (or equivalent course work) within five years of program entry.

6. *ACT Test Scores:

- ACT of 24 in math within five years of program entry.
- ACT of 19 in reading and 18 in writing, (or equivalent course work) within five years of program entry.

**Eligible for wait list once these prerequisites are completed.*

Recommended courses to take prior to Nursing Program Admission

- BIO 240 Normal and Clinical Nutrition
- CIT 122A Computer and Internet Basics I (competency test available)
- PHL 202 Contemporary Ethical Dilemmas
- ENG 112 English Composition
- HPD 110 Basic Life Support for Health Care Workers (CPR) Equivalent classes are: American Red Cross Professional Rescuer or AHA Health Care Provider. Current CPR certification must be documented by the start of the first clinical day, and maintained throughout the program.

GENERAL INFORMATION

- A physical examination and completion of the Certificate of Health documenting good mental and physical health is required prior to clinical course work.
- Criminal Background Checks are now required on all students entering the Associate Degree of Nursing and the Practical Nursing programs at Northwestern Michigan College. This is due to the change in legislation that requires Criminal Background Checks be completed for certain health care institutions. The background check will be required by Northwestern Michigan College upon admission to the program and prior to the beginning of the first course. The costs associated with this background check will be the sole responsibility of the nursing student.
- The Board of Nursing may deny a license for a previous felony conviction, previous treatment for drug or alcohol abuse or after finding the existence of one or more grounds for board action listed in 333.16221 of the Public Health Code, Act 368 of 1978.
- The clinical facilities have the right to accept or reject a student. This action could result in a student being delayed or unable to complete the nursing program. This decision may be made just prior to the clinical rotation.
- Nursing program tuition is charged by the contact hour.

General Education Requirements Credits: 25-27

Communications: ENG 111 <i>and</i> ENG 112	8
Humanities: PHL 202.....	3
Mathematics: Placement into MTH 121 <i>or</i> higher, <i>or</i> completion of MTH 111*	(4)
Science: BIO 227, BIO 228**, BIO 240	13
Social Sciences: PSY 101	3

** These credits do not count toward degree requirements.*

***For an equivalent transfer of BIO 227 and BIO 228 from another institution, students must have completed a full year of Anatomy and Physiology, and one semester of Microbiology with a 2.5 grade or higher within five years of program entry.*

Nursing Specialty Requirements**Credits: 45**

CIT 122A	Computers and Internet Basics** (competency test available).....	(1)
HAH 100C	Informatics Essentials	1
HNR 100	Introduction to Nursing	1
HNR 101	Fundamentals of Nursing-Lecture	4
HNR 102	Fundamentals of Nursing-Clinical.....	4
HNR 108	Pharmacology.....	3
HNR 125	Nursing Across the Lifespan-Lecture	5
HNR 126	Nursing Across the Lifespan-Clinical.....	5
HNR 241	Adv. Maternal Child Nursing-Lecture	3
HNR 242	Adv. Maternal Child Nursing-Clinical.....	2
HNR 247	Nrsg Mgmt of Complex Patients I-Lecture....	3
HNR 248	Nrsg Mgmt of Complex Patients I-Clinical ...	4
HNR 251	Mental Health Nursing-Lecture	2
HNR 252	Mental Health Nursing-Clinical	1
HNR 261	Nrsg Mgmt of Complex Patients II-Lecture ..	3
HNR 262	Nrsg Mgmt of Complex Patients II-Clinical..	4
HPD 110	Basic Life Support for Health Care Providers*, **	(0.5)

*Equivalent classes are: American Red Cross Professional Rescuer or AHA Health Care Provider

**These credits do not count toward degree requirements.

Note: A 2.0 grade or higher is required in all Nursing (HNR) courses. A minimum of 70-72 credits are required to receive the Associate Degree in Nursing. Any HNR course failure counts as a program fail and requires readmission. A second course failure is a program dismissal.

Program Requirements**72****Online Nursing Option**

NMC admits students to an online version of its traditional nursing curriculum each fall. This option is intended for full-time ADN students. It provides all of the nursing theory of academic classes available in an online format. It will still require attendance in person for the lab and clinical courses. The labs and clinical courses are generally scheduled in the Traverse City area and will require 2-3 days per week of attendance.

Once you begin the online option, the college will ensure that the online courses will be available until you complete the program as long as the full-time model schedule is followed.

If you need to change from the full-time plan or your studies become out of sequence for any reason, you will need to move into the traditional program.

NMC.

Find it here.

Nursing - ADN Completion Program**Completion Program for Licensed Practical Nurses***NMC Code 302*

The ADN-Completion Program for Licensed Practical Nurses is designed to expand upon the previous education of the LPN. Upon completion of all non-nursing required course work, the LPN who has current clinical work experience in acute or extended care or who has graduated within the past three years can complete the nursing course work in two semesters. The technology and patient acuity in the agencies utilized for clinical course work have changed greatly in recent years. Recent experience in these settings is important to the success of students pursuing this course work.

Student clinical experiences may include assignments at Munson Medical Center and a variety of other agencies. The program is approved by the Michigan Board of Nursing. Graduates are eligible to apply for National Council Licensure Examination (NCLEX-RN) for licensing as a registered nurse. NMC utilizes hospital and non-hospital based clinical sites to meet the requirements for completion of the program.

NMC's program is approved by the Michigan Board of Nursing. Graduates are eligible to apply for the National Council Licensure Examination (NCLEX-RN) for licensing as a registered nurse.

ADMISSION REQUIREMENTS

Enrollment in any Nursing (HNR) course requires admission to the nursing program and/or approval of the nursing department director. Consideration for admission is on a rolling basis and requires satisfactory completion of program prerequisites. Space in the program is limited. Completion of prerequisites does not guarantee admission to the nursing program. Should qualified applicants exceed space available, competitive admission criteria may apply. Completed applications must be submitted to the Admissions Office.

The following are required for application:

1. Current Michigan LPN license.
2. Graduation from an accredited Practical Nursing Program with evidence of an official transcript with an overall GPA of 2.0 or above. Applicants must have work experience in the field of nursing or clinical coursework within the last three (3) years. Applicants who do not meet the work experience criteria will be required to complete the first year nationally normed nursing exam with a minimum competency as identified by the testing service before progressing in the program. If this minimum competency is not achieved, HNR 126 will be required. Additional assessments may be used to determine course placement.
3. CHM 101 or equivalent college chemistry course at 2.0 GPA or higher within ten years of program entry. Students with a year of high school chemistry (with a combined grade of 2.5 or above) or college chemistry older than ten years may waive the CHM 101 requirement by passing the Chemistry competency examination.

(continued)

4. COMPASS Test scores: Math-66 or above in Algebra (or equivalent course work) within five years of program entry. Students must place into MTH 121-College Algebra. If not, students must take MTH 111-Intermediate Algebra.
5. Completion of all General Education Requirements, as identified on the following pages, with an overall GPA of 2.0 or above. In addition to the overall GPA requirement, a minimum of 2.5 or higher in BIO 227 and BIO 228 (BIO 227 and BIO 228 within five years of program entry or successful completion of a competency exam), a minimum grade of 2.0 is required in ENG 111 and PSY 101.

GENERAL INFORMATION

- A physical examination and completion of the Certificate of Health documenting good mental and physical health is required prior to clinical course work.
- Criminal Background Checks are now required on all students entering the Associate Degree of Nursing and the Practical Nursing programs at Northwestern Michigan College. This is due to the change in legislation that requires Criminal Background Checks be completed for certain health care institutions. The background check will be required by Northwestern Michigan College upon admission to the program and prior to the beginning of the first course. The costs associated with this background check will be the sole responsibility of the nursing student.
- The Board of Nursing may deny a license for a previous felony conviction, previous treatment for drug or alcohol abuse or after finding the existence of one or more grounds for board action listed in 333.16221 of the Public Health Code, Act 368 of 1978.
- The clinical facilities have the right to accept or reject a student. This action could result in a student being delayed or unable to complete the nursing program. This decision may be made just prior to the clinical rotation.
- Nursing program tuition is charged by the contact hour.

General Education Requirements

Credits: 31

Communications: ENG 111 (2.0 or higher)
and ENG 112..... 8
 Humanities: PHL 202..... 3
 Mathematics: COMPASS Placement into MTH 121 **or**
 higher, **or** completion of MTH 111 4
 Science: BIO 227, 228*, 240..... 13
 Social Sciences: PSY 101 3

*For an equivalent transfer of BIO 227 and BIO 228 from another institution, students must have completed a full year of Anatomy and Physiology, and one semester of Microbiology with a 2.5 grade or higher within five years of program entry.

Nursing Specialty Requirements

Credits: 45

Level One Nursing Coursework 23

Note: Credit for the practical nursing level course work (HNR 100-145) must be established prior to admission to the program. At least 22 nursing credits must be established through NMC course completion or transfer equivalences to meet the program requirements. Additional course work may be required and will be arranged by the Nursing Director if needed.

CIT 122A	Computers and Internet Basics (competency test available).....	(1)
HAH 100C	Informatics Essentials	1
HNR 241	Adv. Maternal Child Nursing-Lecture	3
HNR 242	Adv. Maternal Child Nursing-Clinical.....	2
HNR 247	Nursing Management of Complex Patients I-Lecture	3
HNR 248	Nursing Management of Complex Patients I-Clinical.....	4
HNR 251	Mental Health Nursing-Lecture	2
HNR 252	Mental Health Nursing-Clinical.....	1
HNR 261	Nursing Management of Complex Patients II-Lecture	3
HNR 262	Nursing Management of Complex Patients II-Clinical	4
HPD 110	Basic Life Support for Health Care Providers*.....	(0.5)

*Equivalent classes are: American Red Cross Professional Rescuer or AHA Health Care Provider

Note: A 2.0 grade or higher is required in all Nursing (HNR) courses. A minimum of 70-72 credits are required to receive the Associate Degree in Nursing.

Program Requirements

70-72


NMC.
Find it here.

Nursing - Practical

Certificate of Achievement (Level II) *NMC Code 010*

Northwestern Michigan College's Practical Nursing Program is a two-semester certificate program after prerequisites are met. It is designed to give the student basic health care provider skills which will enable them to become eligible to take the National Council Licensure Examination (NCLEX-PN). After successfully completing the NCLEX-PN exam, students are able to enter the work force in various healthcare settings. Licensed Practical Nurses often work in offices, long-term care and home health care facilities. All nursing courses must be completed within five years.

The program is approved by the Michigan Board of Nursing.

Graduates of this program are eligible to apply for the National Council Licensure Examination (NCLEX-PN) for licensing as a Practical Nurse.

ADMISSION REQUIREMENTS

Enrollment in any Nursing (HNR) course requires admission to the nursing program OR approval of the Nursing Program Director. HNR 100 may be taken ahead of program admission if course prerequisites are met and space available. Consideration for admission is on a rolling basis and requires satisfactory completion of all program prerequisites. Space in the program is limited. Completion of prerequisites does not guarantee admission to the Nursing Program.

Should qualified applicants exceed space available, competitive admission criteria may apply. Completed applications must be submitted to the College Admission Office.

The following are required for application:

1. *2.0 college GPA.
2. *COMPASS test scores: Reading-82 or above, Writing-70 or above, Math-66 on Algebra (or equivalent coursework) within five years of program entry. Students must place into MTH 121-College Algebra. If not, students must take MTH 111-Intermediate Algebra, OR have an ACT score of 19 for reading and writing, and math ACT of 24. (Reading and writing COMPASS scores are required for students who do not transfer equivalent courses)
3. Courses required for admission consideration.
 - *CHM 101 competency or equivalent college chemistry course at a 2.0 or higher within ten years of program entry. Students with a year of high school chemistry (with a combined grade of 2.5 or above) or with college chemistry older than 10 years, may waive the CHM 101 requirement by passing the Chemistry competency exam.
 - *BIO 227-Anatomy and Physiology I - 2.5 GPA required. Must be taken within five years of program entry. If not, students may retake BIO 227 and BIO 228 or successfully complete a competency exam. BIO 227 has specific prerequisites that may require additional coursework.
 - BIO 228-Anatomy and Physiology II with a 2.5 GPA required.

- For an equivalent transfer of BIO 227 and BIO 228 from another institution, students must have completed a full year of Anatomy and Physiology, and one semester of Microbiology with a 2.5 grade or higher within five years of program entry.

4. Courses recommended to be completed prior to starting the PN program.

- BIO 240-Normal and Clinical Nutrition
- CIT 122A-Computer and Internet Basics (competency test available)
- HPD 110-BLS for Health Care Providers

**Eligible for wait list once these prerequisites are completed.*

GENERAL INFORMATION

- A physical examination and completion of the Certificate of Health documenting good mental and physical health is required prior to clinical course work.
- Criminal Background Checks are now required on all students entering the Associate Degree of Nursing and the Practical Nursing programs at Northwestern Michigan College. This is due to the change in legislation that requires Criminal Background Checks be completed for certain health care institutions. The background check will be required by Northwestern Michigan College upon admission to the program and prior to the beginning of the first course. The costs associated with this background check will be the sole responsibility of the nursing student.
- The Board of Nursing may deny a license for a previous felony conviction, previous treatment for drug or alcohol abuse or after finding the existence of one or more grounds for board action listed in 333.16221 of the Public Health Code, Act 368 of 1978.
- The clinical facilities have the right to accept or reject a student. This action could result in a student being delayed or unable to complete the nursing program. This decision may be made just prior to the clinical rotation.
- Nursing program tuition is charged by the contact hour.

Certificate Requirements

Credits: 37

BIO 227	Human Anatomy & Physiology I with Lab ...	5
BIO 228	Human Anatomy & Physiology II with Lab..	5
BIO 240	Normal and Clinical Nutrition.....	3
CIT 122A	Computers and Internet Basics (competency test available)	(1)
HNR 100	Introduction to Nursing.....	1
HNR 101	Fundamentals of Nursing-Lecture	4
HNR 102	Fundamentals of Nursing-Clinical.....	4
HNR 108	Pharmacology.....	3
HNR 125	Nursing Across the Lifespan-Lecture	5
HNR 126	Nursing Across the Lifespan-Clinical.....	5
HNR 145	Practical Nursing Role & Issues.....	1
HAH 100C	Informatics Essentials	1
HPD 110	Basic Life Support for Health Care Providers*	(0.5)

**Equivalent classes are: American Red Cross Professional Rescuer or AHA Health Care Provider*

Note: A 2.0 grade or higher is required in all Nursing (HNR) courses.

Plant Science

Associate in Applied Science Degree

Fruit Production.....	NMC Code 581
Landscape & Nursery.....	NMC Code 582
Turfgrass Management	NMC Code 583
Viticulture.....	NMC Code 580

NMC and MSU offer a joint program that can lead to an Associate in Applied Science Degree in the areas of Viticulture, Commercial Horticultural Operations, Landscape and Nursery, or Commercial Turfgrass Operations through NMC. Students dual enroll with NMC and MSU North at the University Center. After completing a minimum of 48 hours in the program, a certificate is awarded from the MSU, Institute of Agricultural Technology. Upon meeting the program requirements for the ASA, student may transfer to the MSU East Lansing Campus as a junior to complete a Bachelor of Science degree. AAS Degree is awarded upon completion of MSU certificate and the following additional NMC courses. See your MSU advisor prior to enrolling each semester.

General Education Requirements Credits: 18-19

Communications: ENG 111 <i>and</i> ENG 112	8
Humanities: Any Group 1 course, (HST 111 or HST 112 are recommended)	3-4
Mathematics: Placement into MTH 111 <i>or</i> higher, <i>or</i> completion of MTH 23* (see advisor)	(4)
Science: BIO 108	4
Social Science: ECO 201 <i>or</i> ECO 202	3

* These credits do not count toward degree requirements.

Occupational Specialty Requirements 20-22

CHM 101 Introductory Chemistry (CHM 150 General Chemistry required if students elect to pursue a Bachelor's degree).....	4
CIT 100 Computer in Business-An Intro (<i>or</i> equivalent)....	3
Electives (see program coordinator for appropriate selection)	13-15

Note: A min. of 24 of the 64 credits must be completed at NMC.

MSU North/University Center Requirements 28-30

AT 293 Professional Internship in Ag Technology	3
PLP 210 Plant Diseases and Pathogens	3
ENT 110 Applied Entomology	3
CSS 210 Fund. of Soils & Landscape Science	3
HRT 213 Landscape Maintenance	2
HRT 215 Landscape Industry Seminar.....	1
HRT 218 Landscape Irrigation.....	3
Commercial Turfgrass Operations core & electives <i>or</i>	12
Commercial Horticulture Operations core & electives <i>or</i> ..	10
Landscape and Nursery core and electives.....	12

* See program coordinator to assure core and elective requirements are met.

Program Requirements 66-71

MSU Transfer Students: Students wishing to transfer to MSU as juniors must meet with an MSU and an NMC academic advisor during their first semester to alter general education courses to meet MSU requirements.

Respiratory Therapy - RT

Associate in Applied Science Degree through Muskegon Community College

NMC Code 712

Northwestern Michigan College is a partner with Muskegon Community College and Munson Medical Center to offer a collaborative program leading to an Associate in Applied Science Degree. All liberal arts and science courses can be taken through NMC. All didactic respiratory classes will be offered at Munson Medical Center via live interactive television from Muskegon Community College. Most clinical courses can be completed at Munson Medical Center. This program is fully accredited by the Joint Review Committee for Respiratory Therapy Education.

The respiratory therapy program begins each fall semester. Enrollment in the program is based on the student meeting the following criteria: overall GPA of 2.0 and proficiency testing in Beginning Algebra and successful completion of ENG 111. Depending on placement test results and high school and/or college transcript evaluation, some prerequisite classes may be required. Class sizes generally begin with 8 students in the Munson interactive classroom.

After completing more than two years of instruction, the therapist student receives the Associate in Applied Science Degree (AAS) from Muskegon Community College. The student must pass the advanced practical examination given by the National Board for Respiratory Therapy in order to receive credentials.

Admission Requirements

Enrollment in any Respiratory Therapy (RT) course requires admission to the Respiratory Therapy program. Consideration for admission requires satisfactory completion of program prerequisites and admission to both Muskegon Community College and the Respiratory Therapy program. Space in the Respiratory Therapy program is limited. **Completion of prerequisites does not guarantee admission to the Respiratory Therapy program.** Students interested in pursuing a degree in Traverse City for Respiratory Therapy from Muskegon Community College would follow these guidelines for application to and registration in the program.

1. Submit an application to Northwestern Michigan College. Applications are available at www.nmc.edu/admissions or at the Admissions Office (231) 995-1054.
2. Meet with an NMC advisor or Health Occupations Respiratory Therapy Advisor to complete your educational development plan for completing your degree.
3. Complete the basic criteria for admissions to the Respiratory Therapy program including: overall GPA of 2.0 and proficiency testing in Beginning Algebra and successful completion of ENG 111.
4. Apply for Admission to Muskegon Community College and the Respiratory Therapy Program at www.muskegoncc.edu/pages/1928.asp or applications are also available by calling (231) 995-1235.

Technical Management Administration

Associate in Applied Science Degree *NMC Code 573*

Adding technical training to a business background has long been recognized as a powerful combination in the job market. Technicians often work with non-technical personnel such as accountants, managers, and data processors.

In order to obtain this successful combination of technical and business skills, students who have earned an Associate in Applied Science degree in a technical program may earn a second AAS degree in Technical Management Administration by completing 32 additional credits with a business emphasis.

Please note: This program is available only to students who have already completed an associate degree program in a technical area (Technical, Health, and Visual Communications programs). This program is not available to the student whose first degree is from a Business program.

Previous Technical focused AAS degree Credits: 64

Occupational Specialty Requirements 32

ACC 121	Accounting Principles I	4
ACC 122	Accounting Principles II	4
BUS 101	Introduction to Business	3
BUS 231	Professional Communications	3
BUS 261	Business Law I.....	3
CIT 100	Computers in Business-An Intro	3
MGT 241	Principles of Management	3
MGT 251	Human Resource Management	3
MKT 201	Principles of Marketing	3
Any Business Course		3

Visual Communications

Associate in Applied Science Degree *NMC Code 351*

This program is oriented to careers in advertising design and graphic design. Employment opportunities include entry-level positions in newspapers, publishing and design studios, retail firms, manufacturers, advertising agencies and local freelance work. Students are encouraged to transfer to four-year colleges or universities to earn a bachelor's degree if they plan to seek higher level positions. Emphasis is placed on learning marketable job skills, process, problem-solving techniques, and portfolio preparation. Students explore a full range of skills: drawing, typography, layout, computer illustration techniques, team-work, new media and graphic design.

General Education Requirements Credits: 18-19

Communications: ENG 111 <i>and</i> ENG 112	8
Humanities: ART 111 <i>or</i> ART 112 (preferred) <i>or</i> ART 213	3-4
Mathematics: Placement into MTH 111 <i>or</i> higher, <i>or</i> completion of MTH 23*	(4)
Science: Any Group 1 course with a lab	4
Social Sciences: Any Group 1 course	3

* These credits do not count toward degree requirements.

Occupational Specialty Requirements 46

ART 121	Drawing I.....	3
ART 131	2-D Design	3
VCA 100	Materials and Techniques	3
VCA 125	Typography I.....	3
VCA 126	Typography II	3
VCA 127	Digital Imaging.....	3
VCA 146	Interactive Animation.....	3
VCA 147	Web Design I	3
VCA 150	Digital Graphic Design	4
VCA 200	Visual Communications II	3
VCA 220	Visual Communications III.....	3
VCA 225	Visual Communications Studio.....	3
VCA 230	Visual Communications V	3
VCA 235	Visual Communications Portfolio	3
VCA 250	Time Based Media I	3

Program Requirements 64-65

Visual Communications - Creative Management in Art Direction

Associate in Applied Science Degree *NMC Code 251*

This Visual Communications program is designed for students who have completed the VCA Associate in Applied Science degree and have the desire to work locally or do not wish to transfer to a four-year BFA or university program. This degree focuses on a tailored set of courses from other disciplines that expose the student to marketing, copywriting, small business management, new media, digital photography and other skills that will aid them in breaking into the work force. A required summer internship with a local marketing/design/advertising firm is a key part of this program.

Previous Visual Communications AAS degree 64

General Education Requirements Credits: 32

ART 132	3-D Design	3
ART 171	Photography I	3
ART 175	Digital Photography	3
ART 181	Printmaking I.....	3
ART 213	Modern Art History	3
ENG 221	Creative Writing <i>or</i>	
ENG 222	Advanced Creative Writing.....	3
COM 111	Public Speaking <i>or</i>	
COM 201	Mass Communication and Culture	4
ENG 220	Technical Writing.....	3
MKT 201	Principles of Marketing <i>or</i>	
MKT 210	Principles of Selling.....	3
VCA 290	Visual Communications Internship.....	4

Welding Technology

Certificate of Achievement (Level II) NMC Code 016

The Welding Technology courses are designed to meet the needs of the beginning welding students as well as the needs of people who are upgrading their welding skills. Students will develop their skills in this area through laboratory experience using equipment representative of the welding industry. Welding classes can prepare students to be a certified welder, provide a certificate in Welding Technology, or an Associate in Applied Science degree through the Manufacturing Technology program. The welding curriculum includes Oxy-acetylene, Shielded Metal Arc Welding (SMAW), Gas Metal Arc Welding (GMAW), and Gas Tungsten Arc Welding (GTAW), on both ferrous and nonferrous materials.

Certificate Requirements

Credits: 34

DD 101	Print Reading and Sketching	3
DD 110	Basic Metallurgy	2
MFG 111	Math for Manufacturing	3
MFG 113	Machining I	3
MFG 114	Machining II	3
WPT 110	Oxy-Fuel Processes	3
WPT 120	GTAW (TIG) Welding I	2
WPT 121	GTAW (TIG) Welding II	2
WPT 130	SMAW (Arc) Welding I	3
WPT 131	SMAW (Arc) Welding II	2
WPT 140	GMAW (MIG) Welding I	2
WPT 141	GMAW (MIG) Welding II	2
WPT 142	Flux Cored Arc Welding	2
WPT 160	Welding Qualification Prep	2

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Course Descriptions

Course Prefixes by Academic Area

Aviation

AVF	Aviation Flight
AVG	Aviation Ground

Bridge

BPC	Bridge Courses
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Business

ACC	Accounting
BUS	Business Administration
CIT	Computer Information Technology
CUL	Culinary Arts
MGT	Management
MKT	Marketing

Communications

ASL	World Language - American Sign Language
COM	Communications
ENG	English
FRN	World Language - French
SPN	World Language - Spanish
THR	Theater

Construction Technology

CAR	Carpentry Technology
CMT	Construction Management
EET	Electronical/Electronics Technology
EGY	Renewable Energy
ELE	Electrical Technology
HVA	HVAC/R Technology
PLU	Plumbing Technology

Health Occupations

HAH	Allied Health
HDA	Dental Assistant
HNR	Nursing
HPD	Health Professional Development

Humanities

ART	Art
DNC	Dance
HST	History
HUM	Humanities
MUS	Music
PHL	Philosophy
VCA	Visual Communications

Maritime

MDK	Maritime-Deck
MNG	Maritime-Engineering
MNS	Naval Science

Physical Education

HF	Health and Fitness
OUT	Outdoor Pursuits
PE	Physical Education

Science and Mathematics

AST	Astronomy
BIO	Biology
CHM	Chemistry
EGR	Engineering
ENV	Environmental Science
MTH	Mathematics
PHY	Physics

Social Sciences

ANT	Anthropology
CD	Child Development
CJ	Criminal Justice
ECO	Economics
EDU	Education
GEO	Geography
LWE	Law Enforcement
PLS	Political Science
PSY	Psychology
SOC	Sociology
SWK	Social Work

Technical

AT	Automotive
DD	Drafting and Design
MFG	Manufacturing Technology
WPT	Welding Process Technology

Reading a Course Description

The semester credit hours followed by (contact hours) are listed on the first line of the course description. Student tuition, in most cases, is based on the course contact hour. Exceptions are MDK, MNG, MNS, Applied Music, Ensembles and private lessons. At the end of the description the course is identified by group number. See graduation requirements on page 52.

In addition to the courses listed in this section, each instructional area within Northwestern Michigan College may offer the following three courses:

290A-E Academic Internships

An internship is a method of earning college credit in a supervised field experience. It is an opportunity for students who want to explore career or interest areas, apply classroom theory to a real situation, and gain practical experience for resume building. Service Learning Internships specifically provide an opportunity to earn credits while giving some of your talents

to the community as a volunteer. All internships can be arranged in all liberal and occupational studies areas for one to four hours of elective credit. A maximum of four credits will count toward associate degree requirements. **Group 2 course.**

291 Special Topics

Seminars, lectures, etc. on a selected topic within a field are sometimes offered as special courses. Students may enroll in more than one Special Topics offering but not all four-year schools accept special topics credits. **Group 2 course.**

297 Independent Study

This option provides an opportunity for a student with a good scholastic record to pursue independently the study of a subject under the guidance of an instructor. This option may be arranged for one, two or three credits. This option may be repeated for NMC credit but not all four-year schools accept independent study credits. **Group 2 course.**

NMC Course Descriptions

ACC

Accounting

ACC 121 Accounting Principles I 4.0 (4)

Required prerequisite(s): MTH 23 or placement into MTH 111

Recommended prerequisite(s): BUS 105

This course covers basic principles and procedures in accounting for both a service and merchandising business. It includes the accounting cycle, financial statement preparation, manual accounting systems, petty cash, bank reconciliations, receivables, inventories, and property, plant and equipment.

Group 2 course.

ACC 122 Accounting Principles II 4.0 (4)

Required prerequisite(s): ACC 121

Second semester accounting continues with payroll, current liabilities, partnerships, corporations, bonds, cash flow statements, and statement analysis. **Group 2 course.**

ACC 221 Intermediate Accounting I 4.0 (4)

Required prerequisite(s): ACC 122

A detailed analysis of the content of financial statements covering problems related to revenue recognition, accounting for receivables and inventory. The first semester begins with a brief review of the fundamental accounting process.

Group 2 course.

ACC 222 Intermediate Accounting II 4.0 (4)

Required prerequisite(s): ACC 122

A detailed analysis of the content of financial statements covering problems related to property, plant and equipment, investments, current liabilities and contingencies, bonds and long-term notes, leases, income taxes, and shareholders' equity. US and international reporting standards are compared.

Group 2 course.

ACC 225 Cost/Management Accounting 3.0 (3)

Required prerequisite(s): ACC 121

Recommended prerequisite(s): ACC 122, MTH 111

This course introduces the basic concepts and terminology of managerial cost accounting, its nature and tasks. Both job order cost systems and process cost systems are analyzed. The student begins building a knowledge base for managerial cost accounting through the analysis of the theory and practical applications of 1) cost-volume-profit, 2) job costing, 3) budgets and standard costing, and 4) study of internal control systems in a manufacturing setting. **Group 2 course.**

ACC 290 Accounting Internship 3.0 (3)

Required prerequisite(s): 12 semester credits of accounting in addition to a spreadsheet course. This internship requires the approval of accounting instructor, a GPA of 3.0 in accounting and a minimum of eight hours per week spent on-site..

The accounting work experience is an elective of the two-year Associate in Applied Science degree in Accounting. The purpose of this work experience course is to provide an opportunity for students to acquire accounting work experience, to apply their skills in a real work setting, and to build ties with the business/professional community. Students spend 10 hours per week in this paid or non-paid, supervised on-the-job training experience. In addition to the required 150 hours in an accounting site, students participate in brief, reflective writing assignments. Students must apply one month prior to the semester in which they will complete the internship.

Group 2 course.

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ANT

Anthropology

- ANT 102 Underwater Archaeology3.0 (3)
Recommended prerequisite(s): ENG 99 or placement into ENG 11/111
This course will provide students with an introduction to theory, method, technologies, and practice in underwater archaeology, with case studies of prehistoric and historical sites worldwide, including the Michigan Great Lakes. Course content will draw primarily from anthropology and the applied social sciences. This is a lecture-based course with field trips to coastal sites in northern Michigan. No diving is required. **Group 2 course.**
- ANT 113 Intro to Cultural Anthropology3.0 (3)
Required prerequisite(s): ENG 99 or placement into ENG 11/111
The study of the role of society and culture in humankind's adaptation to a variety of environments is the focus of this course. A variety of cultures are studied, utilizing cross-cultural comparisons. Among topics considered are field methods, theories of cultural evolution, the family, kinship, economics, religion, political organization and language. **Group 1 course.**
- ANT 201 Nautical Archaeology I3.0 (3)
Required prerequisite(s): ENG 99 or placement into ENG 11/111
Recommended prerequisite: ANT 102
This is an entry level course to the Nautical Archaeology Society Training Program and is aimed at introducing nautical archaeology to divers and non-divers, and promoting their interest in the subject. It provides a broad based view of the subject. Course content will draw primarily from archaeology, anthropology, and the applied social or behavioral sciences. The curriculum will be presented in the classroom and in an open water setting (or foreshore site for non divers) in the field. **Group 2 course.**
- ANT 202 Nautical Archaeology II3.0 (3)
Recommended prerequisite(s): ANT 201
This is a field archaeology course that allows students the opportunity to practice the skills they learned in ANT 101. Students will attend two archaeological conferences, and will design and execute underwater archaeology projects. Students may also participate in larger projects within the Grand Traverse Bay Underwater Preserve. Foreshore projects will be developed for non divers. The course will be offered throughout the summer term on a flexible time schedule and is based on individual availability and weather conditions. **Group 2 course.**

ART

Art/Fine Arts

- ART 100 Art Appreciation3.0 (3)
This course prepares the student to make sense of the visual arts, with the emphasis on the process of evaluating meaning and value. The student is exposed to the various media and forms with which the artist works. In addition, the student is given a brief overview of the history of art from classical to the present. **Group 1 course.**
- ART 111 History of Western Art I4.0 (4)
This course will introduce major trends of Western Art from Pre-History through Greece, Rome and the Middle Ages. Significant works of painting, sculpture and architecture will be presented within the social, political and cultural context of each period. **Group 1 course.**
- ART 112 History of Western Art II4.0 (4)
This course is designed to introduce major trends in Western Art from the Renaissance through Modernism to the present. Significant works of painting, sculpture and architecture will be presented within the social, political and cultural context of each period. **Group 1 course.**
- ART 121 Drawing I3.0 (4)
Drawing I introduces the students to basic drawing skills and techniques through the use of line, form, composition, perspective and the use of chiaroscuro. The course emphasis is on using drawing as a vehicle for seeing and communicating. Students will learn to judge proportion, create volume, depict the illusion of space and to analyze their own work as well as others. Black and white dry medium will be used for all assignments. **Group 2 course.**
- ART 122 Drawing II3.0 (4)
Required prerequisite(s): ART 121
Course will explore advanced methods in drawing including the effects of lighting, multiple panel design and conceptualizing of compositions with an emphasis on the use of new media and developing a personal style. Advanced use of color media and theory will also be explored in this course. Assignments will include still life and object studies designed by both the instructors and students. **Group 2 course.**



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ART 131 2-D Design 3.0 (4)

Course will study the concepts and theory of two-dimensional design, pattern, and color as they apply to visual perception and communication. Students will study visual structure, color and their application. **Group 2 course.**

ART 132 3-D Design 3.0 (4)

An introduction to the elements of construction and production of three-dimensional design. Shape, volume, mass, and interaction of forms and colors will be studied within a variety of conceptual models, e.g. architecture, sculpture, package design, display, etc. **Group 2 course.**

ART 151 Ceramics I 3.0 (4)

This is an introductory course consisting of instruction and development of hand-building skills and basic ceramic design. Students prove critical thinking and development of technical skills by completing hand building projects that include: sets, complex shapes (made from multiple shapes), relief, pouring vessels, and a detailed sketchbook that includes research and design focused on each project. Functional pottery, sculpture, and hybrids of these forms will be the focus of this course.

Group 2 course.

ART 152 Ceramics II 3.0 (4)

Required prerequisite(s): ART 151

This course is an advanced studio intensive class that builds on the skills and knowledge developed in Ceramics I. Advanced projects using hand building and wheel throwing techniques will be completed for assessment. Projects will include the concepts of sets, bottle forms, wheel throwing, the human figure, and large stacking forms. Sketchbook/sourcebook documentation of research and design will be required.

Group 2 course.

ART 161 Painting I 3.0 (4)

This course will introduce concepts of painting as well as principles of design, including the development of painting techniques. Students will be given painting projects/problems throughout the semester ending with one self-directed painting which make application of learned concepts. Oils and acrylics will be used. **Group 2 course.**

ART 162 Painting II 3.0 (4)

Required prerequisite(s): ART 161

This course will continue the concepts of Painting I as well as elements of design, including the development of a personal styled technique. Students will deal with more complex and involved painting concepts with an emphasis upon a particular focus of interest and challenge. The course is designed to give more latitude in an independent/individual approach. Students will work in either oil or acrylic paint. **Group 2 course.**

ART 165 Watercolor Painting I 3.0 (4)

An introduction to the techniques and materials of watercolor painting. Includes use of creative effects, additive and subtractive approaches, and mixing of color to create effective paintings in a step-by-step manner. **Group 2 course.**

ART 166 Watercolor Painting II 3.0 (4)

Required prerequisite(s): ART 165

Watercolor II deals with advanced problems in watercolor painting with special emphasis on individual development and creativity particularly in the area of compositional conceptualization. **Group 2 course.**

ART 171 Photography I 3.0 (4)

This is an introductory course in black and white photography, emphasizing composition theory, analogue/film, 35mm SLR camera functions, exposure control and film processing. An introduction to digital darkroom technology is covered. Students will demonstrate their understanding of two-dimensional design in photography by producing two portfolios of their work. **Group 2 course.**

ART 173 Photography II 3.0 (3)

Required prerequisite(s): ART 171

Photography II builds on the competencies in black and white photography developed in Photography I with an emphasis on identifying and enhancing technical and compositional skills of the student on an individual basis. The student is expected to identify those skills and areas for improvement that are the most needed and develop, with the aid of the instructor, a plan for addressing those needs. **Group 2 course.**

ART 175 Color Photography I 3.0 (4)

Required prerequisite(s): ART 171 or instructor permission

Color Photography I is an intermediate photography course covering the basics of working with photographs in digital color form. Specific topics will include understanding the digital process and the controls available to maximize image quality, image enhancement using software programs (Adobe Photoshop), color theory as it applies to both image making and image enhancement, color management, and output to digital prints. **Group 2 course.**

ART 181 Printmaking I 3.0 (4)

Printmaking I is an introductory survey course that introduces the students to a wide variety of print media: relief, intaglio, embossing and monotype. Students will gain knowledge of the history, conception, production and presentation of achromatic prints. **Group 2 course.**

ART 182 Printmaking II 3.0 (4)

Required prerequisite(s): ART 181

Printmaking II expands on processes and concepts explored in Printmaking I with the emphasis on more complex techniques, including lithography, dry point, and collagraphs. Students will refine their technical skills and concepts begun in Printmaking I. Students will explore contemporary printing techniques and issues. **Group 2 course.**

ART 213 Modern Art History 3.0 (3)

This course examines the history of art from the beginning of the 20th century to the present. Emphasis is placed on the continuing connection between modern art movements and the relationship of art to current social and cultural contexts.

Group 1 course.

ART 214 Women in Art.....3.0 (3)
This course will provide a historical study of selected European and American women painters, sculptors, architects, and craftspersons from the 17th through 20th centuries. Art works will be examined within the social and cultural context of each century. **Group 1 course.**

ART 221 Life Drawing I3.0 (4)
Required prerequisite(s): ART 121
Life Drawing I involves comprehensive studies in drawing the human figure with a variety of materials and discusses the solution of the problems of figure drawing used to advance the general qualities of grace, rhythm, and form. Explorations include gesture drawing, contour drawing and drawing the figure in motion. Life Drawing I will work primarily in charcoal and pencil. **Group 2 course.**

ART 222 Life Drawing II3.0 (4)
Required prerequisite(s): ART 221
Life Drawing II is an advanced study of problems in drawing the human figure in multiple views and in longer studies with an accent on composition and dealing not only with the model but the environment the model is in. Life Drawing II will include the introduction of color and wet media. **Group 2 course.**

ART 275 Color Photography II.....3.0 (4)
Required prerequisite(s): ART 175
Color Photography II is an advanced photography course dealing with the use of digital photographic tools and techniques to create artistic work. On the technical side, specific topics will include advanced tools for image control, advanced features in software digital imaging programs (Adobe Photoshop and plug-ins), color management in the digital environment and multiple options for the output of work in a variety of forms. On the artistic side, the work will be to create a coherent visual project that reflects the interests of the student. **Group 2 course.**



ASL World Language - American Sign Language

ASL 101 American Sign Language I4.0 (4)
ASL 101 introduces students to the language and culture of Deaf people in the United States and most of Canada. This course will focus on building vocabulary and dialogue structures needed for introductory conversation about purposeful topics, the use of non-manual grammatical markers such as facial expression, use of finger spelling and numbers, and an introduction to the rich history and culture of the Deaf community. Students will participate in interactive classroom activities using a “voices off” policy to ensure ASL immersion. **Group 2 course.**

ASL 102 American Sign Language II4.0 (4)
Recommended prerequisite(s): ASL 101, or instructor permission
ASL 102 furthers student knowledge and experiences of the language and culture of Deaf people in the US and much of Canada. The introduction of additional vocabulary and grammar structures furthers students’ ability to communicate meaningfully with ASL users. Students will develop greater insight into the Deaf culture through the context of ASL literature, and current topics relevant to the Deaf community are explored. “Voice off” policy is used for more extended periods of time. While developing communications skills, students will simultaneously mature in their understanding of the Deaf experience. **Group 2 course.**

ASL 103 American Sign Language III4.0 (4)
Note: Minimum enrollment of ten (10) students is required.
Recommended prerequisite(s): ASL 101 and ASL 102, or instructor permission
ASL 103 is a continuation of ASL 101 and 102, expanding the emphasis on ASL grammar, vocabulary development, and Deaf culture. Dialogue, short stories narratives, and short conversation, both receptive and expressive, will be featured through the course. Meaningful conversational topic development is emphasized. **Group 2 course.**

ASL 104 American Sign Language IV4.0 (4)
Note: Minimum enrollment of ten (10) students is required.
Recommended prerequisite(s): ASL 103
ASL 104 is a continuation of ASL 101, 102, and 103 and students will further develop ASL grammar, vocabulary development, and Deaf culture. Dialogue, short stories, narratives, and short conversation, both receptive and expressive, will be featured through the course. Meaningful conversational topic development is emphasized. **Group 2 course.**

AST**Astronomy****AST 100 Observational Astronomy.....2.0 (2)**

This is an introduction to astronomy. The goal of this course is to acquaint the student with the constellations, solar system objects and their motions, the celestial sphere concept and co-ordinate system. Stars, star clusters, nebulae and galaxies are also studied. Students will use naked-eye observations as well as telescopes, spectrograph, photometer and CCD camera to observe and report findings. Each session includes training in the operation of equipment. **Group 2 course.**

AST 109 Planetary Astronomy4.0 (3)**AST 109L Planetary Astronomy Lab.....0.0 (2)**

Required prerequisite(s): ENG 99

Recommended prerequisite(s): ENG 11/111, may be taken concurrently and MTH 111

Corequisite(s): AST 109 and AST 109L

Characteristics and properties of the solar system and its components are presented to students in the context of the history of discovery. This information is integrated with student observational data to develop a mathematical model in the laboratory. The model is developed by incorporating equations used to compute characteristics and properties of solar system components. The model is utilized by students to encourage understanding of why the solar system has evolved to its current state by evaluating the effects of changes in values of fundamental measured properties and characteristics.

Group 1 lab course.

AST 119 Astronomy4.0 (3)**AST 119L Astronomy Lab0.0 (2)**

Required prerequisite(s): ENG 99

Recommended prerequisite(s): ENG 11/111, may be taken concurrently and MTH 111

Corequisite(s): AST 119 and AST 119L

History of discovery of the nature of the cosmos and its contents is the format utilized to develop understanding of the nature of stars and the universe, and the physical principles determining this nature. These principles underlie our proficiency for prediction of the nature of the universe and our ability to make observations of our universe. The principles are analyzed by means of a student developed mathematical model incorporating the quantitative relationships derived by physicists and astronomers. Observations provide students with the sky knowledge and data necessary for prediction of stellar characteristics. **Group 1 lab course.**

Visit www.nmc.edu/science-math for detailed information.

AT**Automotive Technology****AT 100 Automotive Service Basics2.0 (2)**

Recommended prerequisite(s): ENG 99, MTH 08

This is the first course in the Automotive Service Program. Engine theory, cooling systems, and lube requirements will be covered. Bolts, micrometers and basic specialty tools are integrated into the class. Training in the use of acetylene torch equipment will be taught along with its use in the automotive field. Students who passed a prior approved high school tech prep program will not be required to take this course. This course is designed to prepare the student to enter the automotive program. **Group 2 course.**

AT 110 Automotive Brake Systems.....5.0 (7)

Required prerequisite(s): AT 100, may be taken concurrently

This course covers theory, components, nomenclature, and service of automotive brake systems. Students will use standard skills to diagnose hydraulic systems, drum and disk brakes, power assist units and systems. The study and repair of modern A.B.S. systems along with the replacement of associated parts such as wheel bearings will also be covered. Lab work will include procedures such as the use of brake lathes, brake line cutting and flaring procedures and the use of electronic test equipment. **Group 2 course.**

AT 120 Automotive Electrical I5.0 (8)

Required prerequisite(s): AT 100, may be taken concurrently

This course covers basic electricity, circuits, testing equipment, and solid state electronics. In addition, this course will also familiarize the student with the operation, testing, and service of the automotive starting and charging system. This is a combination lecture and lab course using both components and vehicles for demonstration. **Group 2 course.**

AT 130 Engine Performance I5.0 (8)

Required prerequisite(s): AT 220

This course is designed to familiarize students with the theory and operation of the automotive ignition and fuel systems. Topics include: distributors, electronic ignition, distributorless systems, fuel injection systems, turbochargers and superchargers. The lab portion provides the student with actual hands on experience with tune-up, ignition, and fuel system service. Modern test equipment will be provided and proper diagnostic techniques will be stressed. **Group 2 course.**

AT 140 Suspensions and Steering4.0 (6)

Required prerequisite(s): AT 100, may be taken concurrently

This course is designed to familiarize the student with the nomenclature, theory, and service techniques for the modern steering and suspension system. Includes the the repair of MacPherson struts and rack and pinion service. The course will provide the student with actual experience with alignment and tire balancing equipment. **Group 2 course.**

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AT 150 Automatic Transmissions.....6.0 (9)*Required prerequisite(s): Instructor permission required*

This course is designed to familiarize the student with hydraulic theory, internal transmission powerflow, electronic control and torque convertor operation. All aspects of transmission operation will be covered as well as removal, overhaul and installation procedures. Students will remove, overhaul, dynotest and install actual failed units in the lab. The cause of the failure of these units will be explored in detail. Factory and aftermarket updates to prevent future failures will be taught. **Group 2 course.**

AT 160 Engine Repair6.0 (8)*Required prerequisite(s): AT 100, may be taken concurrently*

This course covers the theory, construction, and repair of the four stroke automotive engine. This will include the proper use of compression and leakage test equipment, precision measuring tools, special engine tools and valve grinding equipment. Lab work includes diagnosis, replacement of external parts and tear down and overhaul of actual failed engines.

Group 2 course.**AT 170 Heating and Air Conditioning.....4.0 (6)***Required prerequisite(s): AT 120*

This course covers the principles of refrigeration with emphasis on the particular problems of application to automotive air conditioning. The course also covers automotive heating systems which include heater cores, blower motors, vent systems and electronic controls for them. The student will learn how to use refrigerant recovery and charging equipment and will have hands on experience in the lab with that equipment.

Group 2 course.**AT 180 Manual Drivetrain and Axles6.0 (9)***Required prerequisite(s): AT 100, may be taken concurrently*

This course covers the basic operating principles, construction, power flow and repair of clutches, manual transaxles and drive shafts. Different theory and overhaul will be covered including ring and pinion replacement and set up. Lab work will include hands on repair of late model vehicles including four wheel drive. **Group 2 course.**

AT 200 Service Dept. Management.....2.0 (2)

This course is designed to acquaint the student who plans a career in the automotive service industry with the duties, responsibilities, qualifications, and problems of service department manager. The student will learn general shop organization, types of service, and cost and returns by department. Time will be devoted to employer-employee and customer relations and instruction in the use of the service manual. Also includes practice in writing and administering various forms such as work orders, rate sheets, etc. **Group 2 course.**

AT 210 Hybrid Technology5.0 (8)*Required prerequisite(s): AT 130 or Certification in Electrical and Engine Tune Up.*

This course provides a comprehensive systems overview of the operating principles, maintenance, and service of hybrid electric vehicles. **Group 2 course.**

AT 220 Automotive Electrical II5.0 (8)*Required prerequisite(s): AT 120*

This course covers advanced automotive electronics with the emphasis placed on operation, troubleshooting, and repair of lighting, gauges, accessories, and power option circuits. Body hardware is covered including diagnostics of modern systems with body control modules. **Group 2 course.**

AT 230 Engine Performance II4.0 (6)*Required prerequisite(s): AT 130*

This course covers computerized engine controls including the latest emission control systems. The student will become proficient with the use of scanners, scopes and the latest engine analyzers. The art of diagnostics and troubleshooting will be stressed. The student will have hands on experience in this area including practice using the computer as a source of information. **Group 2 course.**

AVF**Aviation Flight****AVF 111 Private Flight.....5.0 (5)**

A flight course structured to provide a minimum of 40 dual and solo flight hours to meet the aeronautical experience requirements for a private pilot. Upon completion of this course the student will have attained the FAA Private Pilot Rating. **Group 2 course.**

AVF 118 Instrument Flight I1.0 (1)*Required prerequisite(s): Private Pilot Rating*

This course is the beginning stage of the Instrument Pilot Rating. The ground work will be laid for students to safely fly by the instruments. Skills and techniques will be gained to effectively move to Instrument Flight II where holding, tracking, and approaches will be learned. Both the aircraft and flight simulator will be used to obtain skills required for this course. Objectives learned will go toward the FAA Instrument Rating. **Group 2 course.**

AVF 130 Instrument Flight II2.0 (2)*Required prerequisite(s): AVF 118*

The aircraft and the simulator will be used to teach the required skills. The student will learn tracking, holding, and instrument approaches. At the culmination of this course the student will have gained actual instrument flight time and be a competent instrument pilot and will be signed off for the FAA Instrument check ride. **Group 2 course.**

AVF 141 Introduction to UAS2.0 (2)

This course will introduce students to the world of unmanned flight. The course will consist of the construction of a remotely controlled aircraft and the skills needed to maintain it. Additionally they will conduct flight operations to become proficient at directly controlling a small aircraft. They will learn about propulsion, communication links, servos, design, materials and regulations of the r/c aircraft world.

Group 2 course.

AVF 230 Commercial Flight I.....2.0 (2)*Required prerequisite(s): Instrument Flight Rating*

The student will advance their skills required by the FAA to obtain a Commercial Pilots Certificate. They will gain experience in different aircraft with the opportunity to gain a Tailwheel Endorsement or Seaplane Rating. Students will increase their instrument proficiency while conducting cross country flights. **Group 2 course.**

AVF 232 Commercial Flight II.....3.0 (3)*Required prerequisite(s): AVF 230*

A flight course structured to provide a minimum of 45 dual and solo flight hours to partially fulfill the flight hour requirements for the FAA Commercial Pilot Certificate. This course will provide a review of VFR and IFR cross country navigation procedures and introduce the student to multi-engine flight. **Group 2 course.**

AVF 234 Commercial Flight III.....2.0 (2)*Required prerequisite(s): AVF 232*

This course is the last of three flight courses required to obtain the FAA Commercial Pilot Certificate. This course consists of approximately 18 flight hours with an emphasis on commercial flight maneuvers in preparation for the Commercial Pilot FAA Practical Test. Upon completion of this course, the student will have attained the FAA Commercial Pilot Certificate. **Group 2 course.**

AVF 241 UAS Flight School.....4.0 (5)*Required Prerequisite(s): AVG 261*

Students will conduct hands-on UAS flight operations to include programming the aircraft for the conduct of various missions that will resemble typical work that they will see in the field. These include surveillance, structure inspection, advanced sensor operations and search and rescue.

Group 2 course.**AVF 271 Multi-Engine Flight.....1.0 (1)***Required prerequisite(s): Private Pilot Rating*

This flight course involves approximately 10 flight hours in an airplane/simulator and 5 ground hours and is designed to give the student the aeronautical knowledge, proficiency, and experience required to meet the FAA Practical Test Standards for the Private or Commercial Multi-engine rating. Upon completion of this course, the student will have attained the FAA Airplane Multi-Engine Land Rating. **Group 2 course.**

AVF 274 Tailwheel Flight.....1.0 (1)*Required prerequisite(s): Private Pilot Rating*

This course is designed to provide the student with the skills, knowledge, and experience to receive a logbook endorsement to fly tailwheel aircraft. **Group 2 course.**

AVF 275 Seaplane Flight.....2.0 (2)*Required prerequisite(s): Private Pilot Rating*

In this course, the student will gain the skills, knowledge, and experience to receive endorsement for the FAA Practical Test. Students will learn in a Piper Super Cub on floats as they demonstrate maneuvers and landings. **Group 2 course.**

AVF 281 Advanced Cross Country Flight.....2.0 (3)*Required prerequisite(s): Multi-Engine Rating**Recommended prerequisite(s): Commercial Pilot Rating*

Students will be exposed to various terrain and weather conditions while accomplishing 50 hours of multi-engine cross country flight. They will be responsible for all aspects of flight planning, ground handling of the aircraft and management of cargo and passengers as necessary. All flight lessons will be conducted with a Multi-Engine Flight instructor. **Group 2 course.**

AVF 283 Upset Maneuver Training1.0 (1)*Required prerequisite(s): Private Pilot Rating*

In this course the student will learn the foundations to safely perform basic aerobatic maneuvers. Also, the student will gain confidence and skills necessary to recover from various unusual flight attitudes that will increase the student's overall flight safety. **Group 2 course.**

AVF 284 Instrument Flight Instructor2.0 (2)*Required prerequisite(s): Flight Instructor Rating*

The student perfects both teaching and instrument flying skills while sitting in the right seat of the cockpit. The student develops the knowledge and ability to teach others instrument flying procedures. Training utilizes instrument equipped aircraft and a Frasca simulator. The course consists of 10-20 hours of flying and 20-30 hours of ground time. **Group 2 course.**

AVF 285 Crew Resource Management2.0 (3)*Required prerequisite(s): Multi-Engine Rating**Recommended prerequisite(s): Commercial Pilot Rating*

Students will learn the principles of Crew Resource Management (CRM) with 50 hours of flight in a multi-engine aircraft, including the challenge and response concepts used in corporate, regional, or major airlines. Lessons will explore decision making during normal, adverse, or unplanned conditions during all phases of flight. Students will be in the role of both Captain and First Officer. All flight lessons will be conducted with a Multi-Engine Flight Instructor.

Group 2 course.**AVF 382 Flight Instructor Rating4.0 (4)***Required prerequisite(s): Commercial Pilot with Instrument Rating*

In this course the student will learn the skills to be a Certified Flight Instructor (CFI). They will master the skills of the Private and Commercial Pilot ratings. In addition they will learn how to be an effective teacher and understand all FAA rules and regulations that accompany being an instructor. The student will learn in this course through the use of the simulator and aircraft. **Group 2 course.**

NMC.

Find it here.

AVG**Aviation Ground****AVG 101 Private Pilot Ground School.....5.0 (5)**

A course of study that will provide the aeronautical knowledge required of a private pilot and prepare the student to take the FAA Private Pilot written examination. Topics include: aerodynamics, engine and aircraft systems, airport operations, weight and balance, aircraft performance, Federal Aviation Regulations, meteorology, airspace, navigation, and flight physiology. **Group 2 course.**

AVG 161 Mechanics for Pilots.....3.0 (3)

Recommended prerequisite(s): Private Pilot Rating

This course will teach the students about the systems, components, safe repair, and regulations involved with maintaining and operating small aircraft. Students will learn in the classroom and in the maintenance hangar. **Group 2 course.**

AVG 190 Aviation Weather.....3.0 (3)

Recommended prerequisite(s): AVG 101

This course offers thorough coverage in the application and analysis of meteorological charts and how they pertain to aviation. It emphasizes the need for advanced knowledge on how NWS/NOAA charts are derived and how to understand their use in aviation today. Additional emphasis will be placed on predominant weather patterns, associated weather and planning flights to avoid severe weather. A basic understanding in the theory of meteorology is desired. **Group 2 course.**

AVG 202 Advanced Aircraft Systems.....3.0 (3)

Recommended prerequisite(s): AVG 101

This course is designed to prepare those students seeking to be career pilots to be successful in the intense aircraft systems ground schools offered by the airlines, manufacturers, and private training providers such as Flight Safety. Each major system of large turbine aircraft will be studied. **Group 2 course.**

AVG 204 Airline Aircraft Ground School.....3.0 (3)

Recommended prerequisite(s): AVG 202

This course is designed to prepare those students seeking to be career pilots to be successful in the intense aircraft ground schools provided by the airlines. Canadair Regional Jet systems, limitations, normal and emergency checklist, and flows and flight procedures will be covered. **Group 2 course.**

AVG 240 Corporate Aviation Ground.....3.0 (3)

Recommended prerequisite(s): AVG 202

Students taking this course will learn about the aspects of corporate aviation. Aircraft, regulations, business customs, and future outlooks of corporate aviation will be presented. **Group 2 course.**

AVG 251 Commercial Ground School.....4.0 (4)

Recommended prerequisite(s): AVF 111 or Private Pilot Rating
An advanced study of aviation topics including GPS, meteorology, radio communications, airspace, and Federal Aviation Regulations. In addition, aircraft systems, career opportunities, aviation safety, aircraft weight and balance, performance charts, and aerodynamics are re-viewed with emphasis on commercial pilot operations. **Group 2 course.**

AVG 252 Instrument Ground School.....4.0 (4)

Recommended prerequisite(s): AVF 101 or Private Pilot Rating
A course of study that will provide the aeronautical knowledge required for the instrument rating and prepare the student to take the FAA Instrument Rating-Airplane written examination. Topics include: flight instruments, radio navigation, departure, enroute, and arrival procedures, VOR, NDB, ILS, and GPS approaches, IFR emergencies, aviation weather, and IFR cross-country flight planning. **Group 2 course.**

AVG 261 UAS Ground School.....4.0 (4)

This course will prepare students for the theory behind piloting a UAV, along with its sensor management. They will learn about rules and regulations, uses, types of aircraft, components, programming, communications and economic impact of the industry. Upon completion students will have a solid foundation of the UAV industry. They will be prepared to gain specific UAV training on larger aircraft like the Predator, Reaper or Global Hawk. **Group 2 course.**

AVG 381 Instructor Ground School.....5.0 (5)

Recommended prerequisite(s): AVG 251

A course of study that will provide basic education principles and a review of the aeronautical knowledge required for the flight instructor (airplane single engine) certificate and prepare the student to take the FAA Fundamentals of Instruction (FOI) and the Flight Instructor-Airplane Single Engine written examinations. Through classroom presentations and one-on-one student teaching, students will gain practical teaching experience. **Group 2 course.**



BIO**Biology****How to select a first course in Biology:**

If you are in a transfer program requiring a full year of introductory biology such as pre-med, pre-dental, pre-vet, agriculture, wildlife and fisheries, or environmental programs, you should choose:

- BIO 115 Cell, Plant and Ecosystem Biology
- BIO 116 Cell and Animal Biology

If you need a one-semester laboratory science course to fulfill a basic education requirement, you should choose:

- BIO 110 Essential Biology

All of the above include a common core that is basic to the understanding of any branch of biology. The core topics include cell structure and function, genetics, the chemical and physical principles governing life processes, and evolution. Any 100-level Biology course may serve as a prerequisite for 200-level Biology courses.

It has been the experience of the Biology Department that students with COMPASS scores below MTH 23 and ENG 111 levels have difficulty successfully completing introductory-level biology courses. If your COMPASS scores are below these levels, the Biology Department recommends that you complete ENG 99, ENG 108 or ENG 11/111 and MTH 08 before enrolling in any biology course. If your COMPASS scores are below these levels and you decide to enroll in a Biology course, allow yourself additional time for study and preparation. If you are unsure of your ability, consult your advisor, or a biology instructor.

BIO 106 Human Biology.....4.0 (3)

BIO 106L Human Biology Lab.....0.0 (2)

Note: There are no prerequisites for this course, but students scoring below MTH 23 and ENG 111 levels on the COMPASS placement test should plan on additional study time.

Corequisite(s): BIO 106 and BIO 106L

A survey of Human Anatomy and Physiology with a primary focus on health and disease. Topics to be discussed will include the cell structure, simple chemistry of biology, homeostasis, the organ systems, genetics, nutrition, exercise physiology, cancer, heart disease, immunology, AIDS, the effects of drugs and alcohol, and other topics of current interest. This course does not meet the requirements for the Nursing program. Consult an advisor before enrolling. **Group 1 lab course.**

BIO 108 Plant Biology4.0 (3)

BIO 108L Plant Biology Lab0.0 (2)

Note: There are no prerequisites for this course, but students scoring below MTH 23 and ENG 111 levels on the COMPASS placement test should plan on additional study time.

Corequisite(s): BIO 108 and BIO 108L

Since almost all life on earth depends upon photosynthesis, this course places its emphasis on the fascinating world of plants. It includes a study of plant structure, growth, development, propagation and scientific concepts on which horticulture is based. Laboratory exercises will include greenhouse work.

Group 1 lab course.

BIO 110 Essential Biology.....4.0 (3)

BIO 110L Essential Biology Lab0.0 (2)

Essential Biology is geared toward the non-major. The course will cover broad areas of biology and engage the student in how biology relates to their own life, and how science and society interact. Core concepts covered include: evolution, structure and function, information flow, exchange and storage, pathways and transformations of energy and matter and living systems. This course replaces BIO 100, BIO 105 and BIO 109. **Group 1 course.**

BIO 115 Cell, Plant & Ecosystem Biology4.0 (3)

BIO 115L Cell, Plant & Ecosystem Biology Lab0.0 (3)

Recommended prerequisite(s): MTH 111

Corequisite(s): BIO 115 and BIO 115L

An introduction to the fundamental concepts of biology, including an investigation of the major kingdoms of life, classification, ecology, botany, cellular anatomy and biochemistry, DNA structure and function, genetic engineering, cloning and stem cell technologies. Laboratory includes field work and investigative exercises which illustrate lecture topics.

Group 1 lab course.

BIO 116 Genetics, Evolution & Animal Bio4.0 (3)

BIO 116L Genetics, Evolution & Animal Bio Lab..0.0 (2)

Recommended prerequisite(s): BIO 115, MTH 111

Corequisite(s): BIO 116 and BIO 116L

This lecture and lab course concentrates on cell division, classical genetics as well as evolution and speciation. It also covers the biology of invertebrate and vertebrate animals. The treatment of the topics in this course necessarily assume a degree of familiarity with the basic biological concepts covered in BIO 115. Students who have not completed BIO 115 should expect to spend extra time reviewing these concepts throughout the course. **Group 1 lab course.**

BIO 208 Microbiology.....4.0 (3)

BIO 208L Microbiology Lab0.0 (3)

Required prerequisite(s): Completion of any 100-level BIO course

Recommended prerequisite(s): ENG 111, MTH 111

Corequisite(s): BIO 208 and BIO 208L

Introductory microbe physiology emphasizes human response to disease and the importance of microbes in environmental cycles. Laboratory is included. **Group 1 lab course.**

BIO 215 Genetics.....3.0 (3)

Required prerequisite(s): Completion of any 100-level BIO course

Recommended prerequisite(s): ENG 111, MTH 111

Continuation of general biology genetics. Classical genetics will be covered in addition to an in-depth study of molecular genetics, recombinant DNA and human inheritance. A major emphasis will be on the current state of genetic research as it applies to topics such as gene therapy, cloning and stem cell research. Population genetics will also be covered.

Group 1 course.

BIO 216 Genetics Lab..... 1.0 (3)
Corequisite(s): BIO 215

Laboratory to complement BIO 215 Genetics for students needing to transfer a 200-level genetics laboratory to a four-year institution. In addition, students interested in the life sciences will earn a deeper understanding of classical, molecular and population genetics by completing this course.

Group 1 course.

BIO 220 Nutrition in Human Health..... 3.0 (3)
Recommended prerequisite(s): MTH 111, ENG 111 and completion of any 100-level BIO course

This course is an exploration of the fundamentals of nutrition: energy nutrients, vitamins and minerals. Function and sources are each presented, as well as the role each plays in maintaining health. Students complete their own Food Intake Record and use this information throughout the semester so as to better understand human nutrition. Students will study the role nutrition and other lifestyles play in relation to the prevention and protection from disease. Discussion also includes the relationship between nutrition and fitness. **Group 2 course.**

BIO 227 Human Anatomy & Physiology I 5.0 (5)**BIO 227L Human Anatomy & Physiology I Lab 0.0 (2)**

Required prerequisite(s): CHM 101, ENG 111, MTH 111

Corequisite(s): BIO 227 and BIO 227L

Recommended prerequisite(s): BIO 106

This course will include an introduction to cells, histology, biochemistry and homeostasis. In addition, the following systems will be discussed: integumentary, skeletal, muscle, nervous, endocrine, and special senses. Lecture will be accompanied by lab work and applications, which will stress the anatomy, histology and function of these organ systems. (Students with high school chemistry (with a combined GPA of 2.5 or better) or college chemistry older than 5 years may waive the CHM 101 requirement by passing the Introductory Chemistry competency exam). **Group 1 lab course.**

BIO 228 Human Anatomy & Physiology II 5.0 (5)**BIO 228L Human Anatomy & Physiology II Lab ... 0.0 (2)**

Required prerequisite(s): BIO 227

Corequisite(s): BIO 228 and BIO 228L

This is a continuation of BIO 227 and will include an introduction to the following systems: cardiovascular, immune, respiratory, digestive, metabolism, urinary, fluid/electrolyte and acid/base balance, reproduction and genetics, and an unit on microbiology and disease. Lab work stressing the anatomy, histology and function of these topics will be included.

Group 1 lab course.

BIO 240 Normal and Clinical Nutrition..... 3.0 (3)

Recommended prerequisite(s): BIO 227, MTH 08 or equivalent

Nutrition is considered from a strong biological point of view. Discussions will include a brief overview of principles of normal nutrition and then will proceed to how these principles apply to cause and treatment of specific disease states and the nutrition care process required. **Group 2 course.**

BIO 250 Natural History of Vertebrates 4.0 (3)**BIO 250L Natural History of Vertebrates Lab..... 0.0 (3)**

Recommended prerequisite(s): ENG 111, MTH 111 and completion of any 100-level BIO course

Corequisite(s): BIO 250 and BIO 250L

This course introduces students to the biology and diversity of vertebrate species in Michigan. The life history, anatomy, behavior, systematics, ecology and conservation of each group of vertebrates are examined. Field studies, laboratory investigations, and classroom discussion will help students understand the biology of fishes, amphibians, reptiles, birds and mammals, as well as their relationships to particular habitats. Local vertebrate species and field study techniques are stressed.

Group 1 lab course.

BIO 260 General Ecology 5.0 (3)**BIO 260L General Ecology Lab..... 0.0 (4)**

Recommended prerequisite(s): ENG 111, MTH 111 and completion of any 100-level BIO course

Corequisite(s): BIO 260 and BIO 260L

The course is an introduction to the study of the complex relationships of organisms with one another and with the physical conditions under which they live. Students will study the conditions necessary for life, population ecology, community and ecosystem dynamics and ecosystem diversity. Field oriented lab exercises involve observations and data collection followed by analysis. **Group 1 lab course.**

BIO 268 Biochemistry..... 3.0 (3)

Required prerequisite(s): CHM 101

Recommended prerequisite(s): BIO 227, MTH 23

Study of the basic fundamentals of the chemical composition of living matter with application of concepts to normal and abnormal human function. **Group 1 course.**

Visit www.nmc.edu/science-math for detailed information.

BPC Bridge Program Courses**BPC 094 Bridge to Communications 4.0 (developmental) (4)**

Bridge to Communications is designed to help adult students make the transition into higher education while at the same time prepares them for today's workplace. This class is comprised of intensive hands-on skill building in communications (writing, speaking, and listening) and also features job portfolios, employability activities, and a career development process.

BPC 096 Bridge to Technology..... 4.0 (developmental) (4)

Bridge to Technology supports adult student learners by incorporating instructor led study sessions to complement an array of required CIT classes. The CIT classes are selected by individual students and can be in keyboarding, Microsoft Word, PowerPoint, Excel and other business software applications. The instructional goal of this course is to help develop the skill sets that can lead to certification or skill mastery.

BUS**Business****BUS 101 Introduction to Business 3.0 (3)**

American business in the new millennium is exciting and challenging. Students will be introduced to the variety of opportunities by exploring ownership, management, the economy, marketing, international business, social responsibility and business ethics, and entrepreneurship. **Group 2 course.**

BUS 105 Business Math 3.0 (3)

Required prerequisite(s): COMPASS placement into MTH 23
Apply basic mathematical principles to solve problems in modern business practice. Topics include trade discounts, markups and markdowns, payroll and payroll taxes, interest, sinking funds, installment buying, the cost of home ownership, sales, excise and property taxes. It is designed for day-to-day business applications. **Group 2 course.**

BUS 155 Interpersonal Communications 3.0 (3)

Recommended competency: Placement into ENG 99
To be well prepared for employment in the 21st century it will be mandatory for students to demonstrate effective human relations. Individuals who enter the workforce in any field will need to possess interpersonal and customer service skills. The global workplace will demand competence in interpersonal or "soft" skills. Excellent customer service and relationship building skills are a necessary component of overall business communication. Topics include: communication and identity, conflict and communication climates, and how to build and maintain effective relationships with external and internal customers. **Group 2 course.**

BUS 231 Professional Communications 3.0 (3)

Recommended prerequisite(s): BUS 130 (Students in the Administrative Support Certificate Program must take BUS 130 before BUS 231); placement into ENG 111
Communicating professionally is a critical skill in a global society.. This course is designed to help students understand communication theory and its application in their professional lives. Students will develop effective writing skills by analyzing complex issues, organizing thoughts logically, and communicating those ideas concisely—in verbal and written form. Students will also practice effective listening skills, understand the components of a successful job search, and use teamwork skills in solving communication problems.

Group 2 course.

BUS 261 Business Law I 3.0 (3)

Recommended prerequisite(s): Placement into ENG 111
This course is a study of the U.S. legal system and specific areas of law related to business, with an emphasis on the techniques of legal decision-making. Topics include the judicial system, torts, contracts, and criminal law.

Group 2 course.

BUS 262 Business Law II 3.0 (3)

Recommended prerequisite(s): BUS 261, placement into ENG 111
This course is the study of the U.S. legal system and specific areas of law related to business, with an emphasis on the techniques of legal decision-making. Topics include agency, partnerships, corporations, franchises, property, and employer-employee relationships. **Group 2 course.**

BUS 290 Business Administration Internship 3.0 (3)

Required prerequisite(s): 20 credits of business courses with a GPA of 3.0.
This course is an elective for the Associate of Applied Science degree in Business Administration. The purpose of the internship is to provide on-the-job training for the student who wishes to pursue a career in business. The internship will be customized to meet the learning needs of the student and the job requirements of the sponsoring firm. Students spend 10 hours per week in this paid or non-paid, supervised on-the-job training experience. In addition to the required 150 hours in a business site, students participate in semi-monthly seminars. Students must apply one month prior to the semester in which they will complete the internship. **Group 2 course.**

CAR**Carpentry****CAR 101 Introduction to Carpentry 3.0 (4)**

Recommended Competencies: COMPASS placement into MTH 23 or higher, or co-enrollment in the recommended developmental math course. COMPASS placement into ENG 11/111 or higher, or co-enrollment in the recommended English course.
This course provides an introduction to residential carpentry. Through structured classroom and hands-on skill building, the student will learn about building materials, fasteners and adhesives, hand and power tools, reading plans and elevations, and floor systems. **Group 2 course.**

CAR 103 Construction Blueprint Reading 3.0 (3)

Recommended Competencies: COMPASS placement into MTH 23 or higher, or co-enrollment in the recommended developmental math course. COMPASS placement into ENG 11/111 or higher, or co-enrollment in the recommended English course.
Students will learn the skills needed to read and understand construction drawings, as well as an understanding of manufacturer's literature of component parts used in buildings. Both commercial and residential construction materials and drawings are studied.

CAR 105 Foundations and Framing 3.0 (4)

Recommended Competencies: COMPASS placement into MTH 23 or higher, or co-enrollment in the recommended developmental math course. COMPASS placement into ENG 11/111 or higher, or co-enrollment in the recommended English course.
Through structured classroom and hands-on skill building, the student will learn foundation design, lay-out, concrete materials, forms and applications, floor, wall, ceiling and roof framing and basic stair layout. **Group 2 course.**

CAR 121 Exterior Construction3.0 (4)
Recommended Competencies: COMPASS placement into MTH 23 or higher, or co-enrollment in the recommended developmental math course. COMPASS placement into ENG 11/111 or higher, or co-enrollment in the recommended English course.

Through structured classroom and hands-on skill building, the student will learn about various roofing materials and applications, window and door installation, siding, cornice design and installation, gutters, downspouts, decks and fences.

Group 2 course.

CAR 125 Interior Construction3.0 (4)
Recommended Competencies: COMPASS placement into MTH 23 or higher, or co-enrollment in the recommended developmental math course. COMPASS placement into ENG 11/111 or higher, or co-enrollment in the recommended English course.

Through structured classroom and hands-on skill building, the student will learn about drywall products, installation, and finishing, wall panels, tile, suspended ceilings, finish trim, flooring and cabinet and countertop installation. **Group 2 course.**

CD Child Development

CD 101 Early Childhood Education.....3.0 (3)
This course familiarizes students with the history and present state of early childhood education, from birth to 10 years of age. An overview of child development theories is presented in the context of the role of the educator/caregiver. Resources and careers, and contemporary issues such as school readiness and exploration of various education philosophies are also included. Environment observations are required as well as a working general education philosophy. The observations are set by students to meet their schedules. **Group 2 course.**

CD 202 Human Growth and Development5.0 (5)
Recommended prerequisite(s): CD 101 or PSY 101, placement into ENG 111
Students will study research, the reasons for child study and its impact on families and education and the issues faced in child development today. Students will explore the dimensions and problems of pregnancy. They will also study the interactions between physical, cognitive, emotional and social developments in children between birth and adolescence. This study will be based on recent research and will be applied using various child development theories. From this, students will develop beginning observation skills and individual based research projects that test theories about child development. Field research is required and set by students to meet their schedules. Students will explore how professional work with and for children is changing and how they can be advocates for the well being of children and families. **Group 2 course.**

CD 203 Guiding Young Children.....3.0 (3)
Recommended prerequisite(s): CD 101 or PSY 101
This course examines the preparation of a positive learning environment. The development and use of equipment with

the children from birth through 10 years of age is explored. Special emphasis on the development of techniques in personal interactions with children is also examined. Current concepts and approaches that directly relate to the mental health of the child and his/her family are explored. Anger management and conflict resolution skills are especially emphasized through the building of positive environments. Field observations are required and are set by students to meet their schedules. **Group 2 course.**

CD 204 Early Childhood Curriculum.....3.0 (3)
Recommended prerequisite(s): CD 101
An active learning approach is used to develop student's skills in planning, implementing and evaluating developmentally appropriate learning experiences for children ages two-and-a-half to 10. Various curriculum areas are covered: science, pre-math, math, drama and music, creative art, sensory, gross and fine motor, social studies and language arts. Basic skills and concepts, resource materials and teaching methods (developmental) are explored for each curriculum area. There is a strong emphasis on individualizing curriculum using the child's interests, modality of learning and intelligence theories. **Group 2 course.**

CD 206 Infant/Toddler Development3.0 (3)
Recommended prerequisite(s): CD 101
This class provides an in-depth study of the physical, cognitive, social and emotional development of the infant and toddler. There will be a focus on attachment and bonding and how that relates to brain development and later social and academic development. There will also be an emphasis on the connections of pregnancy and early bonding. Students will learn how to build foundation relationships that are trust based. They will also develop skills to help families build a respectful and responsive environment for children. Students will learn how to use best practice methods with infants and toddlers. **Group 2 course.**

CD 220 Childhood Program Management3.0 (3)
Recommended prerequisite(s): CD 101
This course will examine the administrative fundamentals of early childhood programs and will include establishment, funding, licensing, staffing, budgets, equipment, philosophy and program planning. **Group 2 course.**

CD 230 Early Language and Literacy3.0 (3)
Recommended prerequisite(s): CD 101
This course is designed to teach students how to recognize and implement appropriate environmental strategies that support early literacy development and appropriate early experiences with books and writing. Emphasis is placed on speaking and listening, as well as reading and writing readiness. This group of skills includes expressive and receptive language, concepts of print and appreciation of literature, emergent writing, letter knowledge, and phonological awareness. Upon completion of the course, students will be able to select, plan, implement, and evaluate appropriate early literacy experiences. **Group 2 course.**

CD 290A-E Service Learning Internship 1.0 - 4.0 (1-4)*Recommended prerequisite(s): CD 101*

Placement in a daycare, nursery school, early elementary grades in grade school or other agencies that deal with children, birth through 10 years of age. The student will have the opportunity to interact with children, assist with planning for them and evaluate their progress under direct supervision. These credits can be divided over more than one semester. **Group 2 course.**

CHM**Chemistry****CHM 101 Introductory Chemistry4.0 (3)****CHM 101L Introductory Chemistry Lab0.0 (2)***Required prerequisite(s): MTH 111**Corequisite(s): CHM 101 and CHM 101L**Recommended prerequisite(s): ENG 111 is strongly encouraged for online students.*

A one-semester chemistry course for the non-science major exploring the language, concepts and methods of chemistry. Topics include atomic theory, chemical periodicity, chemical bonding, stoichiometry, gases, nuclear energy, equilibrium, and acid/base chemistry. The laboratory will include descriptive and analytical experiments, focusing on measurement, physical and chemical properties of materials, acids and bases, laboratory procedures and calculations. Science, engineering, and premedical students must select CHM 150 and 151 to meet chemistry requirements. This course is offered in multiple formats such as online or traditional. Consult with an advisor before enrolling. **Group 1 lab course.**

CHM 150 General Chemistry I4.0 (3)**CHM 150L General Chemistry I Lab0.0 (2)****CHM 150R General Chemistry I, Recitation1.0 (2)***Required prerequisite(s): MTH 111**Corequisite(s): CHM 150, CHM 150L, CHM 150R**Recommended prerequisite(s): MTH 121*

First semester of a two-semester course covering matter and chemical measurement, basic laws, chemical symbols and formulas, stoichiometry and chemical calculations, gases and the gas laws, thermochemistry, atomic structure, electron configurations and the periodic table, elements, chemical bonding and molecular structure, liquids, solids, and intermolecular forces. The laboratory includes descriptive and quantitative experiments illustrating the above topics. The recitation includes problem solving, quizzes and laboratory preparation to accompany lectures. **Group 1 lab course.**

CHM 151 General Chemistry II4.0 (3)**CHM 151L General Chemistry II Lab0.0 (2)****CHM 151R General Chemistry II Recitation1.0 (2)***Required prerequisite(s): CHM 150**Corequisite(s): CHM 151, CHM 151L and CHM 151R*

A second semester course covering chemical reactions in aqueous solution including acid-base and oxidation and reduction reactions, properties of solutions, chemical kinetics, gaseous equilibria, acids and bases, acid-base equilibria, pH, common ion effect, buffer systems, solubility product constant, thermo-

dynamics, enthalpy, entropy and free energy, electrochemistry, and nuclear chemistry. The laboratory will cover the above topics using quantitative and qualitative procedures. The recitation includes problem solving, quizzes, and laboratory preparation to accompany lectures. **Group 1 lab course.**

CHM 250 Organic Chemistry I5.0 (3)**CHM 250L Organic Chemistry I Lab0.0 (6)***Required prerequisite(s): CHM 151**Corequisite(s): CHM 250, CHM 250L*

The first semester of a two-semester course covering the chemistry of carbon compounds. Designed to meet the requirements for majors in chemistry, chemical engineering, biological science, pre-medicine, etc. Topics include nomenclature, structure, aliphatic compounds, free-radical, nucleophilic substitution and elimination reactions, electrophilic addition reaction and mechanisms, alkyl halides, alkenes and alkynes. The laboratory portion will cover fundamental organic laboratory techniques of synthesis, separation and analysis. Specific assignments parallel lecture topics wherever possible. **Group 1 lab course.**

CHM 251 Organic Chemistry II5.0 (3)**CHM 251L Organic Chemistry II Lab0.0 (6)***Required prerequisite(s): CHM 250**Corequisite(s): CHM 251 and CHM 251L*

A follow up to CHM 250. Topics include alcohols, aromatics, ethers and epoxides, arenes, carbonyls, carboxylic and sulfonic acids and their derivatives, amines, phenols, aryl halides, carbohydrates, amino acids, biochemical processes, polynuclear aromatics, heterocycles, and others together with appropriate mechanistic theories and structural concepts. Instrumental techniques discussed include infrared spectroscopy (IR), nuclear magnetic resonance (NMR), mass spectrometry (MS), and ultraviolet (UV) spectroscopy. The lab exercises will continue the development of organic chemistry laboratory technique on both semi-microscale and microscale. In addition, analytical techniques using infrared spectroscopy and gas chromatography will be developed. **Group 1 lab course.**

Visit www.nmc.edu/science-math for detailed information.



CIT Computer Information Technology

CIT 100 Computers in Business-An Intro 3.0 (3)

Recommended prerequisite(s): Keyboarding skills; CIT 122A or equivalent experience

A first exposure to the world of computer applications in business, this course covers the hands-on use of word processing, spreadsheets, databases, and presentation graphics programs. In addition, the Windows operating system, file and folder management, basic concepts, terminology, and security threats will be covered. **Group 2 course.**

CIT 109A Keyboarding I 2.0 (2)

Whether for personal or business use, knowledge of keyboarding is a must today! This course introduces you to the computer keyboard. Areas of emphasis include touch keyboarding of letters, numbers, and symbols. Students who already have the above skills may bypass CIT 109A and enroll in CIT 109B. Online format. **Group 2 course.**

CIT 109B Keyboarding II 2.0 (2)

Recommended prerequisite(s): CIT 109A

Continuation of keyboarding skills development which has been acquired in either CIT 109A or previous keyboarding experience. Emphasis on computers and word processing software used in the application of keyboarding skills for personal and business situations, intensive drill work for speed and accuracy improvement, and use of numeric keypad. Online format. **Group 2 course.**

CIT 110 Programming Logic and Design 3.0 (3)

Required prerequisite(s): MTH 111

Recommended prerequisite(s): CIT 122A

This course will prepare the student for programming courses. Topics covered include flow charting, pseudocode, object orientation, decisions and looping program constructs, collections and arrays, and recursion. Lecture topics will be reinforced with hands-on coding, testing, debugging, and documentation exercises. **Group 2 course.**

CIT 111 Keyboarding III 4.0 (4)

Recommended prerequisite(s): CIT 109B, CIT 119

Learn advanced skills and techniques to format a wide variety of professional-looking business documents. Emphasis is on timesaving features to produce enhanced documents efficiently and accurately using word processing software. Supplementary skill-building drills are used to improve production techniques, keyboarding accuracy, and speed. **Group 2 course.**

CIT 118 Microsoft Office - Word Intro 1.0 (1)

Recommended prerequisite(s): CIT 122A

Recommended competency: Basic keyboarding and Windows skills

This course is designed to provide students with an introduction to word processing using Microsoft Word. Students learn how to prepare documents, format characters and paragraphs, customize paragraphs, and format pages. **Group 2 course.**

CIT 119 Microsoft Office - Word 3.0 (3)

Recommended prerequisite(s): CIT 122A

This course teaches students how to use Microsoft Word and prepares them to pass the Microsoft Office Specialist (MOS) Word certification exam. Skills students will learn include navigating in a document, customizing and formatting text, paragraphs and pages, inserting objects, maintaining and proofing documents, performing mail merge operations, document sharing and management, tracking and referencing documents, and managing macros and forms. Students enrolling in this course will take the Microsoft Office Certification exam. **Group 2 course.**

CIT 122A Computer and Internet Basics I 1.0 (1)

Students will learn the essential skills required to use a computer with the Windows operating system. The student will learn to interact with the Windows desktop to access software and data. The course emphasizes the importance of file and folder maintenance. The course also includes introductions to the World Wide Web, e-mail and searching. Students completing this course will master skills required for on-line courses. **Group 2 course.**

CIT 122B Computer and Internet Basics II 1.0 (1)

Recommended prerequisite(s): CIT 122A

Students will learn additional skills required to use a computer and the Internet effectively. Additional experience with applications, object linking, and embedding is included. Students will investigate administrative and management tools with specific emphasis on security. Students will create and publish basic web pages using HTML. **Group 2 course.**

CIT 124 Microsoft Office - PowerPoint 2.0 (2)

Recommended Competency: Basic keyboarding, Windows skills.

This course teaches students how to use Microsoft PowerPoint and prepares them to pass the Microsoft Office Specialist (MOS) PowerPoint certification exam. Skills students will learn include preparing and modifying a presentation, using help, formatting slides and inserting elements in slides, creating tables, charts and SmartArt graphics, using slide masters and action buttons, applying custom animation and setting up shows, and integrating, reviewing, protecting and saving presentations. Students enrolling in this course will take the Microsoft Office Certification exam. **Group 2 course.**

CIT 155 Personal Computer Maintenance 2.0 (2)

This course provides a detailed look inside the personal computer. Students will learn how computers work, how processing is done, differences between input and output devices, how to configure the Windows operating system, how to upgrade their systems, and how networking and the Internet work. Resource management, installation, and replacement of system components will also be covered. **Group 2 course.**

CIT 156 CompTIA A+® Certification I 3.0 (4)*Recommended prerequisite(s): CIT 155*

This course, in conjunction with CIT 157, covers the objectives of the CompTIA A+ Certification exams. CIT156 concentrates primarily, but not exclusively, on the Essentials exam requirements, including: personal computer components, laptop and portable devices, operating systems, printers and scanners, networks, security, safety, environmental issues, communication and professionalism. **Group 2 course.**

CIT 157 CompTIA A+® Certification II 3.0 (4)*Recommended prerequisite(s): CIT 156*

This course, in conjunction with CIT 156 covers the objectives of the CompTIA A+ Certification exams. CIT157 concentrates primarily, but not exclusively, on the Practical Application exam requirements, including: personal computer components, laptop and portable devices, operating systems, printers and scanners, networks, security, safety, environmental issues, communication and professionalism. **Group 2 course.**

CIT 160 Cisco Internetworking I 4.0 (4)*Recommended prerequisite(s): CIT 213*

This course, in conjunction with CIT 161, CIT 260 and CIT 261 provides the necessary preparation to pass the Cisco CCNA Exam (Cisco Certified Network Associate). The following topics are covered in detail: the OSI Model, LAN topologies and protocols, logical addressing and internetworking devices. This course utilizes the Cisco Networking Academy "Exploration: Network Fundamentals" curriculum and integrates online curriculum, classroom activities and hands-on lab exercises. **Group 2 course.**

CIT 161 Cisco Internetworking II 4.0 (4)*Required prerequisite(s): CIT 160*

This course, in conjunction with CIT 160, CIT 260, and CIT 261, provides the necessary preparation to pass the CCNA Exam (Cisco Certified Network Associate). The following topics are covered in detail: VLSM, Cisco CLI, IOS, router configuration, static routing, dynamic routing protocols, including RIPv1, RIPv2, OSPF and EIGRP. This course utilizes the Cisco Networking Academy "Exploration: Routing Protocols and Concepts" curriculum and integrates online curriculum, classroom activities and hands-on lab exercises. **Group 2 course.**

CIT 170 Microsoft Office - Access 3.0 (3)*Recommended prerequisite(s): CIT 100 or CIT 210*

This course introduces database management using Microsoft Access. Students will design, construct, and administer databases. Students will create and modify database objects including tables, queries, forms and reports. Students will enter, delete, modify, import and export data. Students will configure database features such as security and backup and will evaluate data integrity and design quality. Course content is mapped to the current Microsoft Office Specialist (MOS) Access learning objectives and students enrolled in this course will take the certification exam. **Group 2 course.**

CIT 180 HTML and CSS Programming 2.0 (2)*Recommended prerequisite(s): CIT 122A*

In this course students develop skills in HTML and XHTML web publishing. Students create web pages with variations in web browsers and accessibility requirements in mind. Students develop skills using cascading style sheets and briefly use JavaScript automation. **Group 2 course.**

CIT 185 XML Programming 2.0 (2)*Required prerequisite(s): CIT 170, CIT 180, may be taken concurrently*

Students will be introduced to Extensible Markup Language (XML) technology. You will learn to design field-specific markup language describing both the data and its structure. The resulting XML document will be presented in multiple formats by applying XSLT transformations. **Group 2 course.**

CIT 190 JavaScript Programming 2.0 (2)*Required prerequisite(s): CIT 110, CIT 180, may be taken concurrently*

In this course students develop web client scripting skills using JavaScript. Students use variables, decisions, loops, functions, objects, and other programming concepts as they add interactivity to web pages. **Group 2 course.**

CIT 195 .NET Application Programming 3.0 (3)*Required prerequisite(s): CIT 110*

The student is introduced to .NET application development. Students use Visual Studio to develop MS Windows applications. Application features will include basic input and output, variables, collections, menus, and integration with databases. Object-oriented concepts, application design, program structure, and proper documentation are also covered. **Group 2 course.**

CIT 210 Microsoft Office - Excel 3.0 (3)*Recommended prerequisite(s): BUS 105, MTH 23*

This course deals with a comprehensive study of the most current electronic Excel spreadsheet software and the business applications which can be created and used with the software. The entry of data with different formats, formula creations, file transfer of data, database management, graphing, data tables, solver programs, and an introduction to macros will be covered. Course content is mapped to the current Microsoft Office Specialist (MOS) Excel learning objectives and students enrolled in this course will take the certification exam. **Group 2 course.**

CIT 213 Networking Technologies 4.0 (4)*Recommended prerequisite(s): CIT 156, CIT 157*

This course covers terminology, topologies and media necessary for LANs and WANs. The OSI model will be studied and identified to better enhance the understanding of how various parts work together. Included is an indepth study of TCP/IP and the characteristics for maintaining a network, and ensuring its security. This course maps to the CompTIA Network+® certification exam objectives. **Group 2 course.**

CIT 215 Windows Server Environment.....3.0 (3)*Required prerequisite(s): CIT 213*

In this course students will learn about the latest Windows Server operating system. Students will learn and install many server roles and features. Concepts studied include Active Directory Domain Services, Certificate Services, Federation Services, DNS, DHCP, and Group Policy. Students will have an opportunity to work with a Server Core installation and virtualization using Hyper-V. Account management will be studied and students will setup users and groups, and configure access control lists. This course maps to the Microsoft 70-640 MCTS Windows Server Active Directory Exam objectives. **Group 2 course.**

CIT 216 Computerized Acctg. Systems2.0 (2)*Recommended prerequisite(s): ACC 121*

This course is designed to give the student experience with setting up an accounting system on the computer. QuickBooks software will be used. Accounts receivable, accounts payable, general ledger, inventory, and payroll will be covered.

Group 2 course.**CIT 218 Web APP Programming ASP .NET.....3.0 (3)***Required prerequisite(s): CIT 190, CIT 248, CIT 255*

Students will create dynamic web pages using ASP.NET. Page designs will use server controls to create common user interface elements and user controls to achieve site consistency. Students will develop interactive web pages that access and update databases using ADO.NET. **Group 2 course.**

CIT 233 Project Management3.0 (3)*Recommended competency: Windows knowledge*

This course is intended for CIT students and business professionals who need to manage project activities or resources on time, on budget, and according to performance standards. Students use Microsoft Project as a project management tool to schedule tasks, and monitor resources, costs, and project progress. **Group 2 course.**

CIT 240 Network Security Management3.0 (3)*Required prerequisite(s): CIT 213*

This course examines the fundamentals of computer network security and explores current practices for securing network resources. Course content is mapped to the CompTIA Security+ certification exam objectives, which include network security, compliance and operational security, threats and vulnerabilities, application, data and host security, access control and identity management, and cryptography. **Group 2 course.**

CIT 242 Windows Client Administration2.0 (2)*Recommended competency: Basic Windows skills*

In this course students will study the Windows Client operating system. Course topics include: installing Windows; conducting administration of resources; implementing, managing, monitoring, and troubleshooting hardware devices and drivers; configuring and troubleshooting the desktop environment; implementing, managing, and troubleshooting network protocols and services. **Group 2 course.**

CIT 246 Windows Server Infrastructure3.0 (3)*Required prerequisite(s): CIT 215*

Students taking this course will learn how to setup, configure, and maintain a Windows Server Infrastructure. Topics covered include administering and troubleshooting DHCP, DNS, Network Access Protection, IPSec, and Virtual Private Networks. System performance and reliability will also be studied. This course maps to the Microsoft 70-642 MCTS Windows Server Infrastructure Exam objectives. **Group 2 course.**

CIT 247 Windows Server Administration3.0 (3)*Required prerequisite(s): CIT 246*

Students taking this course will learn how to manage day-to-day server operations. Server administrators manage the infrastructure, web, and IT application servers. Students will use batch and script files to perform many administrative tasks. Tasks performed include software distribution, server updates, profiling and monitoring, and troubleshooting. Many of these tasks will be performed using remote desktop services and administrative tools. This course maps to the Microsoft MCITP 70-646 Windows Server Administration exam objectives. **Group 2 course.**

CIT 248 SQL Server Databases3.0 (3)*Required prerequisite(s): CIT 185*

Microsoft SQL Server is used in this course to introduce students to enterprise database analysis and administration tasks. Students focus on performance, scalability, reliability, and security as they normalize database designs, enforce data integrity, create indexes and stored procedures, optimize queries, and control database access. **Group 2 course.**

CIT 255 .NET Object-Oriented Programming3.0 (3)*Required prerequisite(s): CIT 170, CIT 195*

The student builds on .NET programming fundamentals learned in CIT 195, focusing on object-oriented concepts throughout the course. The definition and use of classes with multiple properties, methods, and constructors is covered early. The student implements encapsulation, inheritance and polymorphism while creating several applications in Visual Studio .NET. **Group 2 course.**

CIT 256 Linux Administration3.0 (3)*Required prerequisite(s): CIT 213*

In this course students will take an in-depth look at Linux, focusing on proper installation, command line usage, and administration of the operating systems. Students will examine the concepts common to all Linux systems, which have increased its popularity. Exploration will take the form of a practical, hands-on approach, using a mix of hands-on projects as well as web resources. This course will prepare students for the first CompTIA Linux+ exam. **Group 2 course.**

NMC.

Find it here.

CIT 260 Cisco Internetworking III..... 4.0 (4)*Required prerequisite(s): CIT 161*

This course, in conjunction with CIT 160, CIT 161, and CIT 261, provides the necessary preparation to pass the Cisco CCNA Exam (Cisco Certified Network Associate). The following topics are covered in detail: LAN switching, VLANs, VTP, DTP, STP, inter-VLAN routing and basic wireless. This course utilizes the Cisco Networking Academy "Exploration: LAN Switching and Wireless" curriculum and integrates online curriculum, classroom activities and hands-on lab exercises. **Group 2 course.**

CIT 261 Cisco Internetworking IV..... 4.0 (4)*Required prerequisite(s): CIT 260*

This course, in conjunction with CIT 160, CIT 161, and CIT 260, provides the necessary preparation to pass the Cisco CCNA Exam (Cisco Certified Network Associate). Topics covered in detail: WAN design, HDLC, PPP, Frame Relay, ATM, cable, NAT/PAT, DHCP, network management and CCNA exam review. This course utilizes the Cisco Networking Academy "Exploration: Accessing the WAN" curriculum and integrates online curriculum, classroom activities, and hands-on exercises. **Group 2 course.**

CIT 275 .NET Solutions Development..... 3.0 (3)*Required prerequisite(s): CIT 248, CIT 255*

Students will create various types of computer application solutions based on the .NET framework, incorporating content from prior programming and database courses. Data access strategies are examined. Standard industry patterns and practices are emphasized. Software projects are used to demonstrate the software development life cycle. **Group 2 course.**

CIT 280 Systems Analysis & Design..... 3.0 (3)*Required prerequisite(s): CIT 233, CIT 248, CIT 255**Recommended prerequisite(s): CIT 215*

This course is the capstone course in the CIT Developer and CIT General associate degree programs. It introduces the student to the phases in the systems development life cycle. Students will gain practical knowledge in systems analysis through participation in a team-based system development project. Students will conduct a feasibility study, perform requirements analysis, and model objects and data. Students will apply their knowledge of database design and programming, and they will create a user interface using elements of both traditional and modern systems analysis methodologies. **Group 2 course.**

CIT 290 CIT Internship..... 3.0 (3)*Required prerequisite(s): Instructor permission*

Work experience is an integral part of the CIT student's program. In this course, students are placed in settings that utilize their business and CIT skills. Students will work 150 hours during the semester in a paid or non-paid, supervised on-the-job training experience. Students must meet with their academic advisor and submit a resume for review before they will be allowed to enroll in this course. **Group 2 course.**

CIT 291 Web Master Internship..... 3.0 (3)*Required prerequisite(s): Instructor permission*

Work experience is an integral part of the Web Master Certificate program. In this course, students are placed in settings that utilize their web installation and development skills as well as business and CIT skills. Students will work 150 hours during the semester in a paid or non-paid, supervised on-the-job training experience. Students must meet with their academic advisor and submit a resume for review before enrolling. **Group 2 course.**

CIT 292 Support Specialist Internship..... 3.0 (3)*Required prerequisite(s): Instructor permission*

Work experience is an integral part of the Support Specialist Certificate program. Students are placed in settings that utilize their technical, business applications, and interpersonal communication skills. Students will work 150 hours during the semester in a paid or non-paid, supervised on-the-job training experience. Students must meet with their academic advisor and submit a resume for review before enrolling. **Group 2 course.**

CJ**Criminal Justice****CJ 101 Intro to Criminal Justice..... 4.0 (4)**

An introduction to the criminal justice system and the criminal justice process, including history, present structure, current functions and contemporary problems of police, prosecution, courts, corrections, and security agencies. **Group 2 course.**

CJ 211 Criminal Law..... 3.0 (3)*Recommended prerequisite(s): Placement into ENG 111*

This offering will study Constitutional law and the Bill of Rights as they directly relate to the powers and the limitations of both federal and state law enforcement officers. Current judicial case histories are studied so as to better understand the changes in enforcement policies. The judicial process is reviewed from time of arrest, arraignment, pre-trial, and trial procedure to the final determination of the case. This course is offered spring semester. **Group 2 course.**

CJ 241 Interview & Interrogation..... 3.0 (3)*Recommended prerequisite(s): CJ 101, placement into ENG 111*

This course will present techniques and methods of obtaining information from victims, witnesses and suspects. It also deals with the laws and court precedents relative to confessions, statements, and admissibility. **Group 2 course.**

CJ 242 Evidence & Criminal Procedures..... 3.0 (3)*Recommended prerequisite(s): Placement into ENG 111*

An overview of the criminal court system and the process of a criminal proceeding from incident to disposition and appeal, including the rules of evidence affecting the trial of a criminal case. It also includes an overview of the criminal procedure rules concerning arrest, search and seizure, and interrogation and confession, which regulate law enforcement and protect citizens' rights of privacy and presumed innocence. The course includes pertinent Supreme Court decision. **Group 2 course.**

CMT**Construction Management****CMT 107 Construction Supervision..... 3.0 (3)**

Students will learn the skills needed for construction supervision, including contract documents, estimate preparation, local, state and federal forms, architectural specifications, building codes, team building, materials ordering, project scheduling, and communicate information effectively for construction project management. **Group 2 course.**

COM**Communications****COM 101 Introduction to Communication 4.0 (4)**

The course is designed to introduce the student to the basic components of the communication process as they operate in four contexts: interpersonal, group, organizational, and mass media. The four contexts are integrated under the rubric of meaning theory in the latter part of the course. The direct application of theories to the student's individual career choice or personal life experience is stressed. **Group 2 course.**

COM 111 Public Speaking 4.0 (4)

Designed to acquaint students with the fundamentals of the discipline and to give them confidence in speech situations, this course considers voice, platform technique, message organization and audience analysis. Emphasis is upon the formal speaking situation. **Group 2 course.**

COM 121 Broadcasting Practicum I..... 2.0 (2)

Practical experience in underwriting, announcing, script writing, "on-air" studio operations and the management of the non-profit college radio station are all part of this course. Internships with local radio stations may be arranged.

Group 2 course.

COM 122 Broadcasting Practicum II 2.0 (2)

This course continues practical experience in underwriting, announcing, script writing, "on-air" studio operations and management. Internships with local radio stations may be arranged. **Group 2 course.**

COM 150 Global Information Strategies..... 1.0 (1)

Required prerequisite(s): ENG 99 (can be taken concurrently) or instructor permission

This course explores information, its role in society and the specific types of information resources available to today's learner. Students will identify information resources based on research need and discover the digital tools available to locate these resources. Criteria for critically evaluating resources will be applied. Students will implement advanced research strategies using various online research tools. Current technologies for organizing and sharing information will be examined.

Group 2 course.

COM 201 Mass Comm. & Culture..... 4.0 (4)

The course is designed to introduce the student to various perspectives on the analysis, evaluation and understanding of mediated communication in mass culture. The course is divided into two major parts. The first focuses on industrial age theories of the effects of mass communication on culture. The second part is designed to give the student the necessary tools to make information age adaptations to the explanatory/predictive models of the effects of mass communication on culture. The direct application of theories, critical thinking and analysis of communication having relevance to the student's individual career choice or life experience is stressed. **Group 2 course.**

CUL**Culinary Arts****CUL 100 Intro to Professional Cookery 1.0 (2)**

Recommended competence(s): COMPASS scores: Pre-Algebra, 21; Writing, 70; Reading, 82

This course is designed for students seeking a career in Culinary Arts. This course will provide a broad orientation to aspiring chefs so that they will better understand what is required to succeed in the industry. Emphasis will be placed on professionalism, safety and sanitation, use of commercial equipment and small wares, basic knife skills, and identification of food products. This course will discuss culinary math, standardized recipes and food science basics. Students will be required to purchase an initial set of uniforms for the course. Students will be furnished with hand tools for skills development. Students must receive an overall GPA of 2.5 to pass the class, as well as pass the final practical with a minimum of 2.5. Note: Course is required for all culinary students. A waiver for this course may be obtained by documenting attendance at a career technical center with a minimum GPA of 2.5 and/or relevant industry experience. Students must submit appropriate documentation (high school transcript and/or resume) to the department chair at least two weeks prior to the beginning of the semester. **Group 2 course.**



CUL 101 Today's Hospitality Industry 3.0 (3)

This course is designed for students who wish to pursue a career in the hospitality industry. It introduces the student to segments of the industry and the different career tracts within each one. The course will acquaint the student with the rigors of hospitality and the particular nature of this people-oriented industry. A foundation course in the study of resort and resort settings, the course provides the student with an awareness of the unique problems associated with the development, management and marketing of a resort. Also, the seasonal nature of most resorts and the challenges presented by this issue are discussed. The nature and unique characteristics of the hospitality industry as a career choice are discussed. **Group 2 course.**

CUL 110 Safety & Sanitation..... 2.0 (2)

This course is designed for students who wish to pursue a career in culinary arts or hotel and restaurant management. With today's complex safety and health laws, it is essential as well as required by many firms to have an indepth understanding and certification in safety and sanitation. This course provides the students with both. Students study food service safety, including fire safety. Students will earn an American Red Cross Certificate in adult CPR. Students also learn all aspects of food service sanitation and earn the NRAEF ServeSafe Certificate. **Group 2 course.**

CUL 111 Professional Cookery 6.0 (12)

Required prerequisite(s): CUL 110, may be taken concurrently
An intensive study of foods and cooking, this course exposes the student to commercial equipment, quality food production, and professional presentation. It provides the student with the practice and theory involved in the preparation of foods in a commercial operation. Basic cooking terminology, methods and procedures are introduced. The course also includes kitchen safety and sanitation, knife and equipment identification and technique, preparation of stocks, soups and mother sauces, meats, poultry and seafood, and the presentation of a complete meal. Uniforms and knives will need to be purchased through the department for this course. **Group 2 course.**

CUL 118 Introduction to Baking..... 4.0 (8)

Required prerequisite(s): CUL 110, may be taken concurrently
This course is designed for students seeking a career in Culinary Arts. In this intensive study of fundamental baking techniques, students will become familiar with baking operation and production. This course covers fundamental pastry and dessert recipes as well as the preparation of yeast dough. **Group 2 course.**

CUL 121 Purchasing and Receiving..... 2.0 (2)

An overview of how food is purchased, received, stored and distributed is discussed in this course. Focus is on product identification, availability, seasonality, price, quality, and freshness. The course also includes the purchasing practices and controls that help to insure a correct product specification. Proper forms for ordering, issuing, inventory, and cost controls are used. **Group 2 course.**

CUL 190 Culinary Internship..... 2.0 (2)

Recommended prerequisite(s): CUL 110, CUL 111, CUL 118, CUL 213 and Culinary staff approval

A culinary internship integrates academics with professional work experience. Students earn college credit while working in fine dining properties, gaining valuable hands-on experience. Students are encouraged to contact the internship coordinator at least two months prior to the semester they are requesting placement. Culinary internships are 40 hours per week for an eight-week summer session. **Group 2 course.**

CUL 210 Nutrition for Culinary Arts 2.0 (2)

This course is designed for students who wish to pursue a career in culinary arts. Healthy eating is attracting more attention as Americans struggle with the problems of obesity and disease prevention. In this atmosphere it is essential for prospective chefs to be aware of the needs of their customers. This course presents the principles of nutrition within the context of professional food preparation. Various ingredients and their role in good nutrition, spa cuisine, planning healthy menus and alternative eating styles are discussed. **Group 2 course.**

CUL 211 Menu Planning..... 3.0 (3)

Required prerequisite(s): CUL 110, CUL 111

No one will argue that the menu is the soul of a restaurant. This course provides the student with the understanding of the menu as the center of the food outlet, around which is built the facility. Menu theme is the driver for equipment purchases, staffing, location and floor plan. An understanding of this complex item is vital to anyone involved in food service. This course is designed to familiarize the student with all aspects of planning a modern menu - from market research to the physical layout of the document. Various types of menus are covered including A'La Carte, Table d'Hote, Institutional and Special Occasion. Menus will be analyzed for effectiveness and pricing strategies. **Group 2 course.**

CUL 213 World Cuisine 6.0 (12)

Required prerequisite(s): CUL 110, CUL 111

This course is designed for the student who wishes to be a professional chef. It comprises the study, preparation and presentation of foods and cooking methods from selected countries. These countries have been selected based on their current popularity in restaurants. In this course, students develop a knowledge and basic understanding of ethnic cooking including the cooking styles of Italy, France, Mexico, China, and various other Asian and American regions. In the process of learning these multi-national cuisines, the student develops additional technical skills in the preparation of the different foods. **Group 2 course.**

NMC.

Find it here.

CUL 215 Garde Manger.....4.0 (8)*Required prerequisite(s): CUL 110, CUL 111, CUL 118, CUL 213*

This course is designed for students who wish to pursue a career in culinary arts. As America's sophistication regarding food has increased, it is essential that students training to be chefs be exposed to the most up-to-date cooking and presentation techniques. Students prepare cold foods for display: pates, galantines, terrines and mousses. Decorative garnishes and other functional banquet presentations are covered in this course. Meat and seafood fabrication is also practiced. Projects made will be used and displayed at various functions and events held at the Great Lakes Campus and at other special occasions. **Group 2 course.**

CUL 217 Kitchen & Dining Room Mgmt3.0 (3)*Recommended prerequisite(s): CUL 101*

This course is designed for students who wish to pursue a career in the food service industry. Its focus is the control of the dynamics of the kitchen and dining room in a modern restaurant. In the highly competitive restaurant business, it is necessary for prospective food and beverage professionals to have a thorough understanding of this aspect of the industry. Many restaurants fail because of a lack of coordination between the front and back of the house. The course focuses on the basic principles of management as applied to kitchen and dining room situations. Other topics include TQM management techniques, team building, motivational techniques, stress management, production management, and styles of table service. **Group 2 course.**

CUL 218 Advanced Baking4.0 (8)*Required prerequisite(s): CUL 110, CUL 118*

This course is designed for students seeking a career in Culinary Arts. In this intensive study of advanced baking techniques, students will become familiar with baking operation and production as well as dessert and pastry finishing and plate presentation. This course covers more advanced pastry and dessert recipes as well as the preparation of yeast dough. Pastries, desserts and dessert sauces will be served to guests at Lobdell's, the Great Lakes Culinary Institute's teaching restaurant. Cake icing and finishing is also included as are tortes, mousses, Bavarians, tarts and other desserts. **Group 2 course.**

CUL 295 Contemporary Service & Cuisine12.0 (24)*Required prerequisite(s): CUL 211, CUL 213**Recommended competency: Basic keyboarding and computer skills*

This course focuses on practical hands-on training. Students rotate through the front-of-the-house and the restaurant kitchen in this intensive semester-long course. Front-of-the-house students learn various styles of table, wine and beverage service. Menu merchandising is stressed throughout the course. Guest relations and timing of service are also emphasized as advanced students serve lunch to guests in Lobdell's, the Great Lakes Culinary Institute's teaching restaurant. Heart-of-the-house students learn classical food preparation preparing designated menu items. Other areas covered include recipe construction and costing, the use and care of equipment, the pressure of a la carte preparation and service, and the effective handling and use of supplies. **Group 2 course.**

DD**Drafting & Design****DD 101 Print Reading and Sketching3.0 (4)**

Students will learn to read engineering drawings of products and tooling used in today's manufacturing. Basic drawing format and layout are presented using product, tooling assembly, and tooling detail drawings. Students learn methods of three dimensional shape description, dimensioning, and tolerancing. Types of fasteners along with related terminology and manufacturing processes are presented. An overview of common manufacturing processes, material specifications, and welding symbols are presented. Students learn the presentation skills of orthographic projection, isometric and oblique pictorial drawings using straight line and free hand sketches.

Group 2 course.**DD 110 Basic Metallurgy3.0 (3)**

This course presents the making and forming of steel and the classification of steel, cast iron and aluminum. Mechanical and physical properties are presented along with hardness and tensile testing labs. Principles of alloying, crystal structure, and the iron-carbon diagram help students understand how annealing, hardening, and tempering processes alter the mechanical properties of steel. Non-ferrous metallurgy is presented with an emphasis on aluminum. **Group 2 course.**

DD 120 Computer Aided Drafting (AutoCAD) ...2.0 (3)*Required prerequisite(s): DD 101, may be taken concurrently*

Students generate two-dimensional mechanical and architectural drawings using AutoCAD software. Templates are created to start new drawings with pre-set configurations and styles. Drawing and editing commands are stressed as students generate work-sheets and assignments creating various types of drawing views in architectural, inch, and metric units. Drawing archives and plotting are done in a network environment simulating a business. DD 101 is highly recommended to be taken with or before this course. **Group 2 course.**

DD 125 Mechanical Drafting (AutoCAD).....2.0 (3)*Required prerequisite(s): DD 120*

Students generate two-dimensional mechanical drawings using AutoCAD software with an emphasis on the manufacturing/tooling industry. Drawings include multi-view orthographic projection, section views, and auxiliary views with an emphasis on dimensioning methods and practices. Students also create isometric and oblique pictorial drawings. American National Standards Institute and American Society of Mechanical Engineers standards are stressed. **Group 2 course.**

DD 130 Architectural Drafting I (AutoCAD)2.0 (3)*Required prerequisite(s): DD 120*

This course is an introduction to architectural drafting using AutoCAD software. Emphasis is placed on the development of sound architectural drafting techniques while learning to apply the AutoCAD software. Students will generate a set of working drawings for a residential project including: floor plan, foundation plan, sections, elevations, etc. **Group 2 course.**

DD 131 Architectural Drafting II (AutoCAD) 4.0 (6)*Required prerequisite(s): DD 130*

This course is a continuation of methods and techniques presented in DD 130. Areas of major emphasis include site planning, building materials, residential structural systems, and construction techniques. AutoCAD concepts of external references and paper space will be utilized as the student generates a set of residential working drawings. **Group 2 course.**

DD 150 Detail Drafting 4.0 (6)*Required prerequisite(s): DD 101, DD 125*

Students generate detail drawings of tooling assemblies with the application of dimensioning and tolerancing. Computer aided drafting software is used to produce the drawings. Students work in a network environment simulating a tool design department of a parts manufacturer. Both inch and metric projects will be completed to corporate, national, and international standards. Projects will progress from static to dynamic assemblies. **Group 2 course.**

DD 160 Tolerancing and GD&T 3.0 (3)*Required prerequisite(s): DD 101*

This course first presents conventional tolerancing terminology, expressions, and accumulations in both inch and metric formats. Next, Geometric Dimensioning and Tolerancing (GD&T) presents an international system of symbols used to dimension product or tooling components. The course is based on the current ASME Y14.5M Dimensioning and Tolerancing standard. Engineers, designers, drafters, cost estimators, machinists, and inspectors must understand this system. Students study actual product drawings and make design sketches of workholding and inspection devices. **Group 2 course.**

DD 170 Part and Assembly Modeling 4.0 (6)*Required prerequisite(s): DD 125*

This course introduces SolidWorks features necessary to create, edit, analyze, and plot 3D models and 2D drawings. Upon successful completion, students will be able to construct 3D part and assembly models of moderate complexity, create animated presentations, and generate 2D detail drawings and assembly drawings with balloons and bill of materials. **Group 2 course.**

DD 240 Advanced Part and Assy Modeling 4.0 (6)*Required prerequisite(s): DD 170*

This course presents advanced modeling concepts using SolidWorks software. Topics include multi-body solids, curves, 3D sweeps, lofts, surfaces, top-down assembly modeling, advanced assembly mates, configurations of assemblies, assembly design tables, assembly editing, troubleshooting, assembly problems, working with subassemblies, advanced sectioning techniques, Toolbox, and eDrawings. Students will create part and assembly models which require the application of the concepts and techniques listed above. **Group 2 course.**

DD 290 Drafting Internship 3.0 (3)*Required prerequisite(s): DD 240, a 3.0 minimum GPA in technical courses and instructor permission*

The Drafting Internship will provide on-the-job training for the student pursuing a career in Drafting. The appropriate site will be chosen based on the specific sector the student indicates as their field of choice in the manufacturing drafting industry. Students will spend 20 hours per week in this paid or unpaid internship for a full 15 week semester. In addition to the 300 hours on the job, the students will be required to attend bi-weekly seminars for additional skills training, group discussion and debriefing. Bi-weekly reports indicating job specific skills will be submitted to the internship coordinator. **Group 2 course.**

DD 295 Advanced Manufacturing Project 4.0 (6)*Required prerequisite(s): DD 240 and instructor permission*

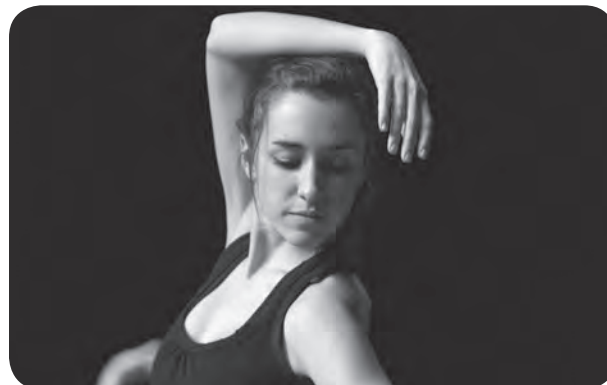
This course provides a capstone experience for Advanced Manufacturing students. They will work in teams to design, fabricate, assemble, and evaluate a mechanical assembly. Teams will be assigned a specific mechanism with stated parameters. The project will require continuous documentation in the form of a project plan with assigned duties and time lines, 3D models with mechanical drawings, process sheets, CNC programs, and inspection reports. **Group 2 course.**

DNC**Dance****DNC 101 Beginning Dance: An Exploration 2.0 (4)**

This course will introduce the major disciplines of dance: ballet, jazz, and modern. Basic dance skills will be acquired through the practice of exercises, steps, and techniques. This course is designed for those with little or no background in dance. **Group 2 course.**

DNC 110 Modern Dance I 2.0 (4)*Recommended prerequisite(s): DNC 101 or previous experience*

This course is designed to introduce students to the physical training and the creative thought process involved in executing modern dance as an art form. This course will consist of technique, improvisation, and creative problem solving through movement. Modern dance and its relationship to music and the historical development of modern dance will also be explored. **Group 2 course.**



DNC 111 Modern Dance II.....2.0 (4)*Recommended prerequisite(s): DNC 110 or previous experience*

This course is designed as an extension of Modern Dance I. This class will consist of increasing proficiency in modern dance through extended studies in technique, improvisation, creative problem solving, and performance. Dance history and motif writing in dance will also be explored. **Group 2 course.**

DNC 120 Choreography and Performance2.0 (2)*Recommended prerequisite(s): DNC 111*

Study choreography by participating in an instructor-led choreographed dance, created through structured improvisation and creative problem-solving techniques. Students will also create and develop their own dances through the exploration of a wide range of approaches to choreography. Performance and its relationship to community and cultural values will also be explored. The culmination of the class work will be a dance performance for the public. **Group 2 course.**

ECO**Economics****ECO 121 Basic Economics3.0 (3)**

This introductory course in economics will survey the principles, history, organization, and problems of the American economy. Micro and macro economic topics will be covered including: supply and demand, unemployment, inflation, the role of government, money and banking, the household and business sectors, competition and other market structures, and the labor market. **Group 1 course.**

ECO 201 Principles of Macroeconomics3.0 (3)*Recommended prerequisite(s): MTH 23*

This principles level course analyzes macroeconomic theory and concepts; and applies them to contemporary economic issues, problems, and policies. Topics include nature and scope of economics, national income accounting, government revenues and expenditures, unemployment and inflation, economic growth, money and banking, monetary policy, and fiscal policy. It is recommended that students take ECO 201 before ECO 202. **Group 1 course.**

ECO 202 Principles of Microeconomics3.0 (3)*Recommended prerequisite(s): MTH 23*

This principles level course analyzes microeconomic theory and concepts; and applies them to contemporary economic issues, problems, and policies. Topics include supply and demand analysis, productivity and the firm's costs of production, price and output determination under various market structures, government interventions in markets, factor allocation and pricing, and international trade. It is recommended that students take ECO 201 before ECO 202. **Group 1 course.**

EDU**Education****EDU 101 Introduction to Teaching3.0 (3)***Recommended prerequisite(s): Placement into ENG 111*

This course will serve as an introduction to teaching as a career. It will provide an overview of students' behaviors and effective teachers' responsibilities preparatory to guided observation and participation in preparation for further study in the field of education. This course includes 30 hours of classroom observation in a K-12 classroom. Instructor permission is needed for non-high school graduates. **Group 2 course.**

EET**Electronics Technology****EET 103 Electrical Studies I3.0 (4)**

This course examines the fundamentals of electricity, including direct current, resistive circuits, electrical terminology, units and component symbols, electrical safety, circuit conductors, wire sizes, circuit protection devices. Electrical safety will be stressed as well as the use of multi-meters and other test equipment. **Group 2 course.**

EET 104 Electrical Studies II3.0 (4)*Required prerequisite(s): EET 103*

This course is a continuation of the fundamentals of Electrical Studies, including direct current, alternating current, wiring practices, inductors, capacitors, and transformers. The use of oscilloscopes and multi-meters and other test equipment. **Group 2 course.**

EET 161 Fundamentals of Light & Lasers4.0 (6)*Required prerequisite(s): MTH 111*

This course introduces the elements of a laser, operation of a helium-neon gas laser, laser physics, optical-cavities, properties of laser light, and a survey of laser systems. Safety procedures concerning lasers and related equipment are presented in this course. **Group 2 course.**

EET 212 Elements of Photonics4.0 (5)*Required prerequisite(s): EET 161*

Elements of Photonics builds upon and applies principles presented in *Fundamentals of Light and Lasers*. The course includes modules on Operational Characteristics of Lasers; Specific Laser Types; Optical Detectors & Human Vision; Principles of Optical Fiber Communications; Photonics Devices for Imaging, Storage and Display; and Laser Welding and Surface Treatment. **Group 2 course.**

EET 221 Industrial Controls3.0 (4)*Required prerequisite(s): EET 103 or ELE 105*

This course studies control circuits, electrical schematics and line diagrams. Motor circuits utilizing motor starters, contactors, timers and counters are used to demonstrate control circuitry. Industrial control devices are examined, including solid-state control devices, electro-mechanical relays, proximity sensors, photoelectric sensing devices and programmable logic controllers. **Group 2 course.**

EET 232 Programmable Logic Controllers 3.0 (4)*Required prerequisite(s): EET 221*

This course studies programmable logic controllers (PLCs). Basic models and complete applications are applied to control inputs and outputs of PLCs. Ladder logic and device wiring techniques are studied, along with advanced program instructions such as counters, timers, sequencers and integer moves. Input/output devices are used to examine PLC program logic during the control process. **Group 2 course.**

Engineering

EGR 101 Introduction to Engineering 1.0 (1)

This course is a general view of the field of engineering. Emphasis is on curricula, categories of engineering and the role of the engineer. Required for all first-year students in the engineering program. **Group 2 course.**

EGR 113 Engineering Graphics I 3.0 (4)*Recommended prerequisite(s): MTH 122 or MTH 140*

This course is designed to satisfy the engineering graphics requirement for most engineering majors. Topics covered include the principles of orthographic projection, auxiliary views, sectional views, sketching; relationship of lines, planes and points in space, space vectors, solid modeling and force systems are discussed from an engineer's point of view. Graphic methods are applied to problem solving and communication of ideas. Two and three dimensional computer modeling are used throughout the course to reinforce the basic concepts. **Group 2 course.**

EGR 131 Elementary Surveying 5.0 (2)**EGR 131L Elementary Surveying Lab 0.0 (3)***Recommended prerequisite(s): MTH 122 or MTH 140**Corequisite(s): EGR 131 and EGR 131L*

This course is designed to satisfy the elementary surveying requirement for a student studying engineering. Students will learn the theory involved in plane and geometric surveying including both linear and angular measurement, traverse computations, stadia, topographical mapping and the design of horizontal and vertical curves as related to construction surveys. Students are expected to perform lab experiments in which they demonstrate their knowledge of concepts learned in lecture, incorporating the basic skill learned in lecture to field settings. Care, adjustment, and use of basic surveying instruments; leveling, taping, horizontal and vertical angle measurements, traverse surveys, horizontal highway curve layout, GPS surveys, electric distance measurement, topographic mapping; fundamental surveying procedures and office computation are all included. Computer spreadsheets and mapping programs are used to facilitate the learning process. **Group 2 course.**

EGR 201 Statics 3.0 (3)*Required prerequisite(s): MTH 141**Recommended prerequisite(s): ENG 111*

This is the first in a three course sequence in Engineering Mechanics. This course covers those topics included in the study of statics, such as forces acting upon a particle and rigid body at rest, analysis of structures, frictional forces, centroids and moments of inertia. Vector algebra and differential calculus are used throughout the course. **Group 2 course.**

EGR 202 Mechanics of Materials 3.0 (3)*Required prerequisite(s): EGR 201*

This is the second in a three course sequence in Engineering Mechanics. This course covers those topics included in the study of mechanics of materials. This includes stress and strain of engineering materials, torsion, Hooke's Law, and shear and moment diagrams, combined stresses, beam deflection, columns, pressure vessels, structural connections, and buckling of structures. Vector algebra and differential calculus are used throughout the course. **Group 2 course.**

EGR 203 Dynamics 4.0 (4)*Required prerequisite(s): EGR 201*

This is the third in a three course sequence in Engineering Mechanics. This course includes those topics typically covered in dynamics such as kinematics, kinetics, particle and rigid body motion, work-energy principles, impulse-momentum, Newton's Laws of Motion, and harmonic motion. Vector algebra and differential calculus are used throughout this course. **Group 2 course.**

Visit www.nmc.edu/science-math for detailed information.

Renewable Energy

EGY 101 Principles of Renewable Energy 3.0 (3)*Recommended prerequisite(s): MTH 23 or placement into MTH 111, ENG 111*

This course highlights industry and governmental perspectives on geothermal, wind, solar, biomass, fuel cells, and other energy sources. **Group 2 course.**

EGY 105 Sustainable Building Design 3.0 (3)*Recommended prerequisite(s): MTH 23 or placement into MTH 111, ENG 111*

This course provides an introduction to sustainable building practices and is for those students studying for the Environmental Design (LEED) Accredited Professional (AP) Exam. Through structured learning activities, the student will learn about the structure of matter and the material world, whole system thinking, site and natural energy mapping, water resources, building orientation, materials and resources, indoor air quality, innovation and design. **Group 2 course.**

EGY 115 Residential Energy Efficiency 3.0 (3)

Recommended prerequisite(s): MTH 23 or placement into MTH 111, ENG 111

Through structured classroom and hands-on skill building, the student will learn about the principles of energy, building shell construction, air leakage, insulation, windows and doors, heating, lighting, cooling, water heating, health, and safety.

Group 2 course.

EGY 141 Solar Photovoltaic Tech I 3.0 (4)

Required prerequisite(s): EGY 101

Recommended prerequisite(s): MTH 23 or placement into MTH 111, ENG 111

Through structured classroom and hands-on skill building, the student will learn about PV applications, solar radiation, site surveys, system components, cells, modules, arrays, batteries and charge controllers. **Group 2 course.**

EGY 143 Solar Thermal Tech I 3.0 (4)

Recommended prerequisite(s): MTH 23 or placement into MTH 111, ENG 111

Through structured classroom and hands-on skill building, the student will learn the history of solar thermal heating systems, components, drainback systems, glycol systems, start up and maintenance procedures, savings and performance estimates, system control, monitoring and testing and solar space heating design. **Group 2 course.**

EGY 145 Geothermal Technology 3.0 (4)

Recommended prerequisite(s): MTH 23 or placement into MTH 111, ENG 111

This course introduces the basic principles of geothermal energy production and technology. Essentials on how to utilize geothermal technology as an energy source will be analyzed and demonstrated. Examples of residential and commercial applications will be shown and reviewed. **Group 2 course.**

EGY 151 Solar Photovoltaic Tech II 3.0 (4)

Recommended prerequisite(s): MTH 23 or placement into MTH 111, ENG 111

Through structured classroom and hands-on skill building, the student will learn about inverters, PV system sizing, mechanical integration, electrical integration, utility interconnections, permitting and inspection, commissioning, maintenance, troubleshooting and economic analysis. **Group 2 course.**

EGY 161 Wind Power Technology 3.0 (3)

Recommended prerequisite(s): MTH 23 or placement into MTH 111, ENG 111

Through structured classroom discussion, the student will learn about wind applications, measuring the wind, estimating power output of various sizes, economics of wind generation, evaluating technology, towers, interconnection with the utility, siting, installation, operation, performance, maintenance, and safety. **Group 2 course.**

ELE**Electrical****ELE 101 Introduction to Electrical 3.0 (4)**

Recommended competencies: COMPASS placement into MTH 111 or higher, or co-enrollment in the appropriate developmental math course. COMPASS placement in ENG 11/111 or higher, or co-enrollment in the appropriate developmental English course.

This course provides an introduction to electrical. Through structured classroom and hands-on skill building, the student will learn the orientation to the trade, electrical safety, circuits, theory and an introduction into the National Electrical Code.

Group 2 course.

ELE 105 Residential Electrical 3.0 (4)

Required prerequisite(s): ELE 101

Through structured classroom and hands-on skill building, the student will learn to identify and select various types and sizes of raceways and fittings for a given application, perform proper hand bending techniques, install conductors, describe the type of information included in electrical specifications and properly use electrical test equipment. **Group 2 course.**

ELE 121 Electrical Applications 3.0 (4)

Required prerequisite(s): ELE 105

Through structured classroom and hands-on skill building, the student will learn the orientation to alternating current, motors, electric lighting, and conduit bending. **Group 2 course.**

ELE 125 Electrical Components 3.0 (4)

Required prerequisite(s): ELE 121

Through structured classroom and hands-on skill building, the student will learn the orientation to conductor installations, cable trays, terminations and splices, grounding and bonding, circuit breakers and fuses, control systems and fundamental concepts. **Group 2 course.**

ELE 131 Electrical Distribution 3.0 (4)

Required prerequisite(s): ELE 125

Through structured classroom and hands-on skill building, the student will learn how to calculate loads on branch and feeder circuits, sizing of conductors for proper load, selection and sizing of overcurrent protection, installation of raceways, boxes and fittings, and determine the maximum load allowed on specific wiring devices. **Group 2 course.**

ELE 135 Motor Control Circuits 3.0 (4)

Required prerequisite(s): ELE 131

Through structured classroom and hands-on skill building, the student will learn how to calculate the power factor of any given circuit, use troubleshooting checklists to troubleshoot fluorescent and HID lamps and lighting fixtures, size motor short circuit protectors, test motors and generators, design and build motor control circuits. **Group 2 course.**

ELE 141 Commercial Electrical Systems.....3.0 (4)*Required prerequisite(s): ELE 135*

Through structured classroom and hands-on skill building, the student will learn to calculate loads and ampacities for single-phase and three-phase feeders, classify lighting fixtures by layout, location, fixture type, and type of service, interpret electronic system components and schematic diagrams and identify power transformer connections. **Group 2 course.**

ELE 145 Commercial Electrical Controls.....3.0 (4)*Required prerequisite(s): ELE 141*

Through structured classroom and hands-on skill building, the student will learn to recognize the different types of reduced voltage starting motor controllers, recognize common types of motor braking, test motor winding resistances, troubleshoot and repair electric motors, complete cable tray assemblies using terminations and splices. **Group 2 course.**

ENG**English****ENG 11 English/Writing Methods 2.0 (developmental)***Students will be placed in this course as a result of COMPASS testing (2)**Required prerequisite(s): ENG 108, may be taken concurrently**Corequisite(s): ENG 111*

This course is to be taken concurrently with ENG 111, and helps facilitate the objectives of ENG 111. Special attention is given to individual student needs in the conventions of standard written prose, argumentation, and research.

ENG 12 English/Writing Methods 2.0 (developmental)*Required prerequisite(s): ENG 11/111 and ENG 108 or ENG 111 (2)**Corequisite(s): ENG 112*

This course is to be taken concurrently with ENG 112 and helps facilitate the objectives of ENG 112. Special attention is given to individual student needs in the conventions of standard written prose, argumentation and research.

ENG 97 Fundamentals of Reading and Writing 4.0 (developmental) (4)*Students will be placed in this course as a result of COMPASS testing**Corequisite(s): ENG 107*

This course will provide an overview to reading and writing. Students will learn and practice basic reading skills such as annotation, think-aloud, word attack, and main idea identification. Students will also be introduced to the writing process and learn a variety of methods such as free writing, invention, essay planning, drafting, and revision.

ENG 99 Introduction to College Reading/Writing 6.0 (developmental) (6)*Required prerequisite(s): Successful completion of ENG 97/ENG 107 with a 2.0 or better or placement based on COMPASS scores*

This is an integrated reading and writing course that gives students the literacy skills they need for college-level academic

work. It builds on the reading and writing skills students already have and prepares them for college composition courses and reading-intensive courses. It also focuses on grammar, punctuation and sentence construction and variety. ENG 99 will cover a broad range of topics and explore a variety of readings and writings chosen to help students develop critical reading, writing and thinking skills.

ENG 107 Academic Study Methods2.0 (2)*Students are placed in this course as a result of COMPASS testing.*

This course provides students with the opportunity to develop and improve basic college academic survival skills and study methods. Topics include: introduction to personal learning style, learning theory, active listening, time management, test taking strategies, basic study techniques such as SQ3R, note taking, improving concentration and memory, and controlling the study environment. **Group 2 course.**

ENG 108 Critical Reading Strategies3.0 (3)*Required prerequisite(s): Successful completion of ENG 99 with a 2.0 or better or placement based on COMPASS scores*

Students may elect this course as a helpful "entry to college" course. Through readings from other disciplines, the focus of this course is on improving comprehension and vocabulary. Learning strategies are introduced and then applied to coursework. Study skills taught include note-taking, test preparation, monitoring comprehension, and general techniques for effective learning. **Group 2 course.**

ENG 110 Grammar & Writing3.0 (3)*Required prerequisite(s): ENG 99*

This course is not a refresher but an intensive inspection of the sentence - as it gets used in academic writing. In the eight weeks, students will be invited to think strategically and deliberately about conventions they've either missed or acquired unconsciously. While developing/intensifying syntactical skill, they will also develop a sound and reasonable language about language. **Group 2 course.**



ENG 111 English Composition.....4.0 (4)
Students are placed in this course as a result of COMPASS testing.
 This is a writing course in which students work to develop their sense of language as a means of shaping and ordering their experience and ideas to develop thought, organization and clarity in written work. **Group 1 course.**

ENG 112 English Composition.....4.0 (4)
Required prerequisite(s): ENG 111 or ENG 11/111, ENG 108
 This is a writing course based on critical reading from various fields. Writing assignments reinforce skills in summary, analysis, evaluation, and synthesis. Emphasis is on argumentation, research methods, and information literacy. **Group 1 course.**

ENG 210 Children's Literature3.0 (3)
Required prerequisite(s): ENG 112, may be taken concurrently
 Focus is on developing criteria, terminology and resources for evaluation and selection of good quality children's literature and on developing methods for sharing that literature with children. The course surveys both picture books and novels from a variety of genres and cultures, and also examines the impact of social change on children's literature. Humanities or English credit. **Group 1 course.**

ENG 211 Introduction to Linguistics3.0 (3)
Required prerequisite(s): ENG 112, may be taken concurrently
 This course is designed to acquaint students with modern developments in the science and philosophy of language, and to improve their understanding of culture and language in general. It addresses issues of sound, word formation, syntax, semantics, language acquisition and more. **Group 2 course.**

ENG 220 Technical Writing.....3.0 (3)
Required prerequisite(s): ENG 111
 This course introduces students to a variety of technical writing situations in business, industry, science, and education. It emphasizes audience awareness, research methods, problem solving, critical thinking, professional ethics, patterns of typical proposals, descriptions, and the requirements of formal reports used in professional writing. **Group 2 course.**

ENG 221 Creative Writing.....3.0 (3)
Required prerequisite(s): ENG 112
 Study and practice of the basic techniques of imaginative writing, focusing on short fiction but with considerable allowance for individual interests. The class emphasizes craft while giving room for creative talent to emerge in response to open-ended assignments. In this workshop seminar, students will exchange helpful commentary on each other's writing, as well as examine professional fiction to analyze how successful authors achieve their results. The class includes close work with the elements of creative narration: concrete language, story shape and pace, characterization, point of view and setting. Individual conferences will supplement class activities. **Group 2 course.**

ENG 222 Advanced Creative Writing.....3.0 (3)
Required prerequisite(s): ENG 221
 More intense and advanced study and practice of techniques of imaginative prose writing than in ENG 221, which an emphasis on narrative fiction, but offering a wide range of options for individual creativity and interest. As an advanced creative writing course, 222 places emphasis upon more fully developed narrative manuscripts, moving beyond individual scenes and exercises with individual narrative techniques to complete stories and revisions of them. Workshop activities will require more sophisticated, directed exchanges among students. Final portfolios are expected to include at least one 'publishable' manuscript, showing revision stages and self-appraisal of that manuscript in particular and semester's work in general. At least one full class session is devoted to publication strategies. **Group 2 course.**

ENG 223 Apprentice Poetry Workshop.....3.0 (3)
Required prerequisite(s): ENG 112
 Weekly writing exercises, peer critique, and one on one mentoring with the instructor provide the foundation for this workshop whose goal is agile, well read poets who feel comfortable working in a variety of forms, as well as reading their own work out loud. Discussion of required readings, emphasis on revision, and experiments to aid the creative process can be expected during the session. **Group 2 course.**

ENG 224 Journalism Fundamentals.....3.0 (3)
Recommended prerequisite(s): Placement into ENG 111
 While the history and role of the press are discussed, this course primarily provides the student with theory and practice in news, editorial and feature writing. Press law and ethics will also be examined. **Group 2 course.**

ENG 228 Advanced Writing & Rhetoric.....4.0 (4)
Required prerequisite(s): ENG 112, may be taken concurrently
 This course examines persuasive language of everyday life and calls on students to reveal, analyze, and critique the subtle rhetorical elements in the texts and voices around them. The course examines how everyday texts or "artifacts" (such as news programs, advertisements, church bulletins, political slogans, college textbooks, course syllabi, and other official documents) persuade audiences to believe in a particular reality. Formal written analysis will rely on working knowledge of classical rhetoric (terms and concepts discussed early in the semester). **Group 2 course.**

ENG 240 Introduction to Literature3.0 (3)
Required prerequisite(s): ENG 112, may be taken concurrently
 An introduction to a variety of literary styles, themes, and forms such as fiction, drama and poetry. Intended to develop an understanding and enjoyment of reading as well as an understanding of current critical approaches to the study of literature. **Humanities or English credit. Group 1 course.**

ENG 241 Mythology3.0 (3)*Required prerequisite(s): ENG 112, may be taken concurrently*

This course features a study of central and recurring patterns of human concern as revealed in the mythic content of various forms of literature. Examination of archetypal structures embedded in works of cultures ranging from ancient Babylonian to contemporary eras is central to course goals and outcomes. Areas to be investigated will include myths of the quest, of power, of origins, of love, and of art. **Humanities or English credit. Group 1 course.**

ENG 242 Women in Literature3.0 (3)*Required prerequisite(s): ENG 112, may be taken concurrently*

This course features an examination of essays, novels, stories, and poems written primarily (but not exclusively) by 19th and 20th century European and American female authors. In addition, the course introduces students to relevant literary criticism and the historical, cultural context in which writing by and about women has emerged. **Humanities or English credit. Group 1 course.**

ENG 245 Native American Literature3.0 (3)*Required prerequisite(s): ENG 112, may be taken concurrently*

This is a general introductory survey course that will explore various Native American literary genres, including fiction, non-fiction, biography and critical essays. Students will be encouraged to develop a critical stance toward non-Native depiction of Native literature and to look beneath the "surface" for hidden socio-economic messages. Students will evaluate past and present expectations of Native American literature and develop an understanding of new more aggressive and increasingly pervasive forms of Native fiction and non-fiction. **Humanities or English credit. Group 1 course.**

ENG 254 Shakespeare3.0 (3)*Required prerequisite(s): ENG 112, may be taken concurrently*

This course is an introduction to representative major dramatic works of Shakespeare and the Elizabethan Age, and includes lecture, film, and discussion. **Humanities or English credit. Group 1 course.**

ENG 256 Environmental Literature3.0 (3)*Required prerequisite(s): ENG 112, may be taken concurrently*

This course will examine the changing perceptions and definitions of wilderness and nature in Western literature and culture. The course will examine and discuss poetry, fiction, and nonfiction by authors, including Wordsworth, Thoreau, Muir, Leopold, Stegner, Jeffers, Silko, Oliver, Abbey, Snyder, and Williams. Students will explore the interaction between literature and environmental issues and activism, and also consider the impact of nature and wilderness on music, painting, photography, and film. **Group 1 course.**

ENG 261 British Literature3.0 (3)*Required prerequisite(s): ENG 112, may be taken concurrently*

This course features an intensive reading of works from British authors representing the entire span of this literary tradition and including works in various genres. It develops a sense of

British literature evolution and a facility in careful literary criticism. **Humanities or English credit. Group 1 course.**

ENG 262 American Literature3.0 (3)*Required prerequisite(s): ENG 112, may be taken concurrently*

Students in this course study the American tradition, early and modern, in prose and poetry. Selections will emphasize the cultural and intellectual background giving rise to our national literature, the major phases or movements in that literature, and how certain writers transcended those movements to create work of universal value. **Humanities or English credit. Group 1 course.**

ENG 263 World Literature3.0 (3)*Required prerequisite(s): ENG 112, may be taken concurrently*

This course exposes students to a variety of readings drawn from Africa, Asia, Europe, Latin America, and/or Oceania. While the reading and writing assignments will certainly require close literary analysis, the class will also attempt to situate the works culturally, historically, and theoretically. **Humanities or English credit. Group 1 course.**

ENG 264 Detective Fiction3.0 (3)*Required prerequisite(s): ENG 112, may be taken concurrently*

The primary emphases of this course are reading and writing about detective fiction and the historical and cultural development of this genre of literature. Multi-media story formulas analyzed include avenger stories, private eye fiction, police procedurals, gentlemen thieves, psychic detectives, stories of magician detectives and spy fiction. **Humanities or English credit. Group 1 course.**

ENG 265 Science Fiction & Fantasy3.0 (3)*Required prerequisite(s): ENG 112, may be taken concurrently*

The primary emphases of this course are reading and writing about Science Fiction and Fantasy stories as they are found in a range of cultural texts like print, motion pictures, radio drama, television, and more. Students will learn to identify and discuss mythologies and related symbols, genre and formula conventions such as icons, stereotypes, rituals, plots, motifs, settings, and more as they investigate the social history of these stories. **Humanities or English credit. Group 1 course.**

ENG 266 Popular Culture3.0 (3)*Required prerequisite(s): ENG 112, may be taken concurrently*

The primary emphases of this course center on the critical reading of and writing about popular culture and its historical development in U.S. and world cultures. Topics to be addressed include myth and mythmaking, iconography, stereotypes, rituals, genres and formulas, the mass media and more. **Humanities or English credit. Group 1 course.**

ENG 267 Film as Literature3.0 (3)*Required prerequisite(s): ENG 112, may be taken concurrently*

This course offers students the opportunity to examine and critique a selection of films through discussion and writing by employing techniques similar to those used in literary analysis. **Humanities or English credit. Group 1 course.**

ENG 271 Adolescence & Cultural Diversity 3.0 (3)

Required prerequisite(s): ENG 112, may be taken concurrently
 This course provides a study of universal and diverse themes and ideas expressed through adolescent literature. It features protagonists and authors from a variety of cultures, both within and outside of the United States, and emphasizes the relationship between culture and the lives of young people.
Humanities or English credit. Group 1 course.

For more information on elective literature or writing courses and when they are offered, please contact the Communications Academic Office, (231) 995-1175.

ENV Environmental Science**ENV 103 Earth Science 4.0 (3)****ENV 103L Earth Science Lab 0.0 (2)**

Recommended prerequisite(s): MTH 08 and ENG 99 or COMPASS equivalent. Students scoring below ENG 111 levels on the COMPASS placement test should plan on additional study time.
Corequisite(s): ENV 103, ENV 103L

Designed for the student who does not intend to major in a physical science. Subject matter deals with features of the planet earth, astronomy, and weather. The laboratory portion includes a practical study of rocks and minerals as well as a study of topographic, geologic and weather maps. Field trips investigate landforms in the Grand Traverse area.

Group 1 lab course.

ENV 104 Life of the Past 4.0 (3)**ENV 104L Life of the Past Lab 0.0 (2)**

Recommended prerequisite(s): MTH 08 and ENG 99 or COMPASS equivalent. Students scoring below ENG 111 levels on the COMPASS placement test should plan on additional study time.

Corequisite(s): ENV 104, ENV 104L

This course introduces students to the record of life on Earth. The roles of global change, origins, evolution, and extinction in life history are examined. Great Lakes and North American fossil records with Prepaleozoic micro-organisms and Paleozoic invertebrates and vertebrates are highlighted. Appearance, evolution, and disappearance of dinosaurs during the Mesozoic Era, human evolution, and the recent demise of the giant Ice Age mammals are analyzed in depth. Laboratory and class activities are included. **Group 1 lab course.**

ENV 105 Intro to Freshwater Studies 3.0 (3)

Recommended prerequisite(s): MTH 23, ENG 111, may be taken concurrently

This course is designed to provide an orientation to the field of water studies, with a specific focus on freshwater. Invited lecturers from local businesses, education and community organizations will raise critical issues concerning freshwater use, distribution and management. Students will compare and contrast connections to freshwater bodies around the world and explore career pathways in the field. **Group 2 course.**

ENV 111 Physical Geology 4.0 (3)**ENV 111L Physical Geology Lab 0.0 (2)**

Recommended prerequisite(s): MTH 111

Corequisite(s): ENV 111, ENV 111L

This course explores processes which transform planet Earth. Landforms, minerals, rocks, and geologic structures are examined in classroom, laboratory, and field studies which focus on these geologic processes and on the techniques of geology. Lab studies apply the methodology and techniques of geology by introduction of map reading, field and map study, study of surficial processes, and study of minerals and rocks.

Group 1 lab course.

ENV 112 Historical Geology 4.0 (3)**ENV 112L Historical Geology Lab 0.0 (2)**

Recommended prerequisite(s): ENV 103 or ENV 111 or GEO 105, MTH 111 and placement into ENG 111

Corequisite(s): ENV 112, ENV 112L

Rocks and fossils of North America, the Great Lakes and the Grand Traverse region which reveal the physical, chemical, and biological evolution of the planet earth are explored in classroom, laboratory, and field studies (including a required 4-day field excursion to Elliot Lake, Ontario).

Group 1 lab course.

ENV 115 Intro to GIS 3.0 (4)

Recommended prerequisite(s): MTH 23

This course explores the fundamentals of Geographic Information Systems (GIS) for map reading, interpretation and analysis, in conjunction with the principles of cartography. Computer and Internet technologies are utilized for the generation, manipulation, storage and retrieval of maps and associated geographic attributes. Topics covered include: basic GIS concepts, display of data and attributes, queries, metadata, tabular relationships, data editing, projections and datums, and basic cartography. **Group 2 course.**

ENV 117 Meteorology & Climatology 4.0 (3)**ENV 117L Meteorology & Climatology Lab 0.0 (2)**

Required prerequisite(s): MTH 23

Corequisite(s): ENV 117, ENV 117L

Recommended prerequisite(s): Students scoring below ENG 111 levels on the COMPASS placement test should plan on additional study time.

Designed to acquaint the student with the science and art of weather analysis, this course includes studies of the basic properties of gases, organization and composition of the atmosphere, basic energy flow, and general weather phenomena that result. Global climates are also investigated. The laboratory portion presents the function and effect of selected physical processes, and includes the use of weather instruments and weather maps. **Group 1 lab course.**

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ENV 131 Oceanography 4.0 (3)**ENV 131L Oceanography Lab 0.0 (2)**

Recommended prerequisite(s): MTH 23 or COMPASS equivalent. Students scoring below ENG 111 levels on the COMPASS placement test should plan on additional study time.

Corequisite(s): ENV 131, ENV 131L

This course explores the origins, structure, and evolution of ocean basins and their role in global climate dynamics. It shall include an investigation of the physical properties that govern waves, currents, tides, air-sea interactions as well as the physical and chemical properties of seawater. It also explores plant and animal life within the oceans including impacts of human activities on the marine environment. **Group 1 lab course.**

ENV 140 Watershed Science 4.0 (3)**ENV 140L Watershed Science Lab 0.0 (2)**

Recommended prerequisite(s): MTH 111. Students scoring below ENG 111 levels on the placement test should plan on additional study time.

Corequisite(s): ENV 140, ENV 140L

This course is designed for the learner who wishes to gain an in-depth understanding of watersheds. It will focus on the physical and biological systems that are responsible for the quality and characteristics of a watershed. Human interactions, stewardship, management and impacts on our local water resources will also be explored. The laboratory portion of the course will place emphasis on field investigations and the analysis of data and water samples collected. Throughout the course basic scientific principles will be incorporated.

Group 1 lab course.

ENV 200 GL Research Technologies 3.0 (4)

Advancements in Great Lakes research and monitoring techniques allow for an increased ability to access and assess remote locations through the use of enabling technologies and platforms including: Research Vessels, Remotely Operated Vehicles (ROV), SONAR systems (single beam, multibeam, scanning) and oceanographic buoy systems. Focus will be directed at understanding the basics of how each component is used and gain firsthand experience operating systems and collecting information. Field activities will take place in local water bodies, Grand Traverse Bay and onboard the *R/V Northwestern*. **Group 2 course.**

ENV 210 Fundamentals of Soil Science 4.0 (3)**ENV 210L Fundamentals of Soil Science Lab 0.0 (2)**

Recommended prerequisite(s): ENG 111, MTH 23

Corequisite(s): ENV 210, ENV 210L

This course will explain the fundamental principles of soil science emphasizing soil as a natural resource. The many interactions between the soil and other components of forest, range, agricultural, wetland and constructed ecosystems are highlighted. In addition to the physical properties; soil chemistry, water interactions, and biological process will be investigated. Soil taxonomy, management, and human interaction with soil will also be covered. The laboratory portion of the course focuses on mapping and identification of soils in the field and lab analysis of soil properties. **Group 1 lab course.**

ENV 231 Environmental Science 4.0 (3)**ENV 231L Environmental Science Lab 0.0 (2)**

Recommended prerequisite(s): ENG 111, MTH 111

Corequisite(s): ENV 231, ENV 231L

Environmental Science is an interdisciplinary course investigating scientific aspects of the outstanding environmental concerns: air, water, and earth alteration; industrial, agricultural and residential/commercial pollution; and ecological changes. Included are the basics of the chemical cycles and societal factors which complicate problem solving. Laboratory incorporates problem solving from data accumulated from field trips, lab activities, and research. **Group 1 lab course.**

ENV 270A Michigan Basin Geology 2.0 (3)

Recommended prerequisite(s): ENG 111, MTH 23, completion of any Science course with laboratory and instructor permission

This is a six-day study of the Michigan Basin. The class concentrates on Paleozoic rock layers and their included fossils. There is also a section on relationships of rock layers to more recent geologic processes and their associated deposits and landforms. **Group 1 course.**

ENV 270B Field Mapping Techniques 2.0 (3)

Recommended prerequisite(s): ENG 111, MTH 23, completion of any Science course with laboratory and instructor permission

This course is a one-week field course. It will focus on the fundamentals of map interpretation and generation. Students will gain a basic understanding of the principles of cartography and field mapping techniques employed by various disciplines in the acquisition of spatial data. **Group 1 course.**

ENV 270C Precambrian Geology of Michigan 2.0 (3)

Recommended prerequisite(s): ENG 111, MTH 23, completion of any Science course with laboratory and instructor permission

This course is a six-day field study of the Precambrian geology of the western Upper Peninsula of Michigan. The class will focus on rock and mineral identification, economic geology, and the geologic history of Michigan's UP. The relationships of ancient bedrock layers to recent surficial geologic processes and their associated landforms will also be explored.

Group 1 course.

ENV 290 Freshwater Studies Internship 1.0-3.0 (1-3)

The internship in Freshwater Studies is a field experience for students interested in developing competencies to address significant water-related issues impacting our region and the world. Students engage in research activities with local and global community partners to collaborate in the implementation of best water management practices. The program is customized according to students' background and specific career goals. Activities may include monitoring water quality, identifying invasive species distribution, digital mapping and hydrographic surveying. **Group 2 course.**

Visit www.nmc.edu/science-math for detailed information.

FRN

World Language
- French

FRN 101 Elementary French I..... 4.0 (4)
Note: Minimum enrollment of ten (10) students is required.

This course represents a comprehensive introduction to the French language for the true beginner. Students will develop the ability to communicate in French in everyday situations while acquiring some of the necessary skills for reading, writing, listening, and speaking. Cultural topics are integrated in each unit. **Group 2 course.**

FRN 102 Elementary French II..... 4.0 (4)
Note: Minimum enrollment of ten (10) students is required
Required prerequisite(s): FRN 101 with a minimum grade of 2.0, required score on the NMC language placement test, or instructor permission

FRN 102 is a continuation of FRN 101 and focuses on the expansion of the communication skills of reading, writing, listening, and speaking. Cultural topics are integrated into each unit. **Group 2 course.**

FRN 201 Intermediate French I 4.0 (4)
Note: Minimum enrollment of ten (10) students is required
Required prerequisite(s): FRN 102 with a minimum grade of 2.0, required score on the NMC language placement test, or instructor permission

FRN 201 is designed to further develop language proficiency in reading, writing, listening, and speaking. A deeper exploration of French culture is presented in this course, allowing students to transform themselves into truly active and proficient language users. **Group 1 course.**

FRN 202 Intermediate French II 4.0 (4)
Note: Minimum enrollment of ten (10) students is required
Required prerequisite(s): FRN 201 with a minimum grade of 2.0, required score on the NMC language placement test, or instructor permission

FRN 202 is a continuation of FRN 201 and focuses on the application of the communication skills of reading, writing, listening, and speaking within cultural contexts. **Group 1 course.**



GEO

Geography

GEO 101 Introduction to Geography 3.0 (3)
Recommended prerequisite(s): MTH 08
Note: Students placing below ENG 111 may have difficulty and should plan on additional study time

This course emphasizes both the physical and the cultural aspects of geography. Physical factors such as weather, climate, soil, vegetation and landforms are considered as they determine the natural resources of a region. Various aspects of human culture such as religion, language and economic systems are studied to gain understanding of the ways in which people have used and misused their resources. **Group 1 course.**

GEO 105 Physical Geography 3.0 (3)
GEO 105L Physical Geography Lab..... 1.0 (2)
Recommended prerequisite(s): MTH 23
Corequisite(s): GEO 105L

Note: Students placing below ENG 111 may have difficulty and should plan on additional study time
Physical geography studies, selected elements of the physical environment: weather and climate, landforms, soil and vegetation. Particular emphasis is placed upon the nature and distribution of physical features throughout Michigan with respect to humankind. The lab includes field trips and emphasizes the application of physical principles through hands-on study of minerals, rocks, and soils; in conjunction with map and aerial photo interpretation. The lab emphasizes the application of selected physical elements through means of field work, map and aerial photo interpretation. **Group 1 course.**

GEO 108 Geography of U.S. & Canada 3.0 (3)
The diverse regions of Anglo-America will be investigated in this course. We will consider the relationship between the natural environment, the cultural background, economic conditions, and local problems of the U.S. and Canada. **Group 1 course.**

GEO 109 World Regional Geography 3.0 (3)
This course is a study of world regions. For each region we will consider the relationship between the natural environment, cultural background, economic conditions, and local problems that relate to world issues. **Group 1 course.**

GEO 110 Economic Geography 3.0 (3)
An examination of the location of various economic activities in the United States and elsewhere and a discussion of the different ways of accounting for that location. Various elements of the natural, economic, social and political environments are considered and their relative importance analyzed, with reference to primary, secondary, and tertiary production. **Group 1 course.**

GEO 115 Intro to GIS.....3.0 (4)*Recommended prerequisite(s): MTH 23*

This course explores the fundamentals of Geographic Information Systems (GIS) for map reading, interpretation and analysis, in conjunction with the principles of cartography. Computer and Internet technologies are utilized for the generation, manipulation, storage and retrieval of maps and associated geographic attributes. Topics covered include: basic GIS concepts, display of data and attributes, queries, metadata, tabular relationships, data editing, projections and datums, and basic cartography. **Group 2 course.**

HAH**Allied Health**

The following courses are appropriate for students in pre-professional medical studies in many health careers, and for those health professionals who wish professional continuing education course work. The content of these courses provides a broad background and can be a useful tool in the medical field. Students who wish credits from these courses transferred to other college or university health programs should consult with a NMC counselor to facilitate the process. Admission to a NMC Health Occupations program is not required to enroll in most of these elective courses.

HAH 100C Informatics Essentials 1.0 (1)*Recommended prerequisite(s): HNR 102, may be taken concurrently*

This course will introduce students to informatics in health care and, in particular, nursing. Students will enhance their ability to use modern informatics such as computer and Internet resources as well as Electronic Medical Record (EMR) software, in the health care environment. This course is offered in a hybrid online and face-to-face format. **Group 2 course.**

HAH 101 Medical Terminology.....3.0 (3)

The student will learn the basic construction of medical words through the use of medical prefixes, suffixes, combining vowels and root words. This foundation will facilitate the understanding of new medical vocabulary encountered in other course work or work situations. **Group 2 course.**

HAH 120 Infection Control 2.0 (2)

This course details the structure of infectious organisms and mechanisms of disease transmission, including host defenses against disease and specific diseases of concern to dental and medical personnel. In addition, the course provides an overview of MIOSHA (Michigan Occupational Safety and Health Act) regulations and occupational safety measures as they relate to the dental and medical fields. **Group 2 course.**

HAH 200 Emergency Assessment & Intervention 3.0 (4)

A comprehensive study of the concepts and practices of first aid techniques. The course provides training for emergency care through assessment, critical thinking, implementation, documentation, and evaluation. It also addresses situations when injury or sudden illness becomes a threat to life, or problems de-

velop that endanger physical or psychological well-being. Certification for CPR for the Professional Rescuer, HAZMAT, and Medical First Responder may be earned in cooperation with state and/or national agencies. Must be able to meet patient lifting and equipment requirements. Required for MCOLES Police Academy. Signature required to register. **Group 2 course.**

HDA**Dental Assistant****HDA 101 Introduction to Dentistry 2.0 (2)**

Students are introduced to the role of the dental assistant and the dental team and opportunities for employment. Students will be informed of the requirements for certification and registration and the various organizations and associations within dentistry and dental assisting. Other areas studied will include dental specialties, dental terminology, applied psychology in the dental office, instrument and equipment identification and charting. The student will have an opportunity to view a dental office to see the set-up and to observe the roles of each person on the dental team. **Group 2 course.**

HDA 112 Dental Materials 2.0 (2)*Recommended prerequisite(s): HDA 120, HAH 120**Corequisite(s): HDA 113*

Students learn the preparation, manipulation, and use of dental materials commonly found in the dental office. There will be discussion regarding the equipment needed, mixing techniques, and proper usage of waxes, restorative materials, impression materials, gypsum products, cements, metals and therapeutic materials. Preparation of each material will be demonstrated. **Group 2 course.**

HDA 113 Dental Materials Lab..... 1.0 (2)*Corequisite(s): HDA 112*

This course familiarizes the student with the handling of dental materials commonly used in the dental office. Opportunities are provided in the laboratory to develop skills in mixing techniques, impression taking, construction of study models, bleaching, and acrylic trays. **Group 2 course.**

HDA 120 Dental Anatomy.....3.0 (3)

The student will learn the anatomy and physiology of the oral cavity, teeth and head. Students will learn the histology of the teeth and surrounding structures, the bones of the skull, the nerves and blood supply of the head and neck, the muscles of mastication, and the names and functions of the teeth and oral structures. This class will also provide detailed information on the anatomy of the individual teeth. **Group 2 course.**

HDA 140 Oral Pathology/Pharmacology.....2.0 (2)*Recommended prerequisite(s): HDA 120*

The purpose of this course is to familiarize the student with disease processes related to the oral cavity and to enable the student to identify these diseases. The student will become familiar with various drugs and their uses in dentistry, prescription writing and documentation, the sources of drugs, routes of administration, and the conditions that modify the reactions of drugs. **Group 2 course.**

HDA 150 Dental Office Management2.0 (2)

Students are acquainted with the procedures necessary for efficient dental office management. Topics include appointment book control, accounts receivable and payable, dental record keeping, third party payment, patient recall, inventory control, telephone techniques, and use of computer hardware and software unique to the dental office. This course is offered in the self-paced format. **Group 2 course.**

HDA 160 Dental Emergencies..... 1.0 (1)

This course acquaints the student with the types of emergencies that may arise in the dental office. The students will learn the procedures to follow when medical and dental emergencies occur, the importance and significance of obtaining accurate and complete patient histories, the proper emergency equipment necessary in a dental office and the maintenance of that equipment, the taking and recording of vital signs, basic first aid rules, and fire safety. **Group 2 course.**

HDA 170 Preventive Dentistry.....2.0 (2)

This course deals with educating dental patients in proper oral hygiene and nutrition. The topics of discussion will include vitamins, minerals, fats, carbohydrates, proteins, food groups, fluoride treatments, oral examinations, pit and fissure sealants, public health dentistry, and oral hygiene instructions. Student demonstration and participation is emphasized. Fluoride treatments and a dietary analysis will be learned and demonstrated by students. Two community presentations will be designed and presented by each student. **Group 2 course.**

HDA 240 Chairside Procedures5.0 (5)

Recommended prerequisite(s): HDA 101, HDA 120, HAH 120, HDA 160, HDA 242, HDA 243

Corequisite(s): HDA 241

This course provides the foundation for dental assistant clinical procedures performed in both general and specialty dental offices. Topics include theory and application of four-handed dentistry; application of infection control procedures; an overview of procedures and techniques unique to dental specialties; and background information and technical skills performed by the Registered Dental Assistant. In addition, local dental specialists serve as guest speakers. **Group 2 course.**

HDA 241 Chairside Procedures Lab.....2.0 (4)

Corequisite(s): HDA 240

This is the clinical component of Chairside Procedures. Students learn and practice operative and specialty chairside techniques in a fully equipped dental clinic. Students assist visiting dentists during simulated dental procedures. Expanded duties for dental assistants are also introduced in this course. **Group 2 course.**

HDA 242 Dental Radiography2.0 (2)

Recommended prerequisite(s): HAH 120, HDA 120, HDA 160; all may be taken concurrently

Corequisite(s): HDA 243

The fundamentals of radiology as applied to dentistry will be presented. Special consideration will be given to radiation

physics, hazards, biological effects, protection and quality control methods. Basic interpretation and radiographic anatomy will also be included. While extraoral techniques are discussed, emphasis will be given to the proper techniques for exposing, processing, and mounting traditional and digital intraoral radiographs of diagnostic quality. **Group 2 course.**

HDA 243 Dental Radiography Lab..... 1.5 (3)

Corequisite(s): HDA 242

Clinical component of Dental Radiography. Students will be introduced to a variety of radiography techniques and will learn how to expose, process and mount radiographs of diagnostic quality. Requirements include three sets on dental manikins and four sets on dental patients. **Group 2 course.**

HDA 251 Dental Assistant Internship I..... 4.0 (4)

Recommended prerequisite(s): HDA 240, HDA 241

Students are assigned to dental offices in the community. 180 hours of hands-on experience includes chairside assisting; office management; laboratory techniques and expanded functions. Included is a one-hour, bi-weekly seminar session. May take any semester with instructor permission. **Group 2 course.**

HDA 252 Dental Assistant Internship II..... 4.0 (4)

Recommended prerequisite(s): HDA 251

A continuation of Internship I providing an additional 180 hours of hands-on experience. In addition to placement in a general dental practice, students observe four specialty settings: oral surgery, orthodontics, periodontics, and endodontics. May take any semester with instructor permission. Included is a one hour, bi-weekly seminar session. **Group 2 course.**

HDA 282 CDA/RDA Written Exam Prep2.0 (2)

Recommended prerequisite(s): HAH 120, HDA 101, HDA 120, HDA 150, HDA 160, HDA 242, HDA 243, HDA 112, HDA 113, HDA 140, HDA 170, HDA 240, HDA 241, may be taken concurrently

The purpose of this course is to prepare students and working dental assistants for the CDA and RDA written exams. Included are review sessions covering General Chairside, Infection Control, and Radiography for both exams and additional specific topics that relate directly to Michigan's expanded functions for dental assistants. **Group 2 course.**

HDA 286 RDA Clinical Exam Prep 1.0 (1)

Recommended prerequisite(s): HDA 282

This course will provide dental assisting students with study/application sessions for the clinical portion of the state licensure exam. Expanded functions of special interest are dental amalgams, temporary crowns, and dental dams. Must be a current dental assisting student or a graduate of a post-secondary dental assisting program approved by the State Board of Dentistry. **Group 2 course.**

HF Health and Fitness

HF 101 Fitness Circuit I 0.5 (1)

Introduction to beginning aerobic conditioning through a fitness circuit designed for varying fitness levels. Instruction includes an orientation session, aerobic fitness, strength training, flexibility, and endurance. This self-directed course meets in the NMC Fitness Center using strength training equipment, exercise bicycles, and other aerobic equipment. Two hours per week on a flexible schedule. Offered summers only. **Group 2 course.**

HF 102 Fitness Circuit II 0.5 (1)

Recommended prerequisite(s): HF 111

Continuing beginning aerobic conditioning through a fitness circuit designed for varying fitness levels. Instruction includes aerobic fitness, strength training, flexibility, and endurance. This self-directed course meets in the NMC Fitness Center using strength training equipment, exercise bicycles, and other aerobic equipment. Two hours per week on a flexible schedule. Offered summers only. **Group 2 course.**

HF 105 Personal Trainer Certification 3.0 (4)

Recommended prerequisite(s): HF 111

This course is designed to provide theoretical knowledge and practical skills in preparation for a national certification exam in personal training. Topics include guidelines for instructing safe, effective, and purposeful exercise, essentials of the client-trainer relationship, conducting health and fitness assessments, and designing and implementing appropriate exercise programming. **Group 2 course.**

HF 111 Fitness Circuit I 1.0 (2)

Introduction to aerobic conditioning through a fitness circuit designed for varying fitness levels. Instruction includes an orientation session, strength training, flexibility, and endurance with an emphasis on aerobic conditioning. This self-directed course meets in the NMC Fitness Center using strength training equipment, exercise bicycles, and other aerobic equipment. Two hours per week on a flexible schedule. **Group 2 course.**

HF 112 Fitness Circuit II 1.0 (2)

Recommended prerequisite(s): HF 111

Continuation of aerobic conditioning through a fitness circuit designed for varying fitness levels. Instruction emphasizes individual strength training and flexibility. This self-directed course meets in the NMC Fitness Center using strength training equipment, exercise bicycles, and other aerobic equipment. Two hours per week on a flexible schedule. **Group 2 course.**

HF 113 Fitness Circuit III 1.0 (2)

Recommended prerequisite(s): HF 112

Continuation of aerobic conditioning through a fitness circuit designed for varying fitness levels. Instruction emphasizes individual aerobic fitness options and the reduction of stress. This self-directed course meets in the NMC Fitness Center utilizing strength training equipment, exercise bicycles, and other aerobic equipment. Two hours per week on a flexible schedule. **Group 2 course.**

HF 114 Fitness Circuit IV 1.0 (2)

Recommended prerequisite(s): HF 113

Continuation of aerobic conditioning through a fitness circuit designed for varying fitness levels. Instruction emphasizes individual fitness evaluation/workout, weight control, and nutrition. This self-directed course meets in the NMC Fitness Center using strength training and aerobic equipment, and exercise bicycles. Two hours per week on a flexible schedule. **Group 2 course.**

HF 116 Yoga 1.0 (2)

Yoga is postural work emphasizing precise, careful body alignment and maximum spinal extension. Yoga works through the concreteness of the body to teach balance and integration. It is an effective way to stretch and strengthen the body. Using movement and breath, yoga brings a therapeutic calm to the body and mind, releasing stress and bringing relaxation. **Group 2 course.**

HF 118 Continuing Yoga 1.0 (2)

Recommended prerequisite(s): HF 116 or instructor permission

Yoga techniques focus on understanding and controlling the body, the breath, and the mind through exercises (asanas), breathing techniques (pranayamas), and meditation training (quieting the mind and body). Yoga poses are designed to develop strength and give maximum flexibility to the muscular, skeletal, and nervous systems with special emphasis on building a strong, supple spine. Benefits include improved circulation, hormonal balance, poise, and a more stable emotional nature. Learning proper breathing will help you cope with stress and increase your energy level. Wear loose, comfortable, layered clothing and plan to work barefooted. Bring two blankets, a mat, and bath towel. **Group 2 course.**

HF 118A Bikram Yoga I 1.0 (2)

Recommended prerequisite(s): Good heart health, not pregnant

This is the original hot yoga, 105 degrees, pure, powerful, authentic, unchanged, taught exactly as Hatha Yoga Master Bikram Choudhury intends it to be taught. 26 poses, 2 breathing exercises, 90 minutes, plus heat. Meets three times per week on a flexible schedule. **Group 2 course.**

HF 118B Bikram Yoga II 1.0 (2)

Required prerequisite(s): HF 118A

Recommended prerequisite(s): Good heart health, not pregnant

A continuation of the original Hot Yoga, 105 degrees, pure, powerful, authentic, unchanged, taught exactly as Hatha Yoga Master Bikram Choudhury intends it to be taught. Twenty-six poses, two breathing exercises, 90 minutes, plus heat. Meets three times per week on a flexible schedule. **Group 2 course.**

HF 121 Aerobic Dance I 1.0 (2)

Through choreographed dance movements and contemporary music, cardiovascular endurance, flexibility, strength and coordination is promoted. **Group 2 course.**

HF 122 Step Aerobics I 1.0 (2)

This body sculpting and fat burning program provides a unique blend of exercise, bench and resistance training by combining Vertifirm (hips & thighs), hand held weights (upper body) and low impact, high-energy step routines. **Group 2 course.**

HF 123 Step Aerobics 0.5 (1)

This body sculpting and fat burning program provides a unique blend of exercise, bench and resistance training by combining Vertifirm (hips & thighs), hand held weights (upper body) and low impact, high-energy step routines. Offered summers only. **Group 2 course.**

HF 124 Aerobic Dance 0.5 (1)

Through choreographed dance movements and contemporary music, cardiovascular endurance, flexibility, strength and coordination is promoted. *Offered summers only.* **Group 2 course.**

HF 126 Lap Swim 1.0 (2)

Recommended prerequisite(s): Ability to swim repeated laps across a pool.

This self-directed course meets twice per week on a flexible schedule. Use of basic strokes for fitness is reviewed. Emphasis is on aerobic and muscular endurance through swimming a variety of laps. **Group 2 course.**

HF 127 Lap Swim II 1.0 (2)

Recommended prerequisite(s): HF 126

This self-directed course meets twice per week on a flexible schedule. A continuation of the Lap Swim program. Emphasis is on increasing aerobic and muscular endurance through swimming a variety of laps. **Group 2 course.**

HF 131 Aerobic Dance II 1.0 (2)

Recommended prerequisite(s): HF 121

A continuation of the Aerobic Dance fitness program. Through choreographed dance movements and contemporary music cardiovascular endurance, flexibility, strength, and coordination is promoted. **Group 2 course.**

HF 132 Step Aerobics II 1.0 (2)

Recommended prerequisite(s): HF 122

A continuation of the Step Aerobics fitness program. This body sculpting and fat burning program provides a unique blend of exercise, bench and resistance training by combining Vertifirm (hips & thighs), hand held weights (upper body) and low impact, high-energy step routines. **Group 2 course.**

HF 133 Pilates 1.0 (2)

The Pilates method of body conditioning is a unique system of stretching and strengthening exercises used to develop long, lean bodies. This program uses floor exercises to strengthen and tone muscles, flatten abdominals, improve posture, flexibility, balance, agility, and coordination. **Group 2 course.**

HF 143 Continuing Pilates 1.0 (2)

Recommended prerequisite(s): HF 133

Building on the fundamentals and exercises of the prerequisite class Pilates, a continuation of mat exercises and equipment will be added. The body will be challenged with moves that call for more strength, coordination, balance, flexibility, and control. **Group 2 course.**

HNR**Nursing**

Completion all HNR courses require admission to the PN, ADN, or LPN to ADN Nursing Program with the exception of HNR 100.

HNR 100 Introduction to Nursing 1.0 (1)

Required prerequisite(s): ENG 111, MTH 111

Presents the history of nursing & nursing education. Introduces professional nursing values and the attitudes and behaviors desired in nurses. Discusses nursing roles, career opportunities, and types of health care delivery settings. Introduces the student to legal and ethical issues related to the role and scope of practice of the licensed practical nurse and the registered nurse. Introduces basic concepts related to professionalism, patient-centered care, health, spirituality, culture, holism, and the impact of illness on the individual and his/her significant others. Covers beginning professional communication skills, collaboration, teamwork, and basic teaching/learning principles. **Group 2 course.**

HNR 101 Fundamentals of Nursing-Lecture 4.0 (4)

Required prerequisite(s): BIO 228 w/grade of 2.5 or higher; CIT122A, HNR100, both may be taken concurrently

Corequisite(s): HNR 102, HNR 108

The students learn the foundation for professional nursing practice. Emphasis is placed on the principles and skills needed to apply the clinical judgment required for safe patient centered care. Communication is emphasized as an essentials aspect of the professional role. **Group 2 course.**

HNR 102 Fundamentals of Nursing-Clinical 4.0 (12)

Corequisite(s): HAH 100C, HNR 101, HNR 108

Through laboratory and/or clinical experience students learn about the professional identity of the nurse while acquiring and applying basic nursing knowledge, judgment, and skills in order to provide safe patient-centered care. The student also learns communication and collaboration skills. **Group 2 course.**

HNR 108 Pharmacology 3.0 (3)

Corequisite(s): HNR 101, HNR 102

Students learn an overview of pharmacology with emphasis on clinical applications within the context of the nursing process. This course is organized by medication classification. It explores indications, modes of action, side effects, contraindications and interactions for the safe administration of selected drugs. Specific nursing judgment and collaborative responsibilities to drug administration are emphasized. Legal statutes and standards regulating drug administration within the scope of nursing professional identity are presented. Individualized patient variables across the lifespan will also be a focus of study. **Group 2 course.**

NMC.
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HNR 125 Lifespan Nursing Lecture 5.0 (5)

Required prerequisite(s): BIO 240, may be taken concurrently, HAH 100C, HNR 100, HNR 101, HNR 102, HNR 108
Corequisite(s): HNR 126

Presentation of nursing management of health care issues related to uncomplicated pregnancy, birth, and neonatal period. Introduction of nursing management of common health alterations found in both chronically and acutely ill clients across the lifespan. Emphasis will be made on utilizing evidence-based practice to identify appropriate nursing interventions to achieve the desired outcome for the client based on their developmental level across the lifespan. **Group 2 course.**

HNR 126 Lifespan Nursing-Clinical 5.0 (15)

Required prerequisite(s): BIO 240, may be taken concurrently, HAH 100C, HNR 100, HNR 101, HNR 102, HNR 108
Corequisite(s): HNR 125

Clinical experiences providing opportunities to apply principles studied in HNR 125. Clinical learning environments will include the opportunity to apply medical-surgical, pediatric, and obstetric nursing interventions in a variety of settings, including acute care and simulation experiences. **Group 2 course.**

HNR 145 Practical Nursing Roles & Issues 1.0 (1)

Recommended prerequisite(s): HNR 125, HNR 126, both can be taken concurrently

Reviews ethical/legal responsibilities of the LPN. Presents issues and trends related to LPN practice, nursing organizations, continuing education; and licensure. Discusses occupational opportunities and provides information on employment search, job-seeking skills and transition issues. **Group 2 course.**

HNR 241 Adv. Maternal Child Nursing-Lec..... 3.0 (3)

Required prerequisite(s): HNR 247, HNR 248
Corequisite(s): HNR 242

This course will expose the student to the complex problems facing families coping with complications during the child-bearing/child-rearing process. Characteristics of the at-risk family will be explored. These concepts will be applied to a review of complications occurring during the prenatal, intrapart, and postpartal periods. The course will then deal with complex health problems during childhood and will include a discussion on perinatal loss and childhood death. A major theme throughout the course will be the use of the nursing process to promote optimal functioning for at-risk families. Community resources will be explored. Previous content on growth and development and cultural considerations will be reviewed briefly and concepts applied through class discussions and case scenarios. **Group 2 course.**

HNR 242 Adv. Maternal Child Nursing-Clinical ... 2.0 (6)

Required prerequisite(s): HNR 247, HNR 248
Corequisite(s): HNR 241

This course provides for the clinical application of the principles presented in the co requisite: HNR 241. Students will spend clinical time on the maternity inpatient unit at Munson Medical Center. A clinical instructor will guide and support the student through observational experiences in labor and

delivery and all students will have the opportunity to do postpartum and newborn assessments and care. In addition, four of these hours will be spent in the NICU (Neonatal Intensive Care) setting where the student will observe and participate in the care of premature and ill neonates. Students will also spend clinical time in a precepted pediatric clinical caring for acutely ill pediatric patients. Clinical time will also be spent doing an assessment on a family, assessing growth and development and community resources. Students will also be involved in clinical simulations and case studies. Students will participate in the above experiences by observing and/or directly providing care to at-risk families coping with childbearing and/or childrearing stressors/issues. Risk factors for these families may include developmental and psychosocial factors as well as physical alterations or complications. **Group 2 course.**

HNR 247 Nursing Management of Complex Patients I-Lec 3.0 (3)

Required prerequisite(s): BIO 240, HAH 100C, HNR 125, HNR 126,

Recommended prerequisite(s): Admission to the Nursing program, GPA of 2.0 on all prerequisite nursing courses

Corequisite(s): HNR 248

Presentation of nursing interventions and management concepts required for adult patients with complex medical and/or surgical disorders. Emphasizes advanced assessment, analysis, nursing judgment, and nursing accountability. The focus is on adult patients with multiple complex requirements. Geriatric considerations are presented and integrated throughout. **Group 2 course.**

HNR 248 Nursing Management of Complex Patients I-Clinical 4.0 (12)

Required prerequisite(s): BIO 240, HAH 100C, HNR 125, HNR 126, or admission to the Nursing program and successful completion of prerequisite nursing courses with 2.0 or better
Recommended prerequisite(s): Admission to the Nursing program, GPA of 2.0 on all prerequisite nursing courses
Corequisite(s): HNR 247

Clinical experience providing opportunities to apply principles presented in HNR 247. Emphasis is upon refinement of organization, decision-making, critical thinking, and priority-setting skills in the care of multiple clients with complex medical/surgical disorders. **Group 2 course.**

HNR 251 Mental Health Nursing-Lec 2.0 (2)

Required prerequisite(s): HNR 241, HNR 242
Corequisite(s): HNR 252

This course is designed to enable the student to better understand behavior exhibited by persons with mental disorders. Classifications, causes, and symptoms of mental diseases are presented and treatments such as individual, group, and activity therapies are explored. Emphasis is placed on the ways by which the nurse determines, develops, implements, and evaluates a therapeutic environment for the client. The implementing of theories of human behavior is the scientific aspect of mental health-psychiatric nursing; the purposeful use of the self in the performance of care is the artful aspect. The goal is preventative and corrective impact upon mental illness and the restoration of optimal mental health. **Group 2 course.**

HNR 252 Mental Health Nursing-Clinical..... 1.0 (3)*Required prerequisite(s): HNR 241, HNR 242**Corequisite(s): HNR 251*

Clinical experience providing opportunities to apply principles presented in HNR251. A variety of clinical settings addressing mental health issues in acute care, long-term care, and in community agencies are utilized. Emphasis is placed upon the exercise of critical thinking in addressing mental health issues and concerns. Additionally, students identify and analyze community resources of importance to persons with mental health issues. Students participate in care in the clinical area approximately 12 hours per week for 3.5 weeks during the semester.

Group 2 course.**HNR 261 Complex Patient Mgmt II-Lec..... 3.0 (3)***Required prerequisite(s): HNR 251, HNR 252**Corequisite(s): HNR 262*

This course builds upon the context of HNR 247 with the presentation of nursing management of adult patients with complex endocrine, hepatic, and autoimmune disorders. Additionally, the course introduces principles of leadership and management as these relate to the delivery of nursing care to a group of patients. The principles of delegation, communication, and priority-setting are reviewed. The course discusses a variety of nursing management challenges related to team building, managing change, conflict resolution, power and authority, politics and political action, current economic aspects of health care, legal/ethical issues, and emergency preparedness. Career opportunities, job-seeking skills, NCLEX-RN preparation, and issues related to role transition are discussed in reference to the graduates' move into the work force. The quality improvement process and evidence-based practice are considered as students research and deliver a group presentation related to a current issue or trend in nursing management. **Group 2 course.**

HNR 262 Complex Patient Mgmt II - Clinical..... 4.0 (12)*Required prerequisite(s): HNR 251, HNR 252**Corequisite(s): HNR 261*

Clinical experience providing opportunities to apply principles presented in HNR 261. A variety of clinical units in acute care and extended care settings are utilized. Emphasis is placed upon organizational skills, including time management, and the exercise of critical judgment in managing the care for a normal caseload of clients. The process of critical thinking is the nucleus necessary to achieve the course objectives. Students perform care in the clinical area 24 hours per week for 7.5 weeks during the semester. The course is designed to promote a successful role transition from student to entry-level professional nurse. **Group 2 course.**

HPD**Professional Development****HPD 110 Basic Life Support for Health..... 0.5 (-.5) Care Providers**

Provides basic life support training and certification for nursing students interested in becoming health care providers to provide them with life support skills needed for clinical practice. **Group 2 course.**

HPD 120 Basic Life Support for Professional 0.2 (.2) Providers: Recertification

Required prerequisite(s): Current American Heart Association or American Red Cross Life Support for Professional Provider certification

Provides recertification in Basic Life Support for Professional Provider for students interested in becoming health care providers who can show previous certification through the American Red Cross or American Heart Association. **Group 2 course.**

HST**History****HST 101 Western Civilization to 1500..... 4.0 (4)***Recommended prerequisite(s): Placement into ENG 111*

This is the first course in a year-long study of western civilizations from the birth of civilization to the Age of Nation States in the 19th century. The main instructional goal is to have students demonstrate an understanding of the diverse societies and culture of the western world. It's important that students recognize that western civilization includes many diverse cultures and has interacted with many other diverse cultures throughout its development. In addition, students will analyze the distinctive characteristics of western civilizations, identify the achievements and limitations of western civilizations, and develop an awareness of how contemporary problems were caused by past forces. As students achieve these goals, they will develop skills in communication and critical thinking. This course covers the period from the birth of civilization to the early Middle Ages. **Group 1 course.**

HST 102 Western Civilization Since 1500..... 4.0 (4)*Recommended prerequisite(s): Placement into ENG 111*

This is the second course in a year-long study of western civilizations from the birth of civilization to the Age of Nation States in the 19th century. The main instructional goal is to have students demonstrate an understanding of the diverse societies and culture of the western world. It's important that students recognize that western civilization includes many diverse cultures and has interacted with many other diverse cultures throughout its development. In addition, students will analyze the distinctive characteristics of western civilizations, identify the achievements and limitations of western civilizations, and develop an awareness of how contemporary problems were caused by past forces. As students achieve these goals, they will develop skills in communication and critical thinking. This course covers the period from the Late Middle Ages to the Age of Nation States in the 19th century.

Group 1 course.

HST 111 U.S. History to 1865 4.0 (4)*Recommended prerequisite(s): Placement into ENG 111*

This is the first course in a year-long study of U.S. History from Native American origins to the modern world. A main instructional goal is to have students demonstrate an understanding of how diverse societies and cultures have contributed to the development of the United States. In addition, students will analyze the distinctive characteristics of the development of the United States, identify the achievements and limitations of these developments, and develop an awareness of how contemporary problems were caused by past forces. Students will learn how American society developed from Native American origins through Reconstruction, and how society has impacted both individuals and groups in America. As students achieve this goal, they will develop skills in communications and critical thinking. **Group 1 course.**

HST 112 U.S. History Since 1865 4.0 (4)*Recommended prerequisite(s): Placement into ENG 111*

This is the second course in a year-long study of U.S. History from Native American origins to the modern world. A main instructional goal is to have students demonstrate an understanding of how diverse societies and cultures have contributed to the development of the United States. In addition, students will analyze the distinctive characteristics of the development of the US, identify the achievements and limitations of these developments, and develop an awareness of how contemporary problems were caused by past forces. As students achieve these goals, they will develop skills in communication and critical thinking. Students will learn how American society developed from Reconstruction to the post-Vietnam era, and how society has impacted individuals and groups. **Group 1 course.**

HST 211 Native American History 3.0 (3)*Recommended prerequisite(s): Placement into ENG 111*

A history of the Native American experience from the pre-Columbian period to the post World War II era. Major emphasis is placed upon the social, political, and economic role of the Native American community in American society and its unique role as a part of that society. Students will also demonstrate an awareness of how contemporary problems were caused by past forces. Students will develop skills in analysis, critical thinking, historical reasoning and writing.

Group 1 course.**HST 212 African-American History 3.0 (3)***Recommended prerequisite(s): Placement into ENG 111*

This course is a history of the African-American experience from African origins to the Modern era in America. Major emphasis is placed upon the social, political, and economic role of the African-American community in American society and its unique role as a part of that society. Students will also demonstrate an awareness of how contemporary problems were caused by past forces. As students achieve this goal, they will develop skills in analysis, critical thinking, historical reasoning, and writing. **Group 1 course.**

HST 213 American Women's History 3.0 (3)*Recommended prerequisite(s): Placement into ENG 111*

A history of American Women's experience from Native American origins to the Modern Era. Major emphasis is placed upon the social, political and economic role of American women in American society and their unique role as a part of that society. Students will also demonstrate an awareness of how contemporary problems were caused by past forces. Students will develop skills in analysis, critical thinking, historical reasoning and writing. **Group 1 course.**

HST 225 American Civil War 3.0 (3)*Recommended prerequisite(s): Placement into ENG 111*

This course is a study of the American Civil War. The instructional goal is to have students demonstrate through discussions and essays the causes of the Civil War in antebellum America, how the war was waged, why the North won and the South lost the war, how the war affected American society, and how the war led to Reconstruction. Students will demonstrate an awareness of how contemporary problems were caused by past forces. Students will develop skills in analysis, critical thinking, historical reasoning and writing. **Group 1 course.**

HST 228 The Vietnam War 3.0 (3)*Recommended prerequisite(s): Placement into ENG 111*

This course is a study of the history of the Vietnam War. The instructional goal of this course is to have students demonstrate through discussions and essays how America became involved in Vietnam, how the war was waged, the war's effect on American society, and how the war affected Vietnam. Students will also demonstrate an awareness of how Vietnamese culture affected the war and how Vietnam has affected America's contemporary society. Students develop skills in analysis, critical thinking, historical reasoning and writing. **Group 1 course.**

HST 230 A History of Michigan 3.0 (3)*Recommended prerequisite(s): Placement into ENG 111*

The instructional goal of this course is to have students demonstrate through discussion and essays the distinctive characteristics of Michigan history, the common characteristics of Michigan history as compared to other states, the identification of achievements and limitations of Native American societies within Michigan, and an awareness of how contemporary problems were caused by past forces. This course covers the period from the "earliest beginnings" to the "recent past." Students will develop skills in analysis, critical thinking, historical reasoning and writing. **Group 1 course.**

NMC.

Find it here.

HST 235 20th Century Europe.....3.0 (3)
Recommended prerequisite(s): Placement into ENG 111
This course is a study of the history of Europe in the 20th century with emphasis on Germany, England, France, and Russia. The instructional goal is to have students demonstrate through discussions and essays the distinctive characteristics of European civilizations, the common characteristics of European civilizations, the identification of achievements and limitations of European civilizations, and how Europe has affected America and America affected Europe. Students will demonstrate an awareness of how contemporary problems were caused by past forces. Students will develop skills in analysis, critical thinking, historical reasoning and writing. **Group 1 course.**

HST 247 Latin American History3.0 (3)
Recommended Prerequisite(s): Placement into ENG 111
A history of Latin America from the pre-Columbian period to the modern era. Major emphasis is placed upon the social, political, and economic role of the Latin American community. In addition, the course will analyze how Latin America and the USA have interacted and affected each other across this time period. Students will also demonstrate an awareness of how contemporary problems were caused by past forces. Students will develop skills in analysis, critical thinking, historical reasoning and communications. **Group 1 course.**

HUM Humanities

HUM 101 Introduction to Humanities3.0 (3)
Recommended prerequisite(s): Placement into ENG 111
An interdisciplinary study of Western Culture focusing on the interrelationships of art, literature, and philosophy as they reveal the major ideas and values of Classical Greek, Roman, Medieval, and Renaissance civilizations. **Group 1 course.**

HUM 102 Introduction to Humanities3.0 (3)
Recommended prerequisite(s): Placement into ENG 111
An interdisciplinary study of Western Civilization focusing on the interrelationships of art, literature, and philosophy as they reveal the major ideas and values of the Reformation, Baroque, Neo-Classic, Romantic, 19th century and Modern periods. **Group 1 course.**

HUM 116 World Cultures.....4.0 (4)
Recommended prerequisite(s): Placement into ENG 111
The purpose of this course is to introduce major trends of non-Western art and culture. This course explores the arts and culture of Asia, Africa, Oceania and the Americas utilizing an interdisciplinary and thematic approach focusing on the painting, sculpture, architecture, textiles, body art, masks, social and political issues, cultural and religious rituals, and customs and traditions of each region. **Group 1 course.**

HUM 221 Russian Language and Culture4.0 (4)
The class includes both classroom work in Russian language and culture as well as excursions and cultural experiences in Russia. The cultural component is designed to provide students with a context through which they will be able to understand and process new cultural information. Students will gain practical language skills that will be utilized during the time in Russia. The approach is interdisciplinary and will include units on economics, politics, history, music, architecture, and literature. **Group 1 course.**

stand and process new cultural information. Students will gain practical language skills that will be utilized during the time in Russia. The approach is interdisciplinary and will include units on economics, politics, history, music, architecture, and literature. **Group 1 course.**

HVA Heating, Ventilation, Air Conditioning

HVA 101 Introduction to HVAC/R.....3.0 (4)
Recommended competencies: COMPASS placement in MTH 111 or higher and ENG 11/111 or higher, or co-enrollment in the appropriate developmental Math and English course.
This course provides an introduction to heating, ventilation, air conditioning, and refrigeration. Through structured classroom and hands-on skill building, the student will learn the tools of the trade, how to solder and braze copper tubing, piping skills and trade mathematics. **Group 2 course.**

HVA 105 Thermodynamics of HVAC/R3.0 (4)
Required prerequisite(s): HVA 101 or its equivalency
This course provides an introduction to heating, ventilation, air conditioning and refrigeration. Through structured classroom and hands-on skill building, the student will learn the thermodynamics of refrigeration. Students will also learn proper charging procedures and a basic approach to system troubleshooting using electrical meters and refrigeration gauges. **Group 2 course.**

HVA 121 Fundamentals of Heating3.0 (4)
Required prerequisite(s): HVA 105 or its equivalency
Through structured classroom and hands-on skill building, the student will learn air distribution systems, how to calculate proper sizing of chimneys, vents and flues, and alternating current. **Group 2 course.**

HVA 125 A/C Applications3.0 (4)
Required prerequisite(s): HVA 121 or its equivalency
Through structured classroom and hands-on skill building, the student will learn about metering devices, accessories and option equipment, compressors, heat pumps, leak detection equipment, evacuation methods, recovery requirements and how to properly charge air conditioning and refrigeration equipment. **Group 2 course.**

HVA 131 Gas Heating Diagnostics.....3.0 (4)
Required prerequisite(s): HVA 125
Through structured classroom and hands-on skill building, the student will learn troubleshooting techniques with oil heat, gas heat, and electric heat. Students will also learn how to troubleshoot cooling, heat pumps, and accessories. **Group 2 course.**

HVA 135 Commercial HVAC/R.....3.0 (4)
Required prerequisite(s): HVA 131
Through structured classroom and hands-on skill building, the student will learn advanced troubleshooting techniques with cooling and heat pumps, and also about hydronic heating systems and air properties and system balancing. **Group 2 course.**

LWE Law Enforcement

Students must meet with Police Academy Director prior to enrolling in all LWE courses.

LWE 102 Police Operations.....4.0 (4)

The student is introduced to educational and training requirements for employment in law enforcement, police community relations, the functions and objectives of a police department and the police response and responsibilities to the community. **Group 2 course.**

LWE 195 Police Practicum4.0 (4)

This course will provide Law Enforcement students with the practical experience of observing five various shifts with officers. This should insure that candidates will understand what law enforcement officers actually do. Recording the experiences will also assist the student in report writing. **Group 2 course.**

LWE 210 Cultural Awareness/Diversity2.0 (2)

Students explore ethics, cultural diversity, interpersonal skills and the laws as they apply to today's modern policing. Title VII or the 1964 Civil Rights Act, Elliot Larson Civil Rights Act, Americans with Disabilities Act, ethnic intimidation, and sexual harassment will also be addressed. **Group 2 course.**

LWE 212 Criminal Investigation.....3.0 (3)

Students will be introduced to criminal investigation procedures including theory of an investigation, conduct at crime scenes, collection and preservation of physical evidence, methods used in police science laboratory, fingerprints, ballistics, documents, serology, photography, and related forensic sciences. **Group 2 course.**

LWE 214 Firearms.....4.0 (8)

This course will assist the students in the development of safety skills and the appropriate use of firearms in completing the Michigan Commission on Law Enforcement Standards basic firearms course. Included will be an orientation to firearms, policies, procedures, and liability of firearms use and hands-on firearms range techniques. **Group 2 course.**

LWE 215 Defensive Driving3.0 (6)

Defensive Driving will cover motor vehicle law, its application and jurisdiction and vehicle stops. This course will also include the teaching of driving skills needed by a law officer. **Group 2 course.**

LWE 216 Traffic Enforcement & Invest3.0 (3)

Traffic Enforcement and Investigation will include traffic control enforcement, the law and prosecution of operating under the influence of alcohol, accident investigation, and traffic accident evidence collection. **Group 2 course.**

LWE 218 Physical Training/Wellness.....4.0 (5)

This course is designed to give the students a complete understanding of wellness/physical fitness. The goal of the class is to develop a mentality that fitness is long term. Includes course

lectures on the following topics: fitness and wellness, benefits and guidelines for exercise, coronary risk factors, stress management, nutrition, weight control, low back care, motivation and behavior change, and various ways to perform fitness tasks. This class also includes workouts, and testing students against Cooper Standards. **Group 2 course.**

LWE 225 Defensive Tactics4.0 (5)

Required prerequisite(s): Students must also be in excellent physical condition.

Students learn subject control with new mandatory guidelines from MCOLES. Students will understand survival mindset, tactical communication, fear/anger management, and post force incident responsibilities. Student will demonstrate proficiency in 13 defensive tactics outcomes. **Group 2 course.**

LWE 226 Michigan Criminal Law3.0 (3)

The study of substantive criminal law as a means of defining and preserving social order. Sources of criminal law; classification of crimes against persons, property and public welfare; principles of criminal liability; elements necessary to establish crime and criminal intent; specific crimes and defenses; and constitutional limitations are examined. **Group 2 course.**

LWE 227 Criminal Procedures3.0 (3)

Recommended prerequisite(s): LWE 226

Criminal Procedures will study the administration of criminal justice, the nature and scope of police power, the concept of exclusion, laws of arrest, search and seizure and interrogation, the acquisition of evidence, and judicial protection of the accused. **Group 2 course.**

LWE 228 Speed Measurement/PBT3.0 (3)

This course will teach the legal and practical aspects of speed measurement and PBT (preliminary breath tester) operations. Class discussions will primarily be based on relationship between excessive speed, drinking and highway crashes. The course will also explore departmental policies and procedures concerning speed measurement and PBT use. Students will understand and demonstrate basic accident investigation and related accident evidence collection. **Group 2 course.**



MDK**Maritime Deck****MDK 100 Survival at Sea 1.0 (2)**

This course of instruction covers the following: concentrated instruction and training for the U.S. Coast Guard certification as LIFEBOATMAN; including the fundamentals of seamanship, small boat handling with power and sail; construction equipment, and marking of the standard lifeboat; construction, equipment, and operation of inflatable life rafts; abandon ship procedures, man overboard procedures, and survival swimming; the launching and retrieval of lifeboats; sailboat nomenclature and operation. STCW '95.

Group 2 course.

MDK 104 Rigging & Ship Maintenance Lab 1.0 (2)

The purpose of this course is to provide the cadet an opportunity to acquire practical experience in general seamanship: including marlinespike seamanship, line handling; splicing line, splicing wire rope; rigging, block and tackle nomenclature and use; vessel maintenance, the practical application of the procedures and equipment used in vessel upkeep.

Group 2 course.

MDK 106 Watchstanding I 1.0 (2)

Required prerequisite(s): MDK 100

The purpose of this course is to provide an opportunity for the cadet to acquire practical experience in shiphandling with vessels sufficiently large to duplicate shiphandling problems encountered with much larger vessels. Topics covered include the general principles of ship control for both single and twin propeller vessels. Cadets are exercised in line handling, towing, anchoring techniques, landing techniques, and shipboard safety. Cadets will then advance through the use of simulation to shiphandling exercises dealing with the general principles of vessel control and the problems of handling a vessel in narrow channels. STCW '95. **Group 2 course.**

MDK 111 Marine Communications 2.0 (2)

This course is designed to acquaint the student with the Global Maritime and Distress Safety System. It includes the basic layout of the GMDSS, communication equipment requirements, licensing requirements, principles and procedures for marine communications, the characteristics of radio wave propagation, frequencies, and modulation. Included also is the Morse Code, Flashing Light and general Distress Signals. STCW '95. **Group 2 course.**

MDK 112 Rules of the Nautical Road 2.0 (2)

Required prerequisite(s): MDK 100

Comprehensive study of the international rules of the road-COLREGS-including their origin, purpose, history, technical provisions, and application. Included is a comparative study of both international and inland rules, their interpretation and practical application as well as a study of case histories and legal interpretations resulting from collisions at sea. STCW '95.

Group 2 course.

MDK 121 Navigation I 3.0 (3)

Required prerequisite(s): MATH 122 (FSU)

Corequisite(s): MDK 122

An introduction to principles of piloting and marine navigation. Includes chart projection, the magnetic compass, chart usage, buoyage systems, aids to navigation, fixes, running fixes, and the use of standard tables. STCW '95. **Group 2 course.**

MDK 122 Navigation I Lab 1.0 (2)

Required prerequisite(s): MATH 122 (FSU)

Corequisite(s): MDK 121

This lab is taken concurrently with MDK 121 and concentrates on applying the principles of piloting to plotting on the chart. Chart projection and use will be introduced. Dead reckoning, terrestrial fixes, set and drift, lines of position, and the use of navigational instruments will be covered. STCW '95. **Group 2 course.**

MDK 149 Damage Control & Safety 2.0 (2)

Required prerequisite(s): MDK 100

This course is designed to give the cadet a comprehensive knowledge of shipboard safety with particular emphasis on fire fighting and damage control. Subject areas include: personal safety, pollution, U.S. Coast Guard rules and regulations, temporary damage repair, shoring principles, and practical shoring problems. STCW '95. **Group 2 course.**

MDK 200 Ship Business & Labor Relations 3.0 (3)

This course provides instruction in the organization, administrative functions, and management of a merchant vessel as well as the systems of operation of ship's business. It includes the study of union contracts, grievance procedures and labor management relations. **Group 2 course.**

MDK 204 Marine Supervisory Lab 1.0 (2)

This course will provide senior cadets with the experience of supervising subordinate cadets. This experience will include job planning, sequencing of tasks, tools and equipment needed, and personnel required to complete the job. The student will experience what it will be like to be responsible for the crew both in terms of safety and output. **Group 2 course.**

MDK 206 Watchstanding II 1.0 (2)

Required prerequisite(s): MDK 210

The purpose of this course is to begin to develop a cadet's piloting and watch management skills. The use of the Shiphandling Simulator/Academy Vessels will allow the development of the Bridge Team Concept through piloting exercises.

Group 2 course.

MDK 210 Sea Project Deck 6.0 (6)

Required prerequisite(s): Must complete first academic year with a 2.0 or better in all required courses.

During this course the cadet is on board a Great Lakes commercial vessel, an ocean vessel or the Academy training ship. The cadet follows a prescribed course of study of vessel operations, safety and navigation equipment and techniques. In addition, the cadet spends a minimum of eight hours per day under supervision of licensed officers gaining experience in various duties and responsibilities. **Group 2 course.**

MDK 221 Lakes Piloting2.0 (2)*Required prerequisite(s): MDK 121, MDK 210*

Study of the Great Lakes and principal ports; this includes currents, depths, aids to navigation, prevailing winds and their effects, recommended courses, shoals, reefs and high traffic areas. Historic analysis will explain current practices.

Group 2 course.**MDK 222 River Piloting3.0 (3)***Required prerequisite(s): MDK 121, MDK 210*

An indepth study of the rivers, channels, and the aids to navigation in these rivers and channels. The focus will be on the rivers that make up the Great Lakes connecting bodies, such as the St. Mary's, St. Clair, Detroit Rivers and the Welland Canal. **Group 2 course.**

MDK 224 Navigation III.....3.0 (3)*Required prerequisite(s): MDK 221, MATH 122 (FSU)*

An introduction to nautical astronomy concerned with the practical application of celestial navigation, the solving of the spherical triangle, star identification, measurement of time and use of instruments. This course will cover plane, mid-latitude, and mercator sailings and how to apply them to navigational problems through the various time zones. Sunrise, sunset, twilight, moonrise, and moonset calculations for a moving vessel will be covered. STCW '95. **Group 2 course.**

MDK 231 Electronic Navigation3.0 (3)*Required prerequisite(s): MDK 210**Corequisite(s): MDK 232*

An in-depth study of various electronic navigation systems with emphasis on radar and covering the theory, operation, use and general maintenance of each system. Required course, must be successfully completed before student may receive Radar Observer Certificate. STCW '95. **Group 2 course.**

MDK 232 Electronic Navigation Lab 1.0 (2)*Required prerequisite(s): MDK 210**Corequisite(s): MDK 231*

A practical course to understand the use and operation of a Marine Radar, how to avoid collision situations (Rapid Radar Plotting), use and operation of Automatic Collision Avoidance System, Gyrocompass theory, Loran "C" theory and operation, GPS theory and operation, depth sounder theory and operation. Required course, must be successfully completed before student may receive Radar Observer Certificate. STCW '95. **Group 2 course.**

MDK 233 Automatic Radar Plotting Aids 1.0 (2)*Corequisite(s): MDK 231, MDK 232*

This course presents the principles and operation of automatic radar plotting aids. It includes the legal aspects of ARPA including IMO and USCG standards, the theory of input and processing characteristics of ARPA, the theory of operation, control functions and adjustments, the acquisition and tracking of contacts, the limitations of and potential errors of ARPA, and special ARPA related features. The cadet will demonstrate the setup and practical use of two actual automatic collision avoidance radars. STCW '95. **Group 2 course.**

MDK 241 Ship Construction2.0 (2)*Required prerequisite(s): MATH 122 (FSU), completion of first academic year with a 2.0 or higher in all required courses.*

A study of the principles of hull construction as applied to all types of vessels. Includes construction nomenclature, criteria of design, methods of construction, materials used in construction, and the forces acting on the hull. STCW '95.

Group 2 course.**MDK 242 Ship Stability.....3.0 (3)***Required prerequisite(s): MDK 210, MATH 122 (FSU)*

A study of the principles of stability; righting moment and righting arm; calculation of metacentric height; inclining experiment; stability computers and tables; practical stability and trim considerations. STCW '95. **Group 2 course.**

MDK 244 Dry Cargo Stowage.....3.0 (3)*Required prerequisite(s): MDK 210, MDK 242*

Principles and problems of the stowage and carriage of cargo: bulk cargo, container cargo, refrigerated cargo, grain cargo and dangerous cargo; cargo handling operations, both loading and unloading equipment. Cargo stowage plans will be developed and reviewed. Students will critique loads they were involved with during their time aboard ship. STCW '95. **Group 2 course.**

MDK 245 Liquid Cargo Stowage2.0 (2)*Required prerequisite(s): MDK 210, MDK 242*

A study of the tanker industry, and the operational aspects of the tank vessel; pollution prevention, precautions and procedures; layouts of different types of tankers; operations sequence and oil tanker construction and terminology. USCG and OPA '90 regulations will be covered. STCW '95. **Group 2 course.**

MDK 250 Stability for the Engineer 1.0 (1)*Required prerequisite(s): MATH 122 (FSU), MNG 100, MNG 104, MNG 106*

Principles, terms and procedures used in the determination of transverse, longitudinal, and damage stability of ships. Investigation of the physical laws affecting a floating body. Effects of cargo operation, free surface, fuel consumption, and flooding on vessel stability. Scrutiny of case studies involving both partial or total loss of stability. **Group 2 course.**

MDK 311 Sea Project Deck6.0 (6)*Required prerequisite(s): Completion of second academic year with a 2.0 or higher in all required courses.*

This course is a continuation of MDK 210 and is designed to provide the cadet with advanced knowledge and sailing time to meet the licensing requirements prescribed by the U.S. Coast Guard and the criteria established by the Maritime Administration. STCW '95. **Group 2 course.**

MDK 312 Sea Project Deck6.0 (6)*Required prerequisite(s): MDK 311*

This course is a continuation of MDK 311 and is designed to further enhance the cadet's professional knowledge and sailing time to meet licensing requirements of the U.S. Coast Guard and the criteria established by the Maritime Administration. STCW '95. **Group 2 course.**

MDK 330 STCW Elementary First Aid 2.0 (2)

This course meets the mandatory minimum requirements specified under STCW as related to medical first aid and basic safety training for all merchant mariners. This course is part of the STCW certification process. Cadets will learn to take immediate action upon encountering an accident or other medical emergency. STCW '95. **Group 2 course.**

MDK 344 Cargo Systems 2.0 (2)

Required prerequisite(s): MDK 210, MDK 242

An in-depth study of the Great Lakes self-unloading vessel, container vessels, tankers, passenger vessels, regulations concerning hazardous materials, government regulations and the relationship between vessel and shore side operations.

Group 2 course.

MDK 346 Bridge Team Management 2.0 (3)

Required prerequisite(s): MDK 206

The purpose of this course is to further develop through the use of the Shiphandling Simulator, the cadet's watch management and watch standing skills, bridge team problem solving, and piloting procedures for various confined waterways on the Great Lakes and other waterways. The cadet will be required to operate the normal pilot house equipment, manage bridge personnel, and be familiar with the paperwork required in the operation of a vessel. STCW '95. **Group 2 course.**

MDK 348 Pilot/Mate License Prep 2.0 (2)

Required prerequisite(s): MDK 312

A complete review of all professional subjects studied in the Maritime program pragmatically developed to reflect the essentials of the U.S. Coast Guard examinations. The final grade for this course is dependent on taking the U.S. Coast Guard exam. Cadets must complete all MDK courses with a 2.0 or better. (This class is for GLMA cadets only.) **Group 2 course.**

MFG**Manufacturing Technology****MFG 111 Math for Manufacturing 3.0 (3)**

Required prerequisite(s): MTH 23 or COMPASS placement into MTH 111.

This course will apply principles of mathematics, geometry, and basic trigonometry to applications in manufacturing. Topics will include proportions, calculation of machine speed and feed and geometric relationships of triangles and circles. Problem solving will require the use of the Pythagorean Theorem and the sine, cosine, and tangent functions to solve right triangles. The Law of Sines and Law of Cosines will be used to solve oblique triangle applications. **Group 2 course.**

MFG 113 Machining I 3.0 (5)

The student will be introduced to precision measurement and the safe use of layout and bench tools, drill press operations, and basic lathe facing and turning operations. Basic vertical milling operations will also be included. **Group 2 course.**

MFG 114 Machining II 3.0 (6)

Required prerequisite(s): MFG 113

This course will introduce students to machining procedures beyond the basic operations. The student should have previously acquired basic machining knowledge and skills. Lathe procedures will include threading, boring, and cutting tapers. Milling operations will include the offset boring head, indexing, and keyseats. Students will perform precision grinding of parallel and angular surfaces using gauge blocks and the sine bar. Electrical discharge machining (EDM) will be discussed. Students will study the processes and perform hands on operations. **Group 2 course.**

MFG 211 CNC Programming 3.0 (4)

Required prerequisite(s): MFG 113 or instructor permission

This course will introduce the student to CNC machine programming, set-up and operation. Instruction will include coordinate systems, process planning, cutter compensation, and canned cycles. Students will write and edit programs for the CNC lathe and mill using conventional G and M code. In addition to programming, lab exercises will include demonstrations of set-up and operation of the CNC lathe and milling machine. **Group 2 course.**

MFG 212 Computer-Aided Machining (CAM) 3.0 (4)

Required prerequisite(s): MFG 211 or instructor permission

This course introduces the student to the concepts of computer aided machining (CAM). Students will use CAM software to generate programs for the CNC lathe and milling machine. The programs will be created using drawings produced in the CAM system as well as drawings imported from third party CAD or solid modeling software. The tool path is verified using the CAM software graphic simulation prior to demonstration of selected programs on the CNC machines.

Group 2 course.

MFG 215 Machining III, Lathe 3.0 (6)

Required prerequisite(s): MFG 114

This course offers machining lab experience for students who want to enhance skills obtained in previous courses. The assignments will focus on lathe work which will include threads, tapers, boring, the use of carbide tooling and the four-jaw chuck. The student will continue to develop efficient methods and work to closer tolerances. **Group 2 course.**

MFG 216 Machining IV, Mill and Grind 3.0 (6)

Required prerequisite(s): MFG 114

This course offers milling and precision grinding lab experience for students who want to enhance the skills obtained in previous courses. The assignments will include milling operations, rotary table, OD grinding, and precision surface grinding. The student will continue to develop efficient methods and work to closer tolerances. **Group 2 course.**

MGT**Management****MGT 241 Principles of Management 3.0 (3)**

Recommended prerequisite(s): BUS 101, placement into ENG 111

What do managers actually do? This applications-oriented course will teach you the basics of day-to-day managerial work-planning, organization, leading, and controlling. Special emphasis with realistic scenarios are explored in leadership, communication, planning, conflict, change, strategy, problem solving, teams and work groups. **Group 2 course.**

MGT 245 Principles of Entrepreneurship 3.0 (3)

Recommended prerequisite(s): BUS 101, MKT 201, or instructor permission

This course provides practical knowledge needed for entrepreneurs with special attention focusing on creativity, opportunity, and feasibility of a new start up. Sources of funding and resources for small ventures are addressed indepth in this course to prepare the learner for practical application. This course primarily focuses on idea generation and start-up of the business including risk, funding sources, cash-flow, and awareness of external environmental factors that impact the business. The course project is the development of a feasibility study or related project. Feasibility studies include the extent to which an idea is viable, realistic and the extent to which the entrepreneur is aware of internal and external forces that could affect the business. **Group 2 course.**

MGT 246 Entrepreneur Marketing & Finance 3.0 (3)

Required prerequisite(s): MGT 245

This course is an in-depth focus on the marketing and finance issues unique to entrepreneurs. Marketing topics include niche markets, guerilla marketing, strategic partnerships, social media, and e-marketing access to international markets. Finance topics include capital resource options, financial relationship management, cash flow, pro-forma planning, and strategic ownership models. **Group 2 course.**

MGT 251 Human Resources Management 3.0 (3)

Recommended prerequisite(s): BUS 101, placement into ENG 111

Human Resource managers are especially challenged today navigating employment waters that require expertise in employment legislation, recruitment, selection, training and development, compensation, employee appraisal, labor relations, safety and health. Theory and practice of these topics are explored with special emphasis on day-to-day applications in the workplace. **Group 2 course.**

NMC.
Find it here.

MKT**Marketing****MKT 201 Principles of Marketing 3.0 (3)**

Recommended prerequisite(s): BUS 101, placement into ENG 111

This course surveys the wide scope of marketing as it influences both profit and nonprofit firms with emphasis on the marketing concept as a business philosophy. Ethics in marketing will be discussed. Elements of the marketing mix and the elements of the promotional mix will be studied and incorporated into a marketing plan or a related project. Target marketing and segmentation of consumer markets along with consumer buying behavior will be studied. **Group 2 course.**

MKT 210 Principles of Selling 3.0 (3)

Recommended prerequisite(s): BUS 101, placement into ENG 111

This course will prepare the learner with an understanding of consumer buying behavior and the role of personal selling as a relationship marketing tool and the importance of the sales function to the organization's success. Ethical and legal issues in selling, psychological influences of consumer buying, and the relationship selling process will be discussed in this course. Students will give selling presentations to the class. Students will also learn about technology automation used in selling, servicing prospects, and gain an understanding of selling in the global environment. **Group 2 course.**

MKT 241 Principles of Advertising 3.0 (3)

Recommended prerequisite(s): BUS 101, placement into ENG 111

This course will prepare the learner with an understanding of the real economic, social and cultural role of advertising and conversely, the impact of society's values on advertising. The strategic function of advertising within the broader context of business and marketing will be discussed in this course. The creative aspects of advertising will be studied, and students will develop an advertising campaign or related project. The global effect of marketing and advertising on business and national economics will be addressed along with ethical issues related to truth in advertising in today's society. **Group 2 course.**



MNG Maritime Engineering

MNG 100 Intro to Marine Engineering 1.0 (2)

This course is a general introduction to the shipboard Engine Room. The duties and responsibilities of the engine room personnel will be covered. The course will include an introduction to the engine room propulsion systems (Diesel and Steam), and a study of the operation of the ship's steering gear and deck machinery. This course provides a foundation for the deck and engineering cadet to build upon in his/her program of study. **Group 2 course.**

MNG 104 Engine Systems Graphics 2.0 (3)

Required prerequisite(s): MNG 100

Corequisite(s): MNG 110

The course will introduce the student to the proper use of measuring systems and drafting equipment. The course will develop the correct techniques used in the production of multiview projection, orthographic representation, auxiliary views, section views, and dimensioning. The student will be familiar with the correct (ANSI) symbols used in piping, electrical, and fluid power schematics. The student will be instructed in the use of AutoCAD LT to produce the listed topics. STCW '95. **Group 2 course.**

MNG 105 Shipboard Information Systems 3.0 (3)

This course will introduce the student to techniques in brainstorming, consensus building, and decision making. Building flow charts for process flow and control will be covered. Using the PC aboard ship and in the marine environment will be covered. Maritime specific software such as NS5 will be demonstrated. The effective use of simulation as part of training and upgrading will be covered. **Group 2 course.**

MNG 110 Engineering Mechanics 3.0 (4)

Required prerequisite(s): MNG 100

Corequisite(s): MNG 104

Survey of the construction, operation, and maintenance of shipboard systems. The major emphasis will be on piping, valves, control valves, and pumps. Practical application of the above items will be supported in the lab portion of this course. STCW '95. **Group 2 course.**

MNG 175 Refrigeration 3.0 (3)

Required prerequisite(s): PHY 105, CHM 101

This course provides instruction in the operation and maintenance of refrigeration and air conditioning equipment used on merchant vessels. It covers the theory of refrigeration and the practical operation of refrigeration plants. Lecture is reinforced with the use of hands-on labs. STCW '95. **Group 2 course.**

MNG 210 Diesel Engineering 7.0 (10)

Required prerequisite(s): MNG 110

A comprehensive course dealing with the development of the diesel engine as it applies to marine propulsion. This course is designed to cover the construction, operation, and maintenance of the marine diesel engine and its support systems. Lecture is reinforced with extensive use of hands-on labs and computerized simulations. STCW '95. **Group 2 course.**

MNG 221 Marine Boilers 3.5 (5)

Required prerequisite(s): MNG 104, MNG 105, MNG 110

This is an intensive study of marine boilers and covers all types of water tube boilers. Emphasis is placed on construction, operation and maintenance of equipment. Sub systems such as fuel handling and combustion chemistry; air handling; water preparation and chemistry; automated combustion systems; and water regulation systems are covered in detail. Special emphasis is placed on USCG regulations and STCW competencies. STCW '95. **Group 2 course.**

MNG 222 Marine Turbines 2.5 (3)

Required prerequisite(s): MNG 104, MNG 105, MNG 110

This course is an in-depth study of marine turbine propulsion plants. It covers theory, construction, operation, maintenance and inspection procedures typically associated with marine use. Associated systems such as lubrication, exhaust and condensate systems are also covered. Drive trains, reduction gear, stern tubes shafting and propellers are also discussed. STCW '95. **Group 2 course.**

MNG 223 Steam Lab 1.0 (2)

Required prerequisite(s): MNG 104, MNG 105, MNG 110

This is a hands on course intended to reinforce MNG 221 and MNG 222. Students will disassemble, inspect, and reassemble machinery typical of what is found aboard ship. Machinery condition will be noted and recommendations made. Machinery records will be updated. STCW '95. **Group 2 course.**

MNG 234 Electronic Fundamentals 4.0 (4)

Required prerequisite(s): MNG 104

This course bridges the gap between theoretical physics and practical hands-on technology. Industrial electrical safety, shock hazards, and emergency procedures are stressed. The cadet receives practical hands-on practice with both digital, analog meters and oscilloscopes. Digital and analog circuits are constructed and examined both in the lab and with computer simulations. Practical considerations of circuit construction in the field are discussed in terms of ABS, USCG, and IEEE regulations and requirements. The cadet is also introduced to concepts of logic with emphasis being placed on the understanding and construction of ladder diagrams and the use of truth tables for troubleshooting electronic circuits. STCW '95. **Group 2 course.**

MNG 235 Electric Machines and Controls 4.0 (4)

Required prerequisite(s): MNG 234

Corequisite(s): MNG 236

This course covers the theory, application, operation, and maintenance of rotating machines as typically found aboard U.S. Merchant Ships and related industrial applications. Generators (DC and AC) motors (DC, multiple and single phase AC) transformers and related equipment are covered. Special attention is given to magnet relay and electronic logic control circuits. Regulations specific to CFR title 46 and IEEE are reviewed. STCW '95. **Group 2 course.**

MNG 236 Electric Machines & Controls Lab 2.0 (4)*Corequisite(s): MNG 235*

This course is a companion class to MNG 235. Course material is reinforced with practical hands-on experience with universal electrical lab machinery. The operating characteristics of typical rotating machines are studied. Special attention is given to problems associated with multiple generator AC distribution. Safe and effective troubleshooting techniques are practiced on live 110/208 volt electrical control systems. STCW '95. **Group 2 course.**

MNG 250 Unloading Systems 3.0 (4)*Required prerequisite(s): MNG 110*

This course will introduce the cadet to the shipboard Unloading Systems used aboard Great Lakes Bulk Carriers. The cadet will study the operation and maintenance of this unloading equipment. This instruction is supported by work in the lab. A review of Pollution Regulations will also be covered. STCW '95. **Group 2 course.**

MNG 315 Engineering Sea Project I 6.0 (6)*Required prerequisite(s): Completion of first academic year with a 2.0 or higher in all required courses.*

During this course the cadet is on board a Great Lakes commercial vessel. The cadet follows a prescribed course of study of vessel operations with particular emphasis on the engine room and auxiliary equipment, including safety requirements. In addition, the cadet spends a minimum of eight hours a day under the supervision of a licensed officer gaining experience in various engineering duties and responsibilities. STCW '95. **Group 2 course.**

MNG 316 Engineering Sea Project II 9.0 (9)*Required prerequisite(s): Completion of second academic year with a 2.0 or higher in all required courses.*

During this course, the cadet is on board a Great Lakes commercial vessel. The cadet follows a prescribed course of study of vessel operations with particular emphasis on the engine room and auxiliary equipment, including safety requirements. In addition, the cadet spends a minimum of eight hours a day under the supervision of a licensed officer gaining experience in the various engineering duties and responsibilities. This course is a continuation of MNG 315 and is designed to enhance the cadet's professional knowledge and sailing time to meet the licensing requirements of the U.S. Coast Guard, STCW and the criteria established by the Maritime Administration. STCW '95. **Group 2 course.**

MNG 317 Engineering Sea Project I 3.0 (3)*Required prerequisite(s): MDK 149, MNG 210 or instructor permission*

During this course the cadet is on board the TS State of Michigan. The cadet follows a prescribed course of study in vessel operations with particular emphasis on engine room and auxiliary equipment, including safety requirements. In addition, the cadet spends eight hours a day under the supervision of a licensed officer gaining experience in various engineering duties and responsibilities. STCW '95. **Group 2 course.**

MNG 318 Engineering Sea Project II 6.0 (6)*Required prerequisite(s): MNG 221, MNG 222, MNG 223, MNG 317*

This course is a continuation of MNG 317 and is designed to provide the cadet with advanced knowledge and sailing time to meet the licensing requirements of the U.S. Coast Guard, STCW and the criteria established by the Maritime Administration. STCW '95. **Group 2 course.**

MNG 319 Engineering Sea Project III 6.0 (6)*Required prerequisite(s): MNG 318*

This course is a continuation of MNG 318 and is designed to provide the cadet with advanced knowledge and sailing time to meet the licensing requirements of the U.S. Coast Guard, STCW and the criteria established by the Maritime Administration. STCW '95. **Group 2 course.**

MNG 355 Watchstanding 2.0 (2)*Corequisite(s): MNG 355, MNG 396*

Engineering simulators are used to strengthen the watchstanding skills of the engineering cadet. The cadet will be required to operate shipboard systems, manage engine room personnel, and become familiar with the paper work required in the operation of a modern engine room. **Group 2 course.**

MNG 366 Engine Room Business 2.0 (2)*Corequisite(s): MNG 355, MNG 396*

Cadets are introduced to the every day management and administrative activities confronting the Marine Engineer. The cadet will be introduced to management and personnel skills necessary to deal with people problems peculiar to the marine environment. General issues of alcohol, drug abuse, and sexual harassment in the marine environment will be discussed and placed in perspective with USCG and STCW protocols. Other necessary skills such as program planning, flow-charting, record-keeping, etc., will be introduced and practiced in scenarios. Legal considerations for the ship's officer such as log books, union contracts, certificates, evaluations, inspections, regulations, etc., will be introduced and discussed. **Group 2 course.**

MNG 396 License Preparation Engine 2.0 (2)*Corequisite(s): MNG 355, MNG 396*

A complete review of all professional subjects studied in the Maritime Engineering program. This course is designed to cover the essentials of the Third Assistant Engineer's examination administered by the U.S. Coast Guard. The final grade for this course is dependent on taking the U.S. Coast Guard license exam. **Group 2 course.**

NMC.

Find it here.

MNS

Naval Science

MNS 100 Naval Science2.0 (2)

This course is required of all Maritime Academy cadets and is an introduction to Naval Science specifically oriented toward Merchant Marine officers. It is intended to familiarize students with the role of the Merchant Marine in national defense and policy and with the various concepts of cooperation between the Navy and the Merchant Marine industry. **Group 2 course.**

MNS 200 Naval Science II.....2.0 (2)

Required prerequisite(s): MNS 100
This course is required of all Maritime Academy cadets who are Midshipmen in the Strategic Sealift Officer Program/U.S. Naval Reserve program. It familiarizes the student with the naval missions and heritage and assists the Merchant Marine officer in making the transition from civilian to sailor. **Group 2 course.**

MNS 250 Leadership and Ethics2.0 (2)

Required prerequisite(s): MNS 200 or instructor permission
This course is required of all Maritime Academy cadets who are midshipmen in the Strategic Sealift Officer Program/U.S. Naval Reserve program. It introduces students to western moral traditions and ethical philosophy with a variety of topics, such as military leadership, core values, and professional ethics that will prepare them for their role and responsibilities as a leader in the U.S. Navy of the 21st century. **Group 2 course.**

MTH

Mathematics

Students are REQUIRED to have and learn to use a TI-84 graphing calculator for ALL math classes.

MTH 06 Basic Numerical Skills.....2.0 (non-credit) (2)

Required prerequisite(s): COMPASS placement
Corequisite(s): MTH 08
This course is taken along with MTH 08. This course is designed to emphasize the thorough development of arithmetic concepts and basic numerical skill mastery. Hands-on activities applied and real-world applications will be stressed.

MTH 08 Pre-Algebra.....4.0 (non-credit) (4)

Required prerequisite(s): COMPASS placement
Small study groups work in write-in texts in guided discovery format, along with short lectures. Significant use and instruction of TI-84 calculator. This course covers all basic operations with fractions and decimal fractions. There is good coverage of special denominator fractions such as percent, ppm, and ppb. Proportions and ratios are used to introduce rational numbers. There is a survey of metric and English measurement systems with thorough treatment of dimensional analysis in each. Conversion factors and proportions are both used for expanding fractions and for dimensional analysis. Other topics integrated throughout the course include: scientific notation and large number nomenclature, prime number theory and prime

factorization, integers, basic geometry of angles, area and perimeter of rectangles, triangles and circles, volume and surface area of cubes and rectangular prisms. Metric and English mass units are introduced as are related topics such as density. Variables are used in order to introduce algebraic concepts. An algebraic approach is used for solving proportions and other equations. The function concept is used in each course unit using the graph and table utilities of graphing calculator.

MTH 10 Beginning Algebra Skills2.0 (non-credit) (2)

Required prerequisite(s): MTH 08 with a 2.0 grade or higher or appropriate placement score
Corequisite(s): MTH 23
This course is taken along with MTH 23 and is designed to emphasize the thorough development of the arithmetic of fractions and integers along with fraction thinking and problem solving. Other topics that are integrated throughout the course include: rational numbers, the properties of integral exponents, addition, subtraction, and multiplication of polynomials and factoring of polynomials. Solving linear equations, quadratic equations, and proportions are also covered. Function notation is introduced and used throughout the course and basic graphing of linear functions is covered, including slope, x- and y-intercepts. Problem solving is stressed, including unit conversions and mixture problems.

MTH 11 Intermediate Algebra Skills.....2.0 (non-credit) (2)

Required prerequisite(s): MTH 08 with a 2.0 grade or higher or appropriate placement score
Corequisite(s): MTH 111
This course is taken along with MTH 111 and is designed to review fraction thinking and problem solving. Other topics integrated throughout the course include: elementary set notation, a description of the Real number system and its major subsets, and an introduction to the Complex number system. Solving linear, quadratic, and rational equations and inequalities, as well as radical equations and systems of equations are also covered. Matrices are introduced; properties of integral exponents are reviewed and extended to rational exponents. Pre-Intermediate Algebra also covers simplifying, adding, subtracting, and multiplying radicals. Problem solving and the function concept are integrated throughout.

MTH 23 Beginning Algebra.....4.0 (non-credit) (4)

Required prerequisite(s): MTH 08 with a 2.0 grade or higher or appropriate placement score
The course covers the arithmetic of integers and rational numbers, the properties of integral exponents, addition, subtraction, and multiplication of polynomials and factoring of polynomials. Solving linear equations, quadratic equations, and proportions is also covered. Function notation is introduced and used throughout the course and basic graphing of linear functions is covered, including slope, x and y-intercepts. Problem solving is stressed, including unit conversions.

MTH 106 Math for Elementary Teachers I 4.0 (4)

Required prerequisite(s): MTH 111 or higher (excluding MTH 131 and MTH 206) or appropriate placement score

This course places an emphasis on the structure of elementary mathematics. Content includes problem solving and critical thinking using Polya's four-step process, sets and set operations, relations, whole numbers, integers, rational numbers, irrational numbers, arithmetic algorithms in base ten and in other bases, properties of numbers, least common multiples, greatest common factors, fractions, ratios and proportions, percents, and elementary number theory. The course also includes the use of manipulatives, like Cuisenaire Rods, base pieces and Pattern Blocks, to investigate arithmetic concepts. Calculator labs are incorporated into the course to give students calculator experience. **Group 2 course.**

MTH 111 Intermediate Algebra 4.0 (4)

Required prerequisite(s): MTH 23 with a 2.0 grade or higher or appropriate placement score

Intermediate Algebra covers elementary set notation, a description of the Real number system and its major subsets, and an introduction to the Complex number system. Solving linear, quadratic and rational equations and inequalities, as well as radical equations and systems of equations is also covered. The course includes an investigation of graphical, numerical, and symbolic representations and manipulations of various functions including linear, rational and quadratic. Matrices are introduced; properties of integral exponents are reviewed and extended to rational exponents. Intermediate algebra also covers simplifying, adding, subtracting and multiplying radicals. Problem solving and the function concept are integrated throughout. This course is offered in multiple formats such as online or traditional; consult an advisor before enrolling. **Group 2 course.**

MTH 116 Intro. to Computer Science 4.0 (4)

Prerequisite(s): MTH 111 or appropriate placement score

The Java Programming language (Java Programming) will be used to provide a thorough introduction to computer science, object-oriented programming, problem solving, and algorithm and data structure development. Many illustrative applications and programming assignments will be given. **Group 1 course.**

MTH 121 College Algebra 4.0 (4)

Required prerequisite(s): MTH 111 or higher (excluding MTH 131 and MTH 206) or appropriate placement score

This course continues the development of algebraic skills begun in MTH 111. Topics include: functions, mathematical models, solving equations algebraically and graphically, polynomial, logarithmic, exponential functions, inverse functions, linear and nonlinear systems of equations. **Group 1 course.**

MTH 122 Trigonometry 3.0 (3)

Required prerequisite(s): MTH 121 or higher (excluding MTH 131 and MTH 206) or appropriate placement score

This course covers the definition and graphic representation of the trigonometric functions. Triangles, angle measure, equations, identities, and inverse functions are discussed in detail. Law of Sines, Law of Cosines, and equations of the conic sections will also be covered. **Group 1 course.**

MTH 131 Intro to Probability and Statistics 3.0 (3)

Required prerequisite(s): MTH 111 or higher (excluding MTH 206) or appropriate placement score

Descriptive statistics, experimental design, an introduction to probability concepts and inferential statistics are included in this course. Descriptive statistics includes graphical representations such as histograms, bar charts, pie charts, boxplots, stemplots, scatterplots, and the normal curve. Measures of central tendency such as the mean and median, and measures of variation such as the standard deviation and quartiles are studied. The normal density function and linear regression are included. One and two sample problems involving confidence intervals and significance tests are studied for the sample mean and the sample proportion. This course is offered in multiple formats such as online or traditional; consult an advisor before enrolling. **Group 1 course.**

MTH 140 College Algebra & Trigonometry 5.0 (5)

Required prerequisite(s): COMPASS placement and a high school trigonometry class. Students receiving credit for MTH 121 and/or MTH 122 will not receive credit for MTH 140.

This course is designed to provide the student with the necessary maturity and skills to begin the calculus sequence. The topics covered include elementary set theory, equations of the conic sections, polynomial, logarithmic, exponential, trigonometric functions, inverse functions, linear and nonlinear systems of equations. **Group 1 course.**

MTH 141 Calculus I 5.0 (5)

Required prerequisite(s): MTH 122 or MTH 140 or higher (excluding MTH 206) or appropriate placement score

This is the first course in a traditional calculus sequence, emphasizing the development of the mathematical thought process. The topics covered include limits (definitions and limit proofs), continuity, derivatives of algebraic and trigonometric functions, applications of the derivative, the indefinite and definite integral, the fundamental theorem of calculus, and applications of integration. **Group 1 course.**

MTH 142 Calculus II 5.0 (5)

Required prerequisite(s): MTH 141

This course is a continuation of Calculus I. The topics include differentiation and integration involving exponential, logarithmic and inverse trigonometric function. There is an introduction of various integration methods. L'Hopital's Rule, improper integrals, parametric equations, polar coordinates, and infinite sequences and series are also investigated. **Group 1 course.**

NMC.
Find it here.

MTH 206 Math for Elem. Teachers II 4.0 (4)

Required prerequisite(s): MTH 106, MTH 111 or higher (excluding MTH 131) or appropriate placement score

This course is a continuation of MTH 106. Content includes problem solving and critical thinking using Polya's four-step process; basic statistics including mean, median, mode, range, standard deviation, graphical representations of data, linear regression, and weighted averages; probability including the fundamental counting principal, permutation, combination, partitions, experimental probability, theoretical probability, compound probability, probability tree diagrams, expected value and the concept of fair games. The course also explores the fundamental ideas of planar and spatial geometry which includes the analysis and classification of polygons, polyhedra, circles, spheres, cones and cylinders, area, perimeter, surface area and congruence, similarity, measurement, both direct and indirect, and dimensional analysis. This course also includes an introduction to the use of computer and/or graphing calculator software as learning tools for understanding concepts of informal geometry. **Group 2 course.**

MTH 241 Calculus III 4.0 (4)

Required prerequisite(s): MTH 142

The course covers multivariable calculus including three-dimensional analytical geometry, vector valued functions, partial differentiation, and multiple integration (with applications of each). Also an introduction to linear algebra will be covered.

Group 1 course.

MTH 251 Differential Equations 4.0 (4)

Required prerequisite(s): MTH 142

Introduces the concepts of differential equations and of linear algebra. Topics include: solving linear and systems of linear differential equations, Laplace transformations and their physical applications. Solutions are found using analytical, numerical, or graphical techniques relating to quantitative modeling and Laplace transforms. Linear algebraic topics include: vector spaces, subspaces, spanning sets, linear dependence and independence, basis and dimensions, eigenvalues, eigenvectors, and linear transformations. **Group 1 course.**

Visit www.nmc.edu/science-math for detailed information.

MUS**Music****MUS 90 Applied Music-Remedial 1.0-2.0 (1-2) Instruction**

MUS 90 is remedial instruction for students wanting to take 100 level applied instruction in voice, piano, organ, guitar, or any of the traditional wind, percussion or string instruments, but lack either music reading, technical skills, artistic skills or tone production skills. An audition and interview, or, if no music is prepared, only an interview will take place to determine the competency levels of a student. Goals will be established to address those competencies required for 100-level instruction. This course does not apply toward graduation. MUS 90 level instruction can be repeated until remediation is complete. Students will meet with an assigned faculty member for weekly instruction at a pre-arranged time and place. Materials specific to the students needs will be assigned. The Applied Faculty will recommend to the acting Department chair when the competencies have been met.

MUS 101 Theory of Music..... 3.0 (3)

Recommended prerequisite(s): An understanding of music fundamentals

Corequisite(s): MUS 103

Theory of Music course work is designed for students who are pursuing music as an academic major or minor. The first year includes the basic materials of music: the structures of tonality, harmonic progression, and the technique of harmonization. Students are required to complete and analyze music using practices listed above. **Group 2 course.**

MUS 102 Theory of Music..... 3.0 (3)

Required prerequisite(s): MUS 101

Corequisite(s): MUS 104

This course in Theory of Music is the second semester of a two-semester/one-year sequence of coursework designed for students who are pursuing music as an academic major or minor. This course includes the basic materials of music: the structures of tonality, harmonic progression, and the technique of harmonization. Students are required to complete and analyze music using practices listed above. **Group 2 course.**

MUS 103 Sight Singing and Ear Training..... 1.0 (2)

Recommended prerequisite(s): An understanding of music fundamentals

Corequisite(s): MUS 101, MUS 106 or Applied Piano lessons

This is the first of a four-semester/two year sequence of course work designed for students who are pursuing music as an academic major or minor. The content of this course is building of skills in reading music, and developing aural competency in interval relationships, scales, and triads, through a variety of musical practices. **Group 2 course.**



MUS 104 Sight Singing and Ear Training..... 1.0 (2)

Recommended prerequisite(s): MUS 103 or equivalent competency
Corequisite(s): MUS 102

This is the second of a four semester/two year sequence of course work designed for students who are pursuing music as an academic major or minor. The content of this course is a continued building of skills as listed in MUS 103 through a variety of musical practices. **Group 2 course.**

MUS 106 Class Piano I..... 2.0 (2)

Piano study for the beginning or near-beginning student. Cultivation of technical-musical awareness and keyboard playing ability, individually and in ensemble. **Group 2 course.**

MUS 107 Class Piano II..... 2.0 (2)

Recommended prerequisite(s): MUS 106 or instructor permission

This course is the second of a four-semester, two-year sequence of the study of piano. Objectives are the cultivation of technical-musical awareness and keyboard playing ability. **Group 2 course.**

MUS 110 Music Appreciation Stand Lit..... 3.0 (3)

This course is a survey of the history of Western Music from the medieval Europe to the present. Each music era of Western culture will be examined in regards to significant composers and compositions. This course places a strong emphasis on learning to listen and also provides students the opportunity to become familiar with the basic elements of music. No musical background or training is assumed or required. **Group 1 course.**

MUS 111 Music Appreciation Jazz 3.0 (3)

Jazz Appreciation is a survey of the stylistic and historical elements of jazz from its earliest beginnings and influences through the contemporary jazz scene. Emphasis is placed on listening to the significant jazz artists and styles of each period of jazz. The class will also introduce students to the many musical characteristics, techniques, and terms found in the jazz tradition, as well as their historical significance. No musical background or training is assumed or required. **Group 1 course.**

MUS 112 Class Guitar I 2.0 (2)

This course is designed for the student who wishes to acquire basic knowledge and techniques for guitar playing. The instruction introduces the basic information of music notation, as well as mechanical skills for the development of individual playing ability. The format is a structured approach covering hand position, fundamentals of reading music and chord knowledge. Repertoire will include Folk music, popular music and the Blues, and will utilize both strumming and picking techniques. **Group 2 course.**

MUS 113 Class Guitar II 2.0 (2)

Recommended prerequisite(s): MUS 112

This course is a continuation of MUS 112. Emphasis is placed on developing music reading skills for the guitar, along with further development of Folk picking techniques and understanding of the Blues. An introduction to Jazz chords along with fundamentals of music theory will also be presented. **Group 2 course.**

MUS 114 NMC Grand Traverse Chorale..... 1.0 (2)

Recommended prerequisite(s): Choral experience or instructor permission

This large, mixed (SATB) choral ensemble is open to all students with past choral experience. The Grand Traverse Chorale provides its members with an educational experience and personal enrichment made possible through singing of quality choral literature selected from Antiquity through the 21st century with an emphasis on large masterworks. Performance excellence is principal to the purpose of the ensemble. The Grand Traverse Chorale performs throughout the semester and frequently performs with the Traverse Symphony Orchestra. **Group 2 course.**

MUS 115 NMC Grand Traverse Chorale..... 1.0 (2)

Recommended prerequisite(s): MUS 114 or instructor permission

MUS 115 is a continuation of rehearsal and performance as begun in MUS 114. This large, mixed (SATB) choral ensemble is open to all students with past choral experience. The Grand Traverse Chorale provides its members with an educational experience and personal enrichment made possible through singing of quality choral literature selected from Antiquity through 21st century with an emphasis on large masterworks. Performance excellence is principle to the purpose of the ensemble. The Grand Traverse Chorale performs throughout the semester and frequently performs with the Traverse Symphony Orchestra. **Group 2 course.**

MUS 116 NMC Chamber Singers..... 1.0 (3)

Required prerequisite(s): Audition by instructor

This mixed (SATB) choral ensemble is open to all students with past choral experience. The Chamber Singers provides its members with an educational experience and personal enrichment made possible through singing of quality choral literature selected from Antiquity through the 21st century with an emphasis on newer works and works for small choral ensembles. Performance excellence is principle to the purpose to the ensemble. The Chamber Singers perform throughout the semester and frequently perform with the Traverse Symphony Orchestra. **Group 2 course.**

MUS 117 NMC Chamber Singers..... 1.0 (3)

Recommended prerequisite(s): MUS 116 or equivalent or audition by instructor

MUS 117 is a continuation of rehearsal and performance as begun in MUS 116. This mixed (SATB) choral ensemble is open to all students with past choral experience. The Chamber Singers provides its members with an educational experience and personal enrichment made possible through singing of quality choral literature selected from Antiquity through the 21st century with emphasis on newer works and works for small choral ensembles. Performance excellence is principle to the purpose of the ensemble. The Chamber Singers perform throughout the semester and frequently perform with the Traverse Symphony Orchestra. **Group 2 course.**

MUS 118 NMC Concert Band..... 1.0 (2)*Required prerequisite(s): Previous band experience*

This course will provide a survey of significant concert and symphonic band repertoire. Students will learn performance techniques on their instrument as are relevant to the concert band medium. Students will also learn the role that their instrument plays within the context of a concert band. Generally, two to four concerts will be performed each semester. Students must have a high school level competency on a wind or percussion instrument. An audition or personal interview with the conductor will be required for placement in the ensemble.

Group 2 course.**MUS 119 NMC Concert Band..... 1.0 (2)***Required prerequisite(s): MUS 118 or previous band experience*

MUS 119 is a continuation of rehearsal and performance as begun in MUS 118. This course will provide a survey of significant concert and symphonic band repertoire. Students will learn performance techniques on their instrument as are relevant to the concert band medium. Students will also learn the role that their instrument plays within the context of a concert band. Generally, two to four concerts will be performed each semester. Students must have a high school level competency on a wind or percussion instrument. An audition or personal interview with the conductor will be required for placement in the ensemble. **Group 2 course.**

MUS 120 NMC Jazz Band..... 1.0 (2)*Required prerequisite(s): Previous band or jazz band experience, or instructor permission*

A course for the performer with a focus on big band jazz ensemble techniques and styles. A wide range of jazz styles are covered including swing, be-bop, ballads, rock/fusion and Latin. Some improvisation is briefly explored and always encouraged, although it is not the main focus of this course. A minimum of one concert will be performed each semester and all members are required to attend and participate in all scheduled performances. **Group 2 course.**

MUS 121 NMC Jazz Band..... 1.0 (2)*Required prerequisite(s): MUS 120, previous band or jazz band experience, or instructor permission*

A course for the performer with a focus on big band jazz ensemble techniques and styles. A wide range of jazz styles are covered including swing, be-bop, ballads, rock/fusion and Latin. Some improvisation is briefly explored and always encouraged, although it is not the main focus of this course. A minimum of one concert will be performed each semester and all members are required to attend and participate in all scheduled performances. **Group 2 course.**

MUS 124 NMC Collegiate Singers 1.0 (3)

This choral ensemble is open to all students. The Collegiate Singers is designed for beginning and intermediate choral singers with specific instructional emphasis placed on singing and ensemble skills. This course will provide students with a broad base of skills that will be applicable to other choral ensembles in future collegiate years and beyond. The Collegiate Singers perform throughout the semester. **Group 2 course.**

MUS 125 NMC Collegiate Singers 1.0 (3)

MUS 125 is a continuation of rehearsal and performance as begun in MUS 124. This choral ensemble is open to all students. The Collegiate Singers is designed for beginning and intermediate choral singers with specific instructional emphasis placed on singing and ensemble skills. This course will provide students with a broad base of skills that will be applicable to other choral ensembles in future collegiate years and beyond. The Collegiate Singers perform throughout the semester. **Group 2 course.**

MUS 127 Traverse Symphony Orchestra 1.0 (2)

This course is designed to give students the opportunity to study and perform orchestral literature, both standard and contemporary. The TSO, and its affiliated programs, is open by audition in the late summer and early fall of the year, and gives 8-10 public concerts per year. Performance is required for credit. Audition, rehearsal, and performance information is available through the music department. **Group 2 course.**

MUS 128 Traverse Symphony Orchestra 1.0 (2)*Recommended prerequisite(s): MUS 127*

This course is designed to give students the opportunity to study and perform orchestra literature, both standard and contemporary. The TSO, and its affiliated programs, is open by audition in the late summer and early fall of the year, and gives 8-10 public concerts per year. Performance is required for credit. Audition, rehearsal, and performance information is available through the music department. **Group 2 course.**

MUS 130A Ensemble-Sound Recording Tech..... 2.0 (2)*Recommended prerequisite(s): MUS 101, MUS 103, MUS 106, and one credit of applied music*

Students will learn the correct use of analog and digital recording equipment, the theory of sound and sound waves, the use of recording software, how to create different types of sound files, and which is best to use for a given application and how to create a sound file from a live recording session. **Group 2 course.**

MUS 130B Ensembles-Signal Processing..... 2.0 (2)*Recommended prerequisite(s): MUS 130A*

Students will learn the application of dynamic processing to raw audio channels, demonstrating a mastery of editing and mixing. The capstone project from MUS 130A will be utilized. It is highly recommended that students also enroll in MUS 102 (Music Theory), MUS 103 (Sight Singing and Ear Training), MUS 107 (Group Piano Instruction) and one credit of an NMC Music Ensemble. **Group 2 course.**

**MUS 131-135 & 137-139 Ensembles in 1.0 (2)
Applied Music I***Required prerequisite(s): Instructor permission*

This course prepares students for public performance and develops abilities in ensemble techniques. Students study in small ensembles (duets, trios, quartets, quintets, and octets) under faculty direction. Students are expected to perform, at a minimum, for one Music Convocation each semester. Course number suffix A designates fall semester and suffix B designates spring semester. **Group 2 course.**

MUS 136A Ensembles - Vocal Jazz I 1.0 (2)

Required prerequisite(s): Previous choral/vocal experience, or instructor permission

A small ensemble of men's and women's voices rehearses and performs vocal jazz works. Develop skills in vocal jazz styles, blending harmonies, microphone technique, and jazz theory.

Group 2 course.

MUS 136B Ensembles - Vocal Jazz I 1.0 (2)

Required prerequisite(s): MUS 136A, previous choral/vocal experience, or instructor permission

A small ensemble of men's and women's voices rehearses and performs vocal jazz works. Develop skills in vocal jazz styles, blending harmonies, microphone technique, and jazz theory.

Group 2 course.

**MUS 140-160 & 162-167B Applied Music-..... 1-2.0 (1-2)
Private Lesson**

Note: 100 and 200 level courses may be taken three times.

Private lessons for strings, brass, woodwinds, guitar, piano, voice, organ, and percussion are offered. Students may enroll for 1.0 credit (for a 30 minute, weekly lesson) or for 2.0 credits (for a 60 minute, weekly lesson). Music Majors should enroll for 2.0 credits. After registering for Applied Lessons, please contact Jeffrey Cobb, Director of Music Programs (jacob@cobb.nmc.edu or (231) 995-1338), before or during the first week of classes for placement with an applied music instructor. A pre-arranged lesson time with the assigned instructor is arranged and studies/compositions, as appropriate, are prepared for continuing musical development. Students are expected to perform, at a minimum, for one Music Convocation each semester. **Group 2 course.**

MUS 170-170C Applied Music-Digital Audio ... 1-2.0 (.5-1)

A pre-arranged lesson time with the assigned instructor is arranged and studies/projects, as appropriate, are prepared for continuing development in Audio Technology. **Group 2 course.**

MUS 201 Theory of Music..... 3 (3)

Prerequisite(s): The successful completion of MUS 101, 102, 103, 104, 106, 107 or the equivalent competency

Corequisite(s): MUS 203, MUS 206

The third semester of a four-semester/two year sequence of coursework designed for students who are pursuing music as an academic major. Harmonic analyzation, traditional and non-traditional compositional techniques and musical form make up the course content. **Group 1 course.**

MUS 202 Theory of Music..... 3 (3)

Prerequisite(s): The successful completion of MUS 101, 102, 103, 104, 106, 107, 206 or the equivalent competency

Corequisite(s): MUS 204, MUS 207

The fourth semester of a four-semester/two year sequence of coursework designed for students who are pursuing music as an academic major. The course content is a continuation of MUS 201 with the addition of the study of 20th century compositional and beginning counterpoint. **Group 1 course.**

MUS 203 Sight Singing & Ear Training 1 (2)

Prerequisite(s): The successful completion of MUS 101, 102, 104, 106, 107, or the equivalent competency

Corequisite(s): MUS 201, MUS 206

The third semester of a four-semester/two-year sequence of course work designed for students who are pursuing music as an academic major. The content of this course includes the building of skills in reading music, melodic and harmonic dictation and aural competency through a variety of musical practices, principally the voice. **Group 2 course.**

MUS 204 Sight Singing & Ear Training 1 (2)

Prerequisite(s): The successful completion of MUS 101, 102, 103, 104, 106, 107, 206, or the equivalent competency

Corequisite(s): MUS 202, MUS 207

The fourth semester of a four-semester/two-year sequence of course work designed for students who are pursuing music as an academic major. A continuation of MUS 203, this course deals with the building of advanced skills in reading music, melodic and harmonic dictation and aural competency through a variety of musical practices, principally the voice.

Group 2 course.

MUS 206 Class Piano III..... 2.0 (2)

Recommended prerequisite(s): MUS 107 or instructor permission

This is the third of a four-semester, two-year sequence of the study of piano. Objectives are the cultivation of technical-musical awareness and keyboard playing ability. **Group 2 course.**

MUS 207 Class Piano IV..... 2.0 (2)

Recommended prerequisite(s): MUS 206 or instructor permission

This is the fourth of a four semester, two year sequence of the study of piano. Objectives are the cultivation of technical-musical awareness and keyboard playing ability. A continuation of MUS 206. **Group 2 course.**

MUS 214 NMC Grand Traverse Chorale 1.0 (2)

Recommended prerequisite(s): MUS 115, choral experience, or instructor permission

MUS 214 is continuation of rehearsal and performance as begun in MUS 115. This large, mixed (SATB) choral ensemble is open to all students with past choral experience. The Grand Traverse Chorale provides its members with an educational experience and personal enrichment made possible through singing of quality choral literature selected from Antiquity through 21st century with an emphasis on large masterworks. Performance excellence is principle to the purpose of the ensemble. The Grand Traverse Chorale performs throughout the semester and frequently performs with the Traverse Symphony Orchestra. **Group 2 course.**

NMC.
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MUS 215 NMC Grand Traverse Chorale..... 1.0 (2)

Recommended prerequisite(s): MUS 214, choral experience, or instructor permission

MUS 215 is a continuation of rehearsal and performance as begun in MUS 214. This large, mixed (SATB) chorale ensemble is open to all students with past choral experience. The Grand Traverse Chorale provides its members with an educational experience and personal enrichment made possible through singing of quality choral literature selected from Antiquity through 21st century with an emphasis on large masterworks. Performance excellence is principle to the purpose of the ensemble. The Grand Traverse Chorale performs throughout the semester and frequently performs with the Traverse Symphony Orchestra. **Group 2 course.**

MUS 216 NMC Chamber Singers..... 1.0 (3)

Recommended prerequisite(s): MUS 117, choral experience, or instructor permission

MUS 216 is a continuation of rehearsal and performance as begun in MUS 117. This large, mixed (SATB) chorale ensemble is open to all students with past choral experience. The Chamber Singers provides its members with an educational experience and personal enrichment made possible through singing of quality choral literature selected from Antiquity through 21st century with an emphasis on large masterworks. Performance excellence is principle to the purpose of the ensemble. The Chamber Singers performs throughout the semester and frequently performs with the Traverse Symphony Orchestra. **Group 2 course.**

MUS 217 NMC Chamber Singers..... 1.0 (3)

Recommended prerequisite(s): MUS 216, choral experience, or instructor permission

MUS 217 is a continuation of rehearsal and performance as begun in MUS 216. This large, mixed (SATB) chorale ensemble is open to all students with past choral experience. The Chamber Singers provides its members with an educational experience and personal enrichment made possible through singing of quality choral literature selected from Antiquity through 21st century with an emphasis on large masterworks. Performance excellence is principle to the purpose of the ensemble. The Chamber Singers performs throughout the semester and frequently performs with the Traverse Symphony Orchestra. **Group 2 course.**

MUS 218 NMC Concert Band..... 1.0 (2)

Recommended prerequisite(s): MUS 119 or previous band experience

MUS 218 is a continuation of rehearsal and performance as begun in MUS 119. This course will provide a survey of significant concert and symphonic band repertoire. Students will learn performance techniques on their instrument as are relevant to the concert band medium. Students will also learn the role that their instrument plays within the context of a concert band. Generally, two to four concerts will be performed each semester. Students must have a high school level competency on a wind or percussion instrument. An audition or personal interview with the conductor will be required for placement in the ensemble. **Group 2 course.**

MUS 219 NMC Concert Band..... 1.0 (2)

Recommended prerequisite(s): MUS 218 or previous band experience

MUS 219 is a continuation of rehearsal and performance as begun in MUS 218. This course will provide a survey of significant concert and symphonic band repertoire. Students will learn performance techniques on their instrument as are relevant to the concert band medium. Students will also learn the role that their instrument plays within the context of a concert band. Generally, two to four concerts will be performed each semester. Students must have a high school level competency on a wind or percussion instrument. An audition or personal interview with the conductor will be required for placement in the ensemble. **Group 2 course.**

MUS 220 NMC Jazz Band..... 1.0 (2)

Recommended prerequisite(s): MUS 121, previous band or jazz band experience, or instructor permission

A course for the performer with a focus on big band jazz ensemble techniques and styles. A wide range of jazz styles are covered including swing, be-bop, ballads, rock/fusion and Latin. Some improvisation is briefly explored and always encouraged, although it is not the main focus of this course. A minimum of one concert will be performed each semester and all members are required to attend and participate in all scheduled performances. **Group 2 course.**

MUS 221 NMC Jazz Band..... 1.0 (2)

Recommended prerequisite(s): MUS 220, previous band or jazz band experience, or instructor permission

A course for the performer with a focus on big band jazz ensemble techniques and styles. A wide range of jazz styles are covered including swing, be-bop, ballads, rock/fusion and Latin. Some improvisation is briefly explored and always encouraged, although it is not the main focus of this course. A minimum of one concert will be performed each semester and all members are required to attend and participate in all scheduled performances. **Group 2 course.**

MUS 224 NMC Collegiate Singers 1.0 (3)

Open to students who have completed MUS 125 or a year of a collegiate choral ensemble. The Collegiate Singers is designed for beginning and intermediate choral singers with specific instructional emphasis placed on singing and ensemble skills. This course will provide students with a broad base of skills that will be applicable to other choral ensembles in future collegiate years and beyond. The Collegiate Singers perform throughout the semester. **Group 2 course.**

MUS 225 NMC Collegiate Singers 1.0 (3)

Open to students who have completed MUS 224 or a year of a collegiate choral ensemble. The Collegiate Singers is designed for beginning and intermediate choral singers with specific instructional emphasis placed on singing and ensemble skills. This course will provide students with a broad base of skills that will be applicable to other choral ensembles in future collegiate years and beyond. The Collegiate Singers perform throughout the semester. **Group 2 course.**

MUS 227 Traverse Symphony Orchestra 1.0 (2)*Recommended prerequisite(s): MUS 128*

This course is designed to give students the opportunity to study and perform orchestral literature, both standard and contemporary. The TSO, and its affiliated programs, is open by audition in the late summer and early fall of the year, and gives 8-10 public concerts per year. Performance is required for credit. Audition, rehearsal, and performance information is available through the music department. **Group 2 course.**

MUS 228 Traverse Symphony Orchestra 1.0 (2)*Recommended prerequisite(s): MUS 227*

This course is designed to give students the opportunity to study and perform orchestral literature, both standard and contemporary. The TSO, and its affiliated programs, is open by audition in the late summer and early fall of the year, and gives 8-10 public concerts per year. Performance is required for credit. Audition, rehearsal, and performance information is available through the music department. **Group 2 course.**

MUS 229 Music History & Literature 3.0 (3)*Recommended prerequisite(s): ENG 111, ENG 112 or instructor permission and music nomenclature/music reading familiarity*

MUS 229 is a chronological study of Western Music in its historical and cultural settings from Antiquity to the middle of the 18th century. The course is designed to teach the period idioms, forms, composers, and significant compositions for the student majoring in music. Any student meeting the recommended competencies, may enroll in the course. **Group 1 course.**

MUS 230 Music History & Literature..... 3.0 (3)*Recommended prerequisite(s): ENG 111, ENG 112 or instructor permission and music nomenclature/music reading familiarity*

MUS 230 is a chronological study of Western Music in its historical and cultural settings from the middle of the 8th century to the present. This course is designed to teach the period idioms, forms, composers, and significant compositions for the student majoring in music. Any student, however, meeting the recommended competencies, may enroll in this course.

Group 1 course.**MUS 230A Ensembles-Midi Processing 2.0 (2)***Recommended prerequisite(s): MUS 130B or instructor permission*

Learn the basics of MIDI (Musical Instrument Digital Interface) processing by gaining a general understanding of the MIDI Standard, setting up a MIDI studio, learning and practicing with different MIDI hardware and software packages. This course is designed to develop competencies in the theory and use of music sequencing, notation, virtual MIDI instrument software through their application to music composition. **Group 2 course.**

MUS 230B Ensembles-Recording Practicum 2.0 (2)*Recommended prerequisite(s): MUS 230A or instructor permission*

This course applies all previous audio course work to a client-based need for a music track for application to blogs, websites, film/video, or audio based advertising. **Group 2 course.**

**MUS 231A-235B & 237A-239B Ensembles in 1.0 (2)
Applied Music II***Required prerequisite(s): Instructor permission*

A continuation of Ensembles, with emphasis on performance and repertoire. This course prepares students for public performance and develops abilities in ensemble techniques. Students study in small ensembles (duets, trios, quartets, quintets, and octets) under faculty direction. Students are expected to perform, at a minimum, for one Music Convocation each semester. Course number suffix A designates fall semester and suffix B designates spring semester. **Group 2 course.**

MUS 236A Ensembles - Vocal Jazz II 1.0 (2)*Recommended prerequisite(s): MUS 136B, previous choral/vocal experience, or instructor permission*

A small ensemble of men's and women's voices rehearses and performs vocal jazz works. Develop skills in vocal jazz styles, blending harmonies, microphone technique, and jazz theory. **Group 2 course.**

MUS 236B Ensembles - Vocal Jazz II 1.0 (2)*Recommended prerequisite(s): MUS 236A, previous choral/vocal experience, or instructor permission*

A small ensemble of men's and women's voices rehearses and performs vocal jazz works. Develop skills in vocal jazz styles, blending harmonies, microphone technique, and jazz theory. **Group 2 course.**

**MUS 240-267B Applied Music 1.0-2.0 (1-2)
Private Lessons***Required prerequisite(s): A minimum of two semesters of 100 level applied instruction or instructor permission**Note: 100 to 200 level courses may be taken three times*

Private lessons for strings, brass, woodwinds, guitar, piano, voice, organ and percussion are offered. Student may enroll for 1.0 credit (for a 30 minute, weekly lesson) or for 2.0 credits (for a 60 minute, weekly lesson). Music Majors should enroll for 2.0 credits. After registering for Applied Lessons, please contact Jeffrey Cobb, Director of Music Programs (jecobb@nmc.edu or 231-995-1338), before or during the first week of classes for placement with an applied music instructor. A prearranged lesson time with the assigned instructor is arranged and studies/compositions, as appropriate, are prepared for continuing musical development. Students are expected to perform for, at a minimum, one Music Convocation each semester. **Group 2 course.**



OUT Outdoor Pursuits

Prerequisite for all Outdoor Pursuits courses: Students should be at a reasonably good physical fitness level and without current exercise-limiting injuries. These are high-participation courses in which most material is learned through experience on off-campus weekend field trips. Students with disabilities who need accommodations in order to complete these courses should contact the instructor prior to the first class meeting.

OUT 112 Winter Travel and Camping 1.0 (2)
This course introduces the three-season backcountry traveler to safe and enjoyable winter outings. The focus is on winter safety, travel techniques (primarily Nordic skiing and snowshoeing), camping, menu planning, clothing and gear selection, navigation, and shelter building. **Group 2 course.**

OUT 125 Backpacking I..... 1.0 (2)
The course is for novice backpackers. Information discussed and practiced includes basic backpacking skills, selecting of equipment, food planning and preparation, map and compass navigation, backcountry first aid and minimal impact camping. **Group 2 course.**

OUT 126 Backpacking II..... 1.0 (2)
Recommended prerequisite(s): OUT 125 or three-day backpacking experience
This course is for backpackers with prior experience. Its purpose is to broaden the student's knowledge of backpacking techniques with special attention given to lightweight equipment, menu planning, itinerary planning, map and compass navigation, site selection, and other minimal impact considerations. **Group 2 course.**

OUT 130 Caving I 1.0 (2)
An introduction to the geology of cave formation and cave ecology. Additionally, by exploring non-commercial cave systems, students are introduced to the equipment, techniques, and safety systems associated with the sport of caving. **Group 2 course.**

OUT 131 Caving II 1.0 (2)
Recommended prerequisite(s): OUT 130 or instructor permission
This course focuses on safe and appropriate techniques for exploring caves, with an emphasis on selecting and using equipment, as well as implementing climbing/rappelling safety systems for cave exploration. **Group 2 course.**

OUT 132 Rock Climbing I..... 1.0 (2)
This course is a beginning rock climbing course to introduce students to climbing techniques, belaying, and safety practices related to class five climbing. **Group 2 course.**

OUT 133 Rock Climbing II..... 1.0 (2)
Recommended prerequisite(s): OUT 132 or instructor permission
Students will learn anchor selection, active and passive gear placement, and advanced belaying techniques, with an introduction to lead climbing. **Group 2 course.**

OUT 140 Snowshoeing 1.0 (2)
Students will learn how to dress for winter activities, orienteer, winter camp, adjust for emergency situations and explore a variety of locations off campus. Participants will become educated snowshoe consumers and best of all, HAVE FUN! Snowshoes provided. **Group 2 course.**

OUT 160 Canoeing I..... 1.0 (2)
Instruction in various techniques of canoeing are introduced in flat water (lake) and moving water (river). Two one-day trips are planned. **Group 2 course.**

OUT 161 Canoeing II..... 1.0 (2)
Recommended prerequisite(s): OUT 160 or instructor permission
This course is for canoers with prior experience in river canoeing. Wilderness travel by canoe with an over-night camping trip is planned. **Group 2 course.**

PE Physical Education

PE 100A Basketball Coaching..... 3.0 (5)
This course is designed to provide knowledge and practical skills preparing students for regular positions coaching boys and girls basketball and is modeled after the MHSAA (Michigan High School Athletic Association) Coaches Advancement Program (CAP). Classroom lecture session topics will include psychology of coaching, teaching basketball skills and rules, player ability and development, communicating with players and parents, practice planning and game management. Monitored lab sessions will be conducted by coaching TCAPS (Traverse City Area Public Schools) elementary basketball team practices and games. **Group 2 course.**

PE 100B Basketball Officiating 2.0 (3)
This course is designed to provide knowledge and practical skills for MHSAA (Michigan High School Athletic Association) certification in officiating boys and girls basketball and is modeled after the MHSAA Legacy Student Officials Program. Classroom lecture session topics will include rules of play, mechanics, communication, court position, uniform/equipment, court etiquette, etc. Monitored lab sessions will be conducted by officiating TCAPS (Traverse City Area Public Schools) elementary basketball games. **Group 2 course.**

PE 101 Swing, Latin & Slow Dancing I..... 1.0 (2)
This course will introduce students to a fun form of exercise and recreation you can do for the rest of your life through swing and social dancing. Many styles of dancing will be covered including swing, jitterbug, tango, cha cha, waltz, slow dancing, two-step, Latin dancing, salsa, lambada, and many swing moves that can be incorporated into any dance situation. Please wear slippery-soled shoes. **Group 2 course.**

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PE 101A Swing, Latin & Slow Dancing II..... 1.0 (2)*Recommended prerequisite(s): PE 101*

Take each style of dance learned at the beginning level to a more advanced level. Learn swing improvisation and aerials safety and spotting, advanced waltz and slow dancing techniques including lifts, more advanced moves in each of the Latin dances and a new dance, and we will explore the depths of Argentine Tango. Learn to keep partner dancing an integral part of your life and enjoy as a form of exercise. **Group 2 course.**

PE 102 Hip-Hop Dance..... 1.0 (2)

Learn dance combinations used in the Hip-Hop dance style. Develops the strength, flexibility, rhythm, balance, and safe body mechanics to dance confidently in a social atmosphere to popular Hip-Hop music. A great way to exercise and have fun at the same time. Please wear clean, dry gym shoes.

Group 2 course.**PE 102B Hip-Hop Dance II..... 1.0 (2)***Recommended prerequisite(s): PE 102*

Learn advanced dance combinations building upon those used in Hip Hop Dance I. Further develops the strength, flexibility, rhythm, balance, and safe body mechanics to dance confidently in a social atmosphere to popular hip hop music.

Group 2 course.**PE 105 Volleyball I..... 1.0 (2)**

Introduction to volleyball with emphasis on developing individual ball-handling skills. Team play, basic strategy, and rules of play will also be covered. **Group 2 course.**

PE 106 Volleyball II..... 1.0 (2)*Recommended prerequisite(s): PE 105*

A continuation for students who already have good basic skills and understand the game. Emphasis is on team play, offensive and defensive alignments, and advanced volleyball skills.

Group 2 course.**PE 107 Basketball I..... 1.0 (2)**

Introduction to the fundamental skills, rules, offensive and defensive team strategies of basketball. Designed for beginners through advanced levels. Drill practice and team play.

Group 2 course.**PE 108 Basketball II..... 1.0 (2)***Recommended prerequisite(s): PE 107*

A continuation for students who already have good basic skills and understand the game. Emphasis is on advanced offensive and defensive strategies as applied to a practical team play experience. **Group 2 course.**

PE 135 Weightlifting I..... 1.0 (2)

In this self-directed workout class, students will implement a weightlifting/fitness regime utilizing free weights, weight machines, and cardio machines to expand their strength and fitness. Students should have a basic working knowledge of the use of weights and fitness equipment including safety. Students should be without current exercise-limiting injuries or illnesses. **Group 2 course.**

PE 136A Weightlifting II..... 1.0 (2)*Recommended prerequisite(s): PE 135*

Designed for students who wish to continue to build body size and muscular strength. This self-directed class uses free weights and fitness machines, as related to an advanced strength training and conditioning program. **Group 2 course.**

PE 138 Weightlifting With Machines 1.0 (2)

This on-campus weightlifting course enables the student to expand knowledge and use of weight machines. Course includes cardiovascular and strength training, with opportunity for questions and answers. **Group 2 course.**

PE 139 Beginning Aikido I..... .5 (1)

Aikido is Budo - an art based on the philosophy and fighting techniques of the Japanese samurai. "The way of harmony with the forces of nature," Aikido is excellent physical training and effective self-defense. Yoshinkai-style Aikido classes include stretching, exercises to improve balance and focus, learning to fall safely, throwing techniques, controls, and pins, in a setting of traditional Japanese etiquette. **Group 2 course.**

PE 141 Aikido 1.0 (2)

Aikido is Budo - an art based on the philosophy and fighting techniques of the Japanese samurai. "The way of harmony with the forces of nature," Aikido is excellent physical training and effective self defense. This course introduces Yoshokai-style Aikido warmup exercises, basic movements, back break-fall, and 8th kyu level techniques. The emphasis is on improving balance and focus, learning to fall safely, and performing basic techniques with a partner, while learning about Aikido history, principles, and terminology in a setting of traditional etiquette and discipline. **Group 2 course.**

PE 142 Intermediate Aikido..... 1.0 (2)*Recommended prerequisite(s): PE 141*

Refinement of Yoshokai-style Beginning Aikido skills with emphasis on mastering techniques and the introduction of bukiwaza, techniques using wooden sword, staff, knife. **Group 2 course.**

PE 143 Continuing Aikido..... 1.0 (2)*Recommended prerequisite(s): PE 142*

Training at this level emulates regular Aikido practice in a private dojo (training facility). Focus is on mastery of advanced techniques, weapons, and philosophy. **Group 2 course.**

PE 144 Tae Kwon Do (Karate) I..... 1.0 (2)

Introduction to the proper etiquette and philosophy of the Korean art of Tae Kwon Do (Karate). Training includes basic blocks, punches, kicks, stances, self-defense and the four-directional punch, the first pattern of Tae Kwon Do. **Group 2 course.**

PE 145 Tae Kwon Do (Karate) II..... 1.0 (2)*Recommended prerequisite(s): PE 144 or instructor permission*

Refinement of basic skills and techniques of Tae Kwon Do. Training includes introduction of intermediate skills of blocking, kicking, punching, and Chon-ji, the second pattern of Tae Kwon Do. **Group 2 course.**

PE 146 Tae Kwon Do (Karate) III..... 1.0 (2)

Recommended prerequisite(s): PE 145 or instructor permission
Continuing refinement of basic and intermediate skills and techniques. Introduction to advanced foot techniques, semi- and free sparring, and the methods of attack and defense against opponents. Training includes the patterns of Dan-Gun, Do-San and Won-Hyo. **Group 2 course.**

PE 147 Tae Kwon Do (Karate) IV..... 1.0 (2)

Recommended prerequisite(s): PE 146 or instructor permission
Introduction to jumping kicks and refinement of basic, intermediate and semi-advanced skills and techniques. Introduction to jumping kicks and the patterns of Yul-Guk, Joong-Gun, Hwa-Rang, and Choong-Moo. Advanced flying kicks and additional patterns are introduced to those prepared to obtain Kick Belt ranks and to instruct lower rank students. **Group 2 course.**

PE 148 Kuntaw I..... 1.0 (2)

Introduction to the history and philosophy of the Filipino martial art form Maharlika Kuntaw. Kuntaw emphasizes flexibility and agility rather than power or strength and is based on the use of flowing circular strike/counter defense. Training includes use of arnis (sticks), basic strikes, blocks, kicks, anyos (forms) and self-defense. **Group 2 course.**

PE 149 Kuntaw II..... 1.0 (2)

Recommended prerequisite(s): PE 148 or instructor permission
This course provides the student with the continuation of beginning I. The student will learn the application of the six anyos (forms), stick drills, hand techniques, basic blocks, kicks, stalls and traps. **Group 2 course.**

PE 150 Kuntaw III..... 1.0 (2)

Recommended prerequisite(s): PE 149
Continuation of course work with the addition of advanced blocks, parries, kicks, stalls, traps, take downs, stick/weapon drills, and self-defense. Training includes the five H-forms, the six stick anyos (forms) and the applications. **Group 2 course.**

PE 151 Kuntaw IV..... 1.0 (2)

Recommended prerequisite(s): PE 150
Refinement of intermediate skills and techniques with additional advanced blocks, parries, traps, take downs, ground fighting, two-on-one fighting, and stick/weapon drills. Includes applications of advanced skills/techniques and the six saiwans and five combats (forms.) **Group 2 course.**

PE 164 Judo 1.0 (2)

This class will introduce the basics of the sport of Judo as well as Jujutsu based self defense. Judo is recognized as one of the best forms of exercise. Actual combat (randori) is a big part of Judo though safety is not compromised. Please wear loose, comfortable clothing and come to have fun! **Group 2 course.**

PE 169 Continuing Judo..... 1.0 (2)

Recommended prerequisite(s): PE 164
A continuation of Judo for intermediate and advanced levels. Students will continue to improve skills and abilities and advance through belt testing. **Group 2 course.**

PHL**Philosophy****PHL 101 Introduction to Philosophy..... 3.0 (3)**

Recommended prerequisite(s): Completion of ENG 11/111 or placement into ENG 111

This course is an introduction to some of the major areas, ideas, and thinkers of philosophy. Students will read a number of major philosophers in Western Philosophy, such as Socrates, Plato, Aquinas, Descartes, Berkeley, James, Russell, and Sartre, as well as from texts representing non-traditional or non-Western sources, such as Native American and Asian thought. Students will also be introduced to some of the main problems and concepts in the areas of Epistemology, Metaphysics, Ethics, and Aesthetics, as well as investigate other issues or movements, such as Existentialism or Feminism, in more depth. **Group 1 course.**

PHL 105 Critical Thinking 3.0 (3)

Recommended prerequisite(s): Completion of ENG 11/111 or placement into ENG 111

This course is about listening and reading and writing more effectively. Students learn ways to assess information and to form sound evaluative judgments about what is seen, heard, and read. Critical questions provide a structure for critical thinking that supports a continuing search for better opinions, decisions, or judgments. Exercises in understanding and composing logically-sound arguments are emphasized as well as knowing what is fair and reasonable in the argument's structure. Examples are taken from professional situations such as law, medicine, and politics, as well as everyday life. Fallacies in rhetoric, such as name calling and begging the question, are identified and understood. **Group 1 course.**

PHL 121 Western Religions 4.0 (4)

Recommended prerequisite(s): Completion of ENG 11/111 or placement into ENG 111

A study of the historical development, main religious teachings, leading personalities, ethical values and worship practices of the major religious traditions of the Western world: Judaism, Christianity, and Islam. **Group 1 course.**

PHL 122 Eastern Religions 4.0 (4)

Recommended prerequisite(s): Completion of ENG 11/111 or placement into ENG 111

A study of the historical development, main religious teachings, leading personalities, ethical values and worship practices of the major religious traditions of India, China, and Japan: Hinduism, Buddhism, Confucianism, Taoism. **Group 1 course.**

PHL 181 Old Testament 4.0 (4)

Recommended prerequisite(s): Completion of ENG 11/111 or placement into ENG 111

An introduction to the history, literature, and religious ideas of Ancient Israel through a critical examination of the Hebrew Bible and relevant non-canonical materials from the time of the Patriarchs to the Babylonian Exile set in the cultural context in which ancient Israel developed. **Group 1 course.**

PHL 182 New Testament..... 4.0 (4)

Recommended prerequisite(s): Completion of ENG 11/111 or placement into ENG 111

An introduction to the history, literature, and religious ideas of first century Christianity conducted through a critical examination of the New Testament and relevant non-canonical materials set in the cultural and historical context in which early Christianity developed. **Group 1 course.**

PHL 201 Ethics 3.0 (3)

Recommended prerequisite(s): Completion of ENG 11/111 or placement into ENG 111

Ethics is a thoughtful analysis of a variety of value systems found in societies today. It explores the nature and meaning of good and evil and how these concepts relate to concepts of right and wrong. It considers how the good is known and how it is promoted in societies. The course combines primary source readings of philosophers and religious writers with explanatory secondary source material and it encourages student discussion of the issues. Through the use of critical judgement and philosophical thought, the course explores ethical theories from classical to modern times and includes consideration of ethics that are part of Eastern philosophical traditions, as well as sources from Native American, African, African American, Feminist, and other non-traditional frameworks and paradigms. **Group 1 course.**

PHL 202 Contemporary Ethical Dilemmas..... 3.0 (3)

Recommended prerequisite(s): Completion of ENG 11/111 or placement into ENG 111

This course examines the moral and ethical issues confronting modern societies locally and globally. It examines issues regarding the natural environment, the ethical treatment of animals, biomedical ethics; abortion and issues of human reproduction such as stem-cell research and cloning; business ethics; criminal justice and capital punishment; racism, sexism, and other forms of discrimination, welfare and economic distribution. This course relies on the discipline of philosophy for its methods of inquiry. Incorporated throughout the course is the examination of several approaches to ethics as developed by Aristotle, Kant, Mill, and contemporary philosophies of gender and race. Approaches of Eastern/Asian and Native American philosophy are also considered for contrast with standard western approaches to ethical and social issues. The course considers various topics and specific cases in order to provide an overall view of how ethical reasoning might be applied to current issues. **Group 1 course.**

PHL 222 The World of Jesus 4.0 (4)

Recommended prerequisite(s): Completion of ENG 11/111 or placement into ENG 111

Using historical, social scientific, and literary critical methods, this course introduces the socio-economic, political, religious and cultural world in which Jesus of Nazareth lived through a study of the surviving religious and secular texts of Second Temple Judaism and the Greco-Roman culture in which it existed. This course covers events and literature from the Babylonian Exile to the Jewish War. **Group 1 course.**

PHY**Physics****PHY 105 Physics of the World Around Us 4.0 (3)****PHY 105L Physics of the World Around Us Lab.... 0.0 (2)**

Required prerequisite(s): MTH 23

Recommended prerequisite(s): Students scoring below ENG 111 level on the placement test should plan on additional study time.

Corequisite(s): PHY 105 and PHY 105L

This course is an introduction to the fundamental principles developed by mankind to describe the physical universe. In particular, the subjects of mechanics, heat, electricity, waves, and light are surveyed. The development of conceptual understanding and critical-thinking skills are emphasized. Computers are used for data acquisition and analysis. This course is offered in multiple formats such as online or traditional.

Group 1 lab course.

PHY 121 General Physics I 4.0 (4)**PHY 121L General Physics I Lab 0.0 (2)**

Required prerequisite(s): MTH 122 or MTH 140

Corequisite(s): PHY 121 and PHY 121L

This is the first in a two-semester sequential course intended to meet the needs of the prospective pre-medical, pre-dental, technical, maritime, architecture, or any other student who has a keen interest in examining some of the basic laws and applications of physics, using college algebra and trigonometry. This course deals with mechanics, sounds, thermodynamics and fluids. The lab portion is designed to illustrate and reinforce the basic concepts of physics while familiarizing the student with laboratory hardware and the experimental nature of physics. **Group 1 lab course.**

PHY 122 General Physics II 4.0 (4)**PHY 122L General Physics II Lab 0.0 (2)**

Required prerequisite(s): PHY 121

Corequisite(s): PHY 122 and PHY 122L

A continuation of PHY 121, studies in electricity, magnetism, optics and modern physics are included and reinforced in lecture as well as the laboratory setting. **Group 1 lab course.**

PHY 221 Probs. & Principles of Physics I 4.0 (3)**PHY 221L Probs. & Principles of Physics I Lab 0.0 (2)****PHY 221R Probs. & Prin. of Physics I Rec 1.0 (2)**

Required prerequisite(s): MTH 141, may be taken concurrently

Corequisite(s): PHY 221, PHY 221L and PHY 221R

Recommended prerequisite(s): ENG 111, may be taken concurrently

This course is the first semester of a two-semester course sequence primarily intended for those students preparing for engineering, science, or math careers. Topics include kinematics, Newton's Laws, conservation of momentum, conservation of energy, rotational motion, oscillations, and fluids. The development of conceptual understanding and problem-solving skills are emphasized. Computers are used for data acquisition and analysis. **Group 1 lab course.**

- PHY 222 Probs. & Principles of Physics II** 4.0 (3)
PHY 222L Probs. & Principles of Physics II Lab ... 0.0 (2)
PHY 222R Probs. & Prin. of Physics II Rec 1.0 (2)

Required prerequisite(s): PHY 221

Corequisite(s): PHY 222, PHY 222L and PHY 222R

This course is a continuation of PHY 221. Topics include thermodynamics, waves, electricity, electric circuits, magnetism and optics. The development of conceptual understanding and problem-solving skills are emphasized. Computers are used for data acquisition and analysis. A recitation accompanies the lecture and lab. **Group 1 lab course.**

Visit www.nmc.edu/science-math for detailed information.

PLS Political Science

- PLS 101 Intro to American Politics** 3.0 (3)

Recommended prerequisite(s): Placement into ENG 111

This course is an introduction to the study of politics and political institutions in America. Emphasis is given to the constitutional framework, federalism, political participation, the electoral system, the presidency, Congress, the Supreme Court, and the bureaucracy. Civil rights and civil liberties are a theme throughout. This course includes an examination of the politics of race, and ethnic and cultural diversity in America.

Group 1 course.

- PLS 132 Comparative Politics** 3.0 (3)

Recommended prerequisite(s): Placement into ENG 111

This course provides a comparative analysis of political systems in developed and developing countries. Students learn about different forms of political organization as instituted and practiced in various countries. Students examine different methods of comparing political systems and learn to apply these methods in causal theories of political change. This course combines a focus on the basic structures of political systems with a thought-provoking analysis of the causes that give birth to those systems - thereby giving shape to the world in which we find ourselves today. Issues related to democracy, civil liberties, political rights, human rights, and economic development are analyzed throughout the course. **Group 1 course.**

- PLS 211 International Relations** 3.0 (3)

Recommended prerequisite(s): Placement into ENG 111

Students analyze the nature of international relations in the world today. This course offers a broad overview of political and economic issues in the international arena. Course includes an analysis of American foreign policy since World War II. Other topics include such things as conflict in the Middle East, ethnic conflict and nationalism the world over, and the increasing importance of organizations such as the United Nations and the World Trade Organization. Students assess the dynamics of conflict and cooperation on the international scene. Course includes an examination of the basic analytical approaches to the study of international relations.

Group 1 course.

- PLS 222 Intro to Political Theory** 3.0 (3)

Recommended prerequisite(s): Placement into ENG 111

This course examines basic questions of normative political theory as developed by political philosophers of the ancient through contemporary periods. This course focuses on a wide array of political issues. Topics of consideration include: individual rights v. community rights; analysis of the equality of individuals; different conceptions of justice put forth by various philosophers; and questions of what it means to achieve freedom in one's social and political life. Students can expect to read almost exclusively from primary sources. Examples of thinkers often studied in this course include Plato, Aristotle, Machiavelli, Hobbes, Locke, Rousseau, Kant, Marx, Mill, Nietzsche, and Berlin. **Group 1 course.**

PLU Plumbing Technology

- PLU 101 Introduction to Plumbing** 3.0 (4)

Recommended competencies: COMPASS placement into MTH 23 and ENG 11/111 or co-enrollment in the recommended developmental Math and English course

This course provides an introduction to plumbing. Through structured classroom and hands-on skill building, the student will learn the tools of the trade, plumbing safety, how to solder and braze copper tubing, piping skills and trade mathematics.

Group 2 course.

- PLU 105 Plumbing Components** 3.0 (4)

Required prerequisite(s): PLU 101

Through structured classroom and hands-on skill building, the student will learn to work with copper pipe and fittings, cast-iron pipe and fittings, carbon steel pipe and fittings, corrugated stainless steel tubing, fixtures and faucets, drain waste and vent systems and water distribution systems. **Group 2 course.**

- PLU 121 Commercial Plumbing** 3.0 (4)

Required prerequisite(s): PLU 105

Through structured classroom and hands-on skill building, the student will learn to read commercial drawings, hangers, supports, structural penetrations, and fire stopping, installation and testing DWV piping. **Group 2 course.**

- PLU 125 Plumbing Installation** 3.0 (4)

Required prerequisite(s): PLU 121

Through structured classroom and hands-on skill building, the student will learn installation of roof, floor, and drain areas, types of valves, installing and testing water supply piping, installing fixtures, valves, and faucets, basic electricity, installing water heaters, fuel gas systems and servicing plumbing fixtures.

Group 2 course.

- PLU 131 Advanced Plumbing Practices** 3.0 (4)

Required prerequisite(s): PLU 125

Through structured classroom and hands-on skill building, the student will learn to use applied math, size water supply piping, potable water treatment, backflow preventers and types of venting. **Group 2 course.**

PLU 135 Plumbing Systems and Pumps 3.0 (4)*Required prerequisite(s): PLU 131*

Through structured classroom and hands-on skill building, the student will learn sizing DWV and storm systems, sewage pumps and sump pumps, corrosive-resistant waste piping and compressed air. **Group 2 course.**

PSY**Psychology****PSY 100 Career Exploration & Planning 1.0 (1)**

Planning a career can be challenging because of the unknown. This course is designed to introduce the student to career and life planning theories and concepts and assist in applying these principles to their own lives. A variety of techniques will be used to accomplish this including activities on self-assessment of skills, values, interests, personality, and preferences; small group discussions; and written assignments. Development of goal-setting and decision-making skills will be included to enable the student to take charge of their career direction with known information. **Group 2 course.**

PSY 101 Introduction to Psychology 3.0 (3)

This course provides a broad, general introduction to psychology, its basic subject matter, and its approaches to gathering and evaluating evidence about the causes and correlates of behavior. It includes: a) awareness of major psychological approaches to the study of the behavior of organisms; b) knowledge of its important contributors; c) knowledge of research findings, and concepts; and d) understanding of its methodology and limitations. **Group 1 course.**

PSY 211 Developmental Psychology 3.0 (3)*Required prerequisite(s): PSY 101*

This course presents human development from conception to death including the historical and anthropological bases for studying development. The course includes hereditary factors as well as physical, social and emotional, linguistic, intellectual, and personality development. **Group 1 course.**

PSY 212 Psychology/Exceptional Child 3.0 (3)*Required prerequisite(s): CD 202 or PSY 101**Recommended prerequisite(s): Placement into ENG 111*

This course will provide an examination of the atypical child and his or her developmental needs, including the family. Areas covered will include characteristics, identification processes, methods for contributing to the child's healthy development and educational needs, community resources and referral procedures. The course will include the child with sensory, physical and speech impairments. The gifted child's development will also be explored. **Group 1 course.**

PSY 221 Psychology of Personality 3.0 (3)*Required prerequisite(s): PSY 101*

This course provides a presentation of the concepts, perspectives and terminology of major theorists in the field of personality psychology, as students explore the many psychological, physiological, social and cultural factors that affect personality

development. Students are encouraged to evaluate personality theories in relation to current research and application.

Group 1 course.**PSY 223 Intro to Social Psychology 3.0 (3)***Required prerequisite(s): PSY 101 or SOC 101*

This course is an introduction to social psychology theory and research. It covers the individual in the social context including how we perceive, judge, and are influenced by others. Topics such as conformity, attraction, liking, prejudice, attitudes, aggression, helping behavior, and interpersonal power are covered from a social psychological perspective. **Group 1 course.**

PSY 225 Human Sexuality 3.0 (3)*Required prerequisite(s): PSY 101**Recommended prerequisite(s): Placement into ENG 111*

Human Sexuality offers an introduction to all facets of the field, and involves discussions of theory, research, and practical information. The purpose of the course will be to develop a critical awareness of the dominant issues in the field and to refine the student's sense of sexual responsibility and integrity. This will be accomplished by exploring the biological, social, cultural, psychological, and personal elements of sexuality. **Group 1 course.**

PSY 231 Psychology of Adjustment 3.0 (3)*Recommended prerequisite(s): SOC 101, placement into ENG 111*

First, this course will provide the student with a broad introduction to the psychology of adjustment which investigates the processes involved in the dynamic interactions of the individual with his or her environment. Second, this course is designed to present procedures by which the student can harness the principles of learning and rational self-counseling in order to achieve personal goals. **Group 1 course.**

PSY 250 Abnormal Psychology 3.0 (3)*Required prerequisite(s): PSY 101**Recommended prerequisite(s): Placement into ENG 111*

This course is designed to give students a working vocabulary of the basic concepts of psychopathology, to help them critically evaluate theories and therapies in psychopathology, to develop an awareness of their own attitudes toward abnormal behavior, and acquire knowledge of the variety of techniques for overcoming interpersonal problems and living emotionally healthy lives. **Group 1 course.**



SOC**Sociology****SOC 101 Introduction to Sociology3.0 (3)***Recommended prerequisite(s): Placement into ENG 111*

This course is an introduction to the study of human group behavior through social interaction with special emphasis on culture, the socialization process, social stratification, collective behavior, social institutions, and social change.

Group 1 course.**SOC 201 Modern Social Problems3.0 (3)**

This course presents an introductory sociological analysis of causes, changes in, and attempts to effectively treat some of the major problems in contemporary American society. These include: hunger, environmental problems, poverty, crime and delinquency, family problems, and homelessness. Community involvement projects are encouraged. **Group 1 course.**

SOC 211 Marriage & the Family3.0 (3)*Recommended prerequisite(s): SOC 101, placement into ENG 111*

This course covers topics such as traditional and non-traditional families, love and intimacy, sexuality, marriage, parenting, family problems and aging. The concept of healthy human relationships in a partnership, and how to build and maintain them, is stressed. **Group 1 course.**

SOC 220 Gender & Society3.0 (3)*Recommended prerequisite(s): PSY 101 or SOC 101*

This course examines gender as a system of stratification. It approaches issues of gender in society from both a social, structural, and a social psychological perspective. Issues related to gender inequality in selected institutions such as economy, family, media, education, and politics are studied.

Group 1 course.**SOC 221 Russian Language and Culture4.0 (4)**

The class includes both classroom work in Russian language and culture as well as excursions and cultural experiences in Russia. The cultural component is designed to provide students with a context through which they will be able to understand and process new cultural information. Students will gain practical language skills that will be utilized during the time in Russia. The approach is interdisciplinary and will include units on economics, politics, history, music, architecture, and literature. **Group 1 course.**

SOC 231 Deviance & Criminal Behavior3.0 (3)*Recommended prerequisite(s): SOC 101*

This course examines the sociology of crime and criminal law; the social psychology of criminal behavior; the sociology of punishment and correction. Social, economic, political and biological factors are considered while exploring classical, contemporary, and critical thought. Prevention and intervention of criminal behavior are emphasized as well as punishment and correction. **Group 1 course.**

SPN**World Language
- Spanish****SPN 101 Elementary Spanish I4.0 (4)**

This course represents a comprehensive introduction to the Spanish language for the true beginner. Students will develop the ability to communicate in Spanish in everyday practical situations while acquiring some of the necessary skills for reading, writing, listening, and speaking. Cultural topics are integrated in each unit. **Group 2 course.**

SPN 102 Elementary Spanish II4.0 (4)*Required prerequisite(s): SPN 101 with a minimum grade of 2.0, required score on the NMC language placement test of instructor permission*

SPN 102 is a continuation of SPN 101 and focuses on the expansion of the communication skills of reading, writing, listening, and speaking. Cultural topics are integrated into each unit. **Group 2 course.**

SPN 201 Intermediate Spanish I4.0 (4)*Required prerequisite(s): SPN 102 with a minimum grade of 2.0, required score on the NMC language placement test, or instructor permission*

SPN 201 is designated to further develop language proficiency in reading, writing, listening, and speaking. A deeper exploration of Hispanic culture is presented in this course allowing students to transform themselves into truly active and proficient language users. **Group 1 course.**

SPN 202 Intermediate Spanish II4.0 (4)*Required prerequisite(s): SPN 201 with a minimum grade of 2.0, required score on the NMC language placement test, of instructor permission*

SPN 202 is a continuation of SPN 201 and focuses on the application of the communication skills of reading, writing, listening, and speaking within cultural contexts.

Group 1 course.**SPN 227A Spanish for Environmental Mgmt3.0 (3)***Required prerequisite(s): 3-4 years of high school Spanish**Corequisite(s): ENV 290 or instructor permission**Recommended prerequisite(s): SPN 201*

This course focuses on global environmental issues as an entry point for further development of Spanish conversational skills, technical vocabulary and cultural competencies. Through an exploration of current freshwater issues in a Latin American country, coupled with travel overseas, students will study relevant issues concerning environmental resource management, and engage in numerous community projects.

Group 1 course.

SWK**Social Work****SWK 121 Introduction to Social Work2.0 (2)***Recommended prerequisite(s): ENG 11/111 or ENG 111**Corequisite(s): SWK 170*

This course provides the student with an overview of programs and institutions in social work. This would include private and public agencies, public school services, community development agencies and specific organizations working with specialized persons or age groupings. The students will also explore varying types of job opportunities within these services as well as personal dimensions of people who are intending to enter the social work field. **Group 2 course.**

SWK 170 Service Internship Orientation1.0 (1)*Recommended prerequisite(s): ENG 11/111 or ENG 111**Corequisite(s): SWK 121*

Orientation and preparation for introductory internship experiences in social work areas. For example, introduction to use of supervision, supervisory evaluation, self-evaluation and varying agency structures and functions. Opportunities for internships will also be introduced. This course is done in class and seminar format, meeting one hour a week for five sessions, plus one eight hour seminar. **Group 2 course.**

SWK 211 Social Interviewing Skills3.0 (3)*Required prerequisite(s): SWK 121, SWK 170*

Introduction to types, purposes and stages of interviewing. Basic empathy training. Skill development for observation, listening, non-verbal communication rapport building, information giving and information gathering. Beginning training in recording and documentation. Emphases on self-monitoring and working with culturally diverse, oppressed or psychologically maladaptive clients. **Group 2 course.**

SWK 221 Introduction to Social Welfare3.0 (3)*Required prerequisite(s): SWK 121, SWK 170**Recommended prerequisite(s): PLS 101, placement into ENG 11/111 or ENG 111*

This course reviews the historical perspectives of social welfare, how these translate into services and the implications of these on society today. It then moves into modern social work systems and the existing attitudes, philosophies and the implications of economic, political, and cultural conditions. Varying major theories of behavior are also explored as they relate to social work and clients in need of services. **Group 2 course.**

SWK 290 Social Work Internship3.0 (3)*Required prerequisite(s): SWK 121, SWK 170*

This course helps to prepare students for the generalist practice in the field of social work. This is a field instruction course that students will engage in direct practice of social work education. Students will complete 120 hours in a human service agency. This placement will provide an opportunity to observe social workers while they work, as well as assisting in general service delivery under very close supervision. Students must complete 40 internship hours per credit, and finish the full 120 hours in one semester. **Group 2 course.**

THR**Theater****THR 151 Basic Acting.....4.0 (4)**

This course is an introduction to basic acting technique. The human voice as the actor's tool is explored through basic vocal and physical warm ups, and basic stage improvisational techniques are introduced. The course further emphasizes an introduction to basic auditioning rules and approaches; stage monologues are selected and performed, and students select and perform two person scenes.

THR 152 Acting II4.0 (4)*Recommended prerequisite(s): THR 151*

This course further emphasizes warm-ups, both vocal and physical, as well as advanced stage improvisation to hone the actor's skill level. The course focuses on advanced scene work through the study and performance of two Shakespearean scenes. Each student will leave the course with two prepared monologues; one serious and one comic. The audition process and monologue preparation are further emphasized, as well as the director's art and the craft of playwriting.

THR 211 Play Production4.0 (4)*Recommended prerequisite(s): THR 151, THR 152, may be taken concurrently*

This course emphasizes theory and practice of dramatic production demonstrated through the public presentation of a play. All students enrolled in the class will have the opportunity to act, as well as the chance to fill vital roles backstage in the areas of technical theater and stagecraft, as that semester's play is auditioned, cast, blocked, produced, and eventually performed. Students may enroll in play production four times for credit under numbers 211, 212, 213, and 214. To assure proper credit is received, please verify the 200 level theater course for which you are registering.

NMC.

Find it here.



VCA**Visual
Communications/Art****VCA 100 Materials and Techniques3.0 (4)***Recommended prerequisite(s): ART 121*

This course introduces students to commercial drawing techniques, with an emphasis on perspective, pen and ink, and color techniques in marker and pencil when illustrating a variety of different products and illustration formats. Creative media experimentation is encouraged. **Group 2 course.**

VCA 125 Typography I3.0 (4)*Required prerequisite(s): VCA 150*

This class serves as an introduction to typographic history, letterforms, mechanics, terminology, and usage. Students will complete projects that lead them to an understanding of the fundamental and technical aspects of this abstract art as it relates to the field of visual communications as well as print and electronic media. **Group 2 course.**

VCA 126 Typography II3.0 (4)*Required prerequisite(s): VCA 125*

This class serves as continuation to typographic history, trends, display faces and grids with an emphasis on book typography, binding and structuring methods. Students will complete projects that lead them to an understanding of intermediate typography, current typographic trends and comparative analysis of typefaces that relate to the field of Visual Communications as well as print and electronic media. **Group 2 course.**

VCA 127 Digital Imaging3.0 (4)*Recommended prerequisite(s): CIT 100 or understanding of basic computing skills**Recommended competencie(s): Basic keyboarding skills highly recommended. Use of the MacIntosh or Windows operated system required*

Students will learn Adobe Photoshop, a bitmap image manipulation tool used to create images for both print and the web. Students will learn how to incorporate color, use layers, create special effects, use filters and use the variety of selection techniques for proper image editing. Students will learn the basics of using a digital camera and scanner, color management, how to restore damaged images, automate tasks, and how to prepare files for print and digital media. **Group 2 course.**

VCA 146 Interactive Animation3.0 (4)*Required prerequisite(s): VCA 150**Recommended Prerequisite(s): VCA 125*

This course will focus on the exploration of interactive navigation, animation and storytelling that is created for and exists on the web. Design theory, interactivity, file architecture, web loading, hosting and uploading FLASH and exposure to Motion software will emphasize creative and narrative language. **Group 2 course.**

VCA 147 Web Design I3.0 (4)*Required prerequisite(s): VCA 127 and VCA 150 or instructor permission**Recommended Prerequisite(s): VCA 125*

This course will focus on creative website development and design including site planning, interactive navigation, information design theory, file management, and user experience. Basic principles of HTML, CSS, and Wordpress along with and introduction to Dreamweaver software will emphasize creative and utilitarian website construction. **Group 2 course.**

VCA 150 Digital Graphic Design I3.0 (4)*Recommended Prerequisite(s): CIT 100 or understanding of basic computer skills*

In this course you will learn and practice the basics of Adobe InDesign, a desktop publishing tool used to create layouts for print. You will learn how to create, format, manipulate and link text, use style sheets, create single and multipage documents, use frames, color management, import and create graphics, use tables and prepare files for production. In this course you will also learn the basics of Adobe Illustrator, a vector based tool used to create images and layouts for both print and interactive environments. You will learn how to create and manipulate basic shapes with the pen and pencil tools, create gradients, work with type, use layers, create shapes, use fill and stroke, use transform tools, use text tools, use the pen tool, print and choose appropriate color tools for correlating applications. **Group 2 course.**

VCA 200 Visual Communications II3.0 (4)*Required prerequisite(s): ART 122, ART 131, VCA 126, VCA 127**Recommended prerequisite(s): ENG 112**Corequisite(s): VCA 220*

Through this course you will gain insight and an introduction to the theory of graphic design through practice in researching, brainstorming, creative problem solving, comping and production of two and three dimensional graphic designs, logo marks, and three dimensional packaging while embracing traditional and digital techniques and receiving constructive criticism of your work and practice. **Group 2 course.**

VCA 220 Visual Communications III3.0 (4)*Required prerequisite(s): ART 122, ART 131, VCA 126, VCA 127**Recommended prerequisite(s): ENG 112**Corequisite(s): VCA 200*

Through this course, students will gain insight and introduction to the theory of advertising design and art direction through practice in researching, brainstorming, creative problem solving, comping and production of print advertising, advertising campaigns, television story boards and product branding, while embracing traditional and digital techniques and receiving constructive criticism of work and practice. **Group 2 course.**

VCA 225 Visual Communications Studio.....3.0 (4)

Required prerequisite(s): ART 112, ART 132, VCA 200, VCA 220

By the end of this course, students will have participated in two hands-on “real world” design projects in which you will act as writer, art director, designer, photographer or illustrator. Projects are for various local not-for-profit clients. You will learn all aspects of pre-press work, production and printing via field trips while also learning to work with clients and the self-driven responsibilities of independent work. **Group 2 course.**

VCA 230 Visual Communications V3.0 (4)

Required prerequisite(s): VCA 200, VCA 220 or instructor permission

In this course you will excel in setting occupational/educational aspirations and offering/receiving constructive criticism of your work. You will design and produce a body of work for your portfolio, tailored to your individual goals, be it in Illustration, Graphic Design, Motion Graphics or Art Direction. Progressive Visual Communications theory and practice will also be studied. **Group 2 course.**

VCA 235 Visual Communications Portfolio3.0 (4)

Required prerequisite(s): VCA 200, VCA 220

Students explore various methods of preparing professional portfolios, as well as the packaging and marketing of their portfolio works in preparation for further education and/or job interviews related to their career goals in visual communications. Along with the portfolio, each student prepares a resume, digital portfolio and considers other self-promotional pieces to complete the portfolio package. The emphasis of this course is that each student compiles a professional looking and complete portfolio package based on his/her occupational and educational goals. **Group 2 course.**

VCA 246 Interactive Animation II3.0 (4)

Required prerequisite(s): VCA 146

This course will focus on the advanced exploration of interactive navigation, animation and storytelling that is created for and exists on the web. Advanced Design theory, greater interactivity, file architecture, web loading, hosting and uploading for FLASH and more exposure to Motion software will emphasize creative and narrative language. Students should be self-motivated, this advanced section involves independent projects. **Group 2 course.**

VCA 250 Time Based Media I3.0 (4)

Required prerequisite(s): VCA 127

Recommended prerequisite(s): VCA 125

A multisensory, theory driven exposure and exploration of time-based visual communication environments. The role of typography, image, sound, space, luminosity and narrative are assessed and used to create sequences of moving image. Students are exposed to tools, theories, aesthetics and techniques used in the time-based medium in a more advanced level using Final Cut Pro HD. Students should be self-motivated, this advanced section involves independent projects.

Group 2 course.

VCA 252 Time Based Media II3.0 (4)

Recommended prerequisite(s): VCA 250 or instructor permission

A multisensory, theory driven continuation and exploration of time-based visual communication environments. The role of typography, image, sound, space, luminosity and narrative are assessed and used to create sequences of moving image. Students are exposed to tools, theories, aesthetics and techniques used in the time-based medium in a more advanced level using Final Cut Pro HD. Students should be self-motivated, this advanced section involves independent projects.

Group 2 course.

VCA 290 Visual Communications Internship3.0 (4)

Required prerequisite(s): Students must have completed all VCA courses with a minimum 2.5 GPA and departmental approval.

This course is required for the Associate of Applied Science degree in Creative Management in Art Direction. The purpose of the internship is to provide on-the-job experience for the student who wished to pursue a career in visual communications. The internship will be customized to meet the learning needs of the student and the job requirements of the sponsoring firms. Students spend 15 hours per week in this paid or non-paid, supervised on-the-job training experience. In addition to the required 180 hours in a graphic design business site, students participate in bi-weekly reports and weekly online discussion boards with instructor. Students must apply one month prior to the semester in which they will complete the internship.



WPT**Welding Process Technology****WPT 100 Combined Welding (GAS) 2.0 (3)**

This course provides the student with the opportunity to learn the theory and application of safe oxy-acetylene welding and cutting techniques in the flat and horizontal positions on mild steel. **Group 2 course.**

WPT 102 Combined Welding (ARC)..... 2.0 (3)

This course provides the student an opportunity to learn theory and application of safe Shielded Metal Arc Welding (SMAW) techniques in the flat and horizontal positions using “fast freeze” electrodes. **Group 2 course.**

WPT 110 Oxy-Fuel Process 3.0 (5)

This course is designed for Welding students pursuing job skills or transferring into a Welding degree program. Topics include oxyacetylene welding in the flat, horizontal and vertical positions; oxyacetylene cutting, and oxyacetylene brazing. Students learn safety and theory as well as develop their proficiency in these operations. **Group 2 course.**

WPT 120 GTAW (TIG) Welding I 2.0 (3)

Required prerequisite(s): WPT 100 or WPT 110

This course provides the student with the opportunity to learn and apply the theory of basic Gas Tungsten Arc Welding (GTAW) welding techniques on ferrous and non-ferrous metals in the flat and horizontal positions. **Group 2 course.**

WPT 121 GTAW (TIG) Welding II 2.0 (3)

Required prerequisite(s): WPT 120

This course provides students the opportunity to learn and apply welding techniques using the Gas Tungsten Arc Welding (GTAW) process on ferrous and non-ferrous metals on advanced joint designs and in the vertical position.

Group 2 course.

WPT 130 SMAW (Arc) Welding I 3.0 (5)

This course is designed for students pursuing job skills or transfer into a Welding degree program. Students learn theory and application of safe Shielded Metal Arc Welding (SMAW) in the flat and horizontal positions. They develop skills with “fast freeze” and “low hydrogen” type electrodes. Topics include welding terminology, electrical theory as it relates to SMAW, weld defects and quality, and the American Welding Society SMAW filter material numbering system.

Group 2 course.

WPT 131 SMAW (Arc) Welding II 2.0 (3)

Required prerequisite(s): WPT 130

This course provides the student with advanced theory and application of Shielded Metal Arc Welding (SMAW) techniques in the flat, horizontal and vertical positions using “fast freeze” and “low hydrogen” electrodes. Topics include weld quality, inspection, power sources, and trouble shooting.

Group 2 course.

WPT 140 GMAW (MIG) Welding I..... 2.0 (3)

This course provides the student an opportunity to learn the theory and application of basic Gas Metal Arc Welding (GMAW) techniques on ferrous metals. **Group 2 course.**

WPT 141 GMAW (MIG) Welding II..... 2.0 (3)

Required prerequisite(s): WPT 140

This course provides students the opportunity to learn and apply safe welding techniques using the Gas Metal Arc Welding (GMAW) process on ferrous and non-ferrous metals on advanced joint designs and welding positions. **Group 2 course.**

WPT 142 Flux Cored Arc Welding 2.0 (3)

Required prerequisite(s): WPT 140

This course provides students the opportunity to learn and apply safe welding techniques using the Flux Cored Arc Welding (FCAW) process. **Group 2 course.**

WPT 160 Weld. Qualification Prep-SMAW 2.0 (3)

Required prerequisite(s): WPT 131

This course provides experienced welders/students the opportunity to take the AWS welder qualification tests in Shielded Metal Arc Welding (SMAW). **Group 2 course.**

WPT 160A Weld. Qualification Prep-GMAW..... 2.0 (3)

Required prerequisite(s): WPT 141

This course provides experienced welders/students the opportunity to take the AWS welder qualification tests in Gas Metal Arc Welding (GMAW). **Group 2 course.**

WPT 160B Weld. Qualification Prep-GTAW 2.0 (3)

Required prerequisite(s): WPT 121

This course provides experienced welders/students the opportunity to take the AWS welder qualification tests in Gas Tungsten Arc Welding (GTAW). **Group 2 course.**

WPT 160C Weld. Qualification Prep-FCAW..... 2.0 (3)

Required prerequisite(s): WPT 142

This course provides experienced welders/students the opportunity to take the AWS welder qualification tests in Flux Cored Arc Welding (FCAW). **Group 2 course.**





Student Rights & Responsibilities

Student Rights & Responsibilities - Process

1. General Statement of Student Rights and Responsibilities

- a. The purpose of the Student Rights and Responsibilities statement is to define a student's basic rights within the college community, state what actions students may expect from the college to protect those rights, and explain the college's expectations of its student members, including the standards by which student behavior are measured. This statement describes unacceptable student behavior and outlines the procedures by which students are disciplined if they engage in unacceptable conduct.
- b. Students have the right to be treated fairly by the college and to be informed of college policies and/or regulations affecting them. Any student accused of violating college policies and/or regulations is entitled to fair and balanced procedural protection.

2. General Jurisdiction

Application to Academic Students: A person must be officially admitted and/or currently registered for an academic credit course to be considered a student under this policy.

3. Student Code of Conduct

a. *Jurisdiction*

- i. The jurisdiction of the college shall extend to personal behavior and conduct which occurs on Northwestern Michigan College property, or at any official college function or activity whether those activities are social, professional, or academic.
- ii. The Dean of Enrollment Management and Student Services shall have original jurisdiction over all complaints involving Section 3. b. (Prohibited Behavior). The College Review Board shall have exclusive jurisdiction over all appeals under Section 3.

b. **Prohibited Behavior:** The following behavior and conduct is prohibited. This list is not intended to be exhaustive and the college reserves the right to impose discipline for personal behavior and conduct that may not be expressly identified in Section 3. b. if the student knew or should have known that the conduct was not appropriate under the circumstances.

- i. Interference with the teaching and learning process, including the use of profanity toward another student or faculty/staff member.
- ii. Physical abuse, verbal abuse, threats, intimidation, harassment, coercion, and/or other conduct which threatens or endangers the health or safety of any person, including sexual assault against any student, faculty, staff, or guest of the college.
- iii. Discrimination based on age, color, disability/handicap, height, marital status, national origin, political affiliation, race, religion, gender, sexual orientation, veteran's status, or weight.
- iv. Interference by force, threat, harassment, or duress with an individual's personal safety, academic efforts, employment, or participation in college-sponsored activities and/or creating a reasonable apprehension that such interference is about to occur. This includes stalking.
- v. Disruption of college activities and college business, including, but not limited to, classes, convocations, and student services.
- vi. Continued occupation of a college facility after being requested to leave by any person acting as an authorized agent of the college.
- vii. Defacement, damage to, or theft of college property and/or that of another student, faculty, staff, or guest of the college.
- viii. Tampering with fire alarms, safety systems, or the unauthorized setting of fires.
- ix. Dishonesty, including, but not limited to, cheating, furnishing false information to the college, forgery, misuse or alteration of any college document, or misuse of the college computer system. Academic dishonesty is covered in the Academic Code of Behavior as set forth in Section 5.
- x. Making a false report concerning a fire, bomb, or other alleged emergency.

- xi. Use, possession, manufacture, or distribution of drug paraphernalia, controlled substances, and look-alike drugs. The use of tobacco products and alcoholic beverages as prohibited by NMC policies and/or state law.
- xii. Possession, while on campus or at a college-sponsored function, of any weapons, or look-alike weapons, including, but not limited to firearms, explosives, dangerous chemicals, knives, brass knuckles, licensed weapons, or objects or instruments possessed for use as a weapon or for direct or indirect delivery to another person for use as a weapon.
- xiii. Willful disobedience of college officials or authorized agents acting in the performance of their duties.
- xiv. Willful violation of college rules, regulations, procedures, and policies as promulgated in college policy statements.
- xv. Any violation of a local ordinance, or state or federal law.
- xvi. Unauthorized possession, duplication, or use of keys to any college premises, or unauthorized entry to or use of college premises, or tampering with any door or door locking mechanism.
- xvii. Bringing animals into the classrooms or buildings, with the exception of Seeing Eye dogs, or dogs trained to assist persons with a disability recognized under state or federal law.
- xviii. To maintain classroom integrity, only those students registered for an NMC class may attend that class, except for authorized guests.
- xix. Conduct which is disorderly, lewd, or indecent; which includes the use of electronic/digital recording and/or imaging devices used to take images and/or recordings of persons without their knowledge and/or consent; breach of the peace; aiding, abetting, or procuring another person to breach the peace on college premises or at functions sponsored by the college, or participated in by the college.
- xx. Theft or other abuse of computer time, as described in the Computer and Network Acceptable Use Policy including, but not limited to:
 - (a) Unauthorized entry into a file to use, read, or change the contents, or for any other purpose.
 - (b) Unauthorized transfer of files.
 - (c) Unauthorized use of another individual's identification or password.
 - (d) Use of computer facilities to interfere with the work of another student, faculty/staff member, or college official.
 - (e) Use of computer facilities to send or publish threatening, obscene, or abusive messages.
 - (f) Use of computer facilities to view and/or print obscene or offensive images.
 - (g) Use of computer facilities to interfere with normal operations of the college computer system.
- xxi. Abuse of the disciplinary process, including, but not limited to:
 - (a) Failure to obey the summons of a disciplinary body or college official.
 - (b) Falsification, distortion, or misrepresentation of information before a disciplinary body.
 - (c) Disruption or interference with the orderly conduct of a disciplinary proceeding.
 - (d) Interruption of a disciplinary proceeding.
 - (e) Attempting to discourage an individual's proper participation in, or use of, the disciplinary system.
 - (f) Attempting to influence the impartiality of a member of a disciplinary body prior to, and/or during the course of, the disciplinary proceeding.
 - (g) Verbal or physical harassment and/or intimidation of a member of a disciplinary body prior to, during, and/or after a disciplinary proceeding.
 - (h) Failure to comply with the sanction(s) imposed under the Student Code of Conduct.
 - (i) Influencing or attempting to influence another person to commit an abuse of the disciplinary system.

c. **Report of Violations – Initial Inquiry**

- i. Any person may report that a student has allegedly violated the Student Code of Conduct to the Dean of Enrollment Management and Student Services, or his/her designee.
 - ii. Upon receiving such a report, the Dean of Enrollment Management and Student Services or his/her designee may conduct an informal inquiry to determine:
 - (a) If there is jurisdiction over the alleged violation;
 - (b) Whether the accused is a student, as defined in Section 2;
 - (c) Whether the alleged conduct is prohibited; and
 - (d) Whether a sanction is probable, if the allegation is proven.
- d. **Procedures:** Following an informal inquiry, if the Dean of Enrollment Management and Student Services or his/her designee determines that the alleged violation, if proven, would result in a written warning, the procedures as set forth in Section 3. d. i. of the Student Code of Conduct shall apply. If the Dean of Enrollment Management and Student Services or his/her designee determines that the alleged violation, if proven, could result in the imposition of a sanction or sanctions more severe than a warning, the procedures as set forth in Section 3. d. ii. of the Student Code of Conduct will apply.
- i. If the Dean of Enrollment Management and Student Services or his/her designee determines after discussing with the student that a violation has occurred and the sanction for the violation should be a written warning, the following procedures shall be used:
 - (a) A written warning shall be administered and presented to the student by the Dean of Enrollment Management and Student Services, or by his/her designee, or any other authorized employee of the College.
 - (b) Written notice of the conduct constituting the violation and the nature of the warning shall be filed by the Dean of Enrollment Management and Student Services or his/her designee or any other authorized employee with the Office of Student Services.
 - (c) There shall be no appeal from this written warning.
 - (d) All written warnings and notices will be securely stored in the office of the Dean of Enrollment Management and Student Services. This material will be held for a minimum of three years.
 - ii. If the Dean of Enrollment Management and Student Services, or his/her designee, has a reasonable basis to believe a sanction more severe than a warning could be imposed, then the following procedures will be used:
 - (a) **Complaint.** All proceedings other than the administration of a warning shall commence with the filing of a written complaint with the Dean of Enrollment Management and Student Services as soon as reasonable following the date of the alleged violation. A complaint may be filed only when there is a good faith belief that there has been a violation of prohibited behavior.
 - (b) **Form of Complaint.** The complaint shall include (1) facts alleged to constitute a violation; (2) the provision(s) of the Student Code of Conduct alleged to have been violated; and (3) the name of the student alleged to have committed the violation.
 - (c) **Who May File.** The complaint may be filed by (1) a college administrator or staff person; (2) faculty member; (3) student; (4) resident hall staff; or (5) other individual as designated or confirmed by the Dean of Enrollment Management and Student Services.
 - (d) **Service.** The student against whom the complaint is made shall be personally notified and provided a copy of the complaint and the probable sanctions by the Dean of Enrollment Management and Student Services or his/her designee, as soon after the complaint is filed as possible.
 - (e) **Response.** A student served with a complaint shall elect one of the following options within three (3) college business days after service of the complaint by completing, signing, and returning the Student Response form to the Dean of Enrollment Management and Student Services.
 - (i) The student may admit the alleged violation and be sanctioned accordingly.
 - (ii) The student may request mediation, if the Dean of En-

rollment Management and Student Services and other affected parties agree to mediation. If mediation fails or is not agreed to by the Dean of Enrollment Management and Student Services or any of the other parties, the individual shall proceed under options (i) or (iii) of this section.

(iii) The student may deny the alleged violation.

If the Student Response Form is not completed and returned within three (3) college business days after service, the Dean of Enrollment Management and Student Services may treat such action as an admission of the violation and administer a sanction.

- (f) **Investigation.** If the student denies the allegations, the Dean of Enrollment Management and Student Services will, within a reasonable period of time, but not more than fifteen (15) college business days, begin the investigation process. The Dean of Enrollment Management and Student Services shall take the following action:
 - (i) Meet with the student and other relevant parties.
 - (ii) If necessary, assign an impartial investigator to conduct further investigation pursuant to the College's "Investigation Guidelines."
 - (iii) Present the student with all of the evidence upon which a decision will be made and an opportunity for the student to refute the evidence.
- (g) **Findings.** Following completion of the Investigation provided under ii. (f) above, the Dean of Enrollment Management and Student Services shall take the following action:
 - (i) Evaluate all evidence presented and, either:
 - Dismiss the complaint for lack of clear and convincing evidence that a violation of the Student Code of Conduct occurred or that the accused did not commit the act that resulted in a violation, or
 - Based on a finding of clear and convincing evidence, determine that a violation of the Student Code of Conduct was committed by the accused and impose an appropriate sanction.
 - (h) **Notice.** As soon as the Dean of Enrollment Management and Student Services makes a finding, the Dean shall notify the student in writing.
- e. **Sanctions:** A sanction is an action taken when the Student Code of Conduct has been violated. One or more of the following sanctions may be applied. If the student expressly waives his/her right to be sanctioned under this section, the college may impose a different sanction than those listed.
 - i. **Warning.** Notice, orally or in writing, that continuation or repetition of conduct in violation of Section 3. b. may be cause for more severe disciplinary action.
 - ii. **Censure.** A written reprimand, including the possibility of more severe disciplinary sanctions in the event of a subsequent violation of a college regulation within a stated period of time.
 - iii. **Letter of Apology.** The student will prepare and send a letter of apology to the victim(s) of the misconduct.
 - iv. **Probation.** Exclusion from participation in privileges or extra-curricular college activities for a period not to exceed one academic year from date of offense or infraction.
 - v. **Restitution.** Reimbursement for defacement, damage to, or misappropriation of property, or personal injury expenses.
 - vi. **Community Service.** The performance of an appropriate amount of public service that is both beneficial to the community and which will likely assist the individual in understanding the harm caused by his or her conduct.
 - vii. **Attendance.** Enrollment and completion of a class that helps the person understand the harm caused by his or her conduct. This sanction may be required for alcohol, substance abuse, or psychological assessments.
 - viii. **Restricted Student Status.** The student will be allowed to go to and from classes only and will not be allowed to participate freely in any other campus activity. Campus security services may be required, if deemed appropriate. This sanction may remain in effect

until completion of the disciplinary process.

- ix. **Disciplinary Suspension.** Exclusion from classes and other privileges or activities as set forth in the notice for a definite period of time. A disciplinary suspension will be held in abeyance during an appeal.
 - x. **Emergency Suspension.**
 - (a) Exclusion from campus and/or classes and/or other privileges or activities for purposes of investigation, and/or relieving the tension of the student body or class due to a serious infraction of campus rules; or removing a threat to the well-being of the students, or removing for the good of the order of the college a student or students whose presence would prevent the continued normal conduct of the academic community.
 - (b) Emergency Suspension may be imposed immediately by the Dean of Enrollment Management and Student Services or by his/her designee without the filing of a complaint. Emergency Suspension will continue until reviewed by the Dean of Enrollment Management and Student Services. If the Emergency Suspension is continued for more than three (3) college business days, the student shall have the right to appeal to the College Review Board within seven (7) college business days following the emergency suspension. Students who are suspended for disciplinary reasons will receive a grade of W for all classes in which he/she is enrolled. If the suspension is overturned and the student does not wish to finish the semester, tuition, and fees paid for that semester may be applied toward future enrollments or refunded.
 - xi. **Expulsion.** Termination of student status. Re-admission may not be sought before the expiration of one academic year from the date of expulsion.
 - xii. **Permanent Expulsion.** Permanent expulsion is for the most severe cases, with no rights for future re-admission considered.
- f. **Appeal:** An appeal of the Dean of Enrollment Management and Student Services' finding that a violation occurred and/or the imposed sanction or sanctions may be taken to the College Review Board. (See Section 7). A notice of appeal must be filed with the office of the Dean of Enrollment Management and Student Services within ten (10) college business days after the student has received notice of the decision of the Dean of Enrollment Management and Student Services.
4. **Residence Hall Code of Conduct**
- a. **Jurisdiction**
 - i. The Director of Residence Life and Judicial Affairs and the Dean of Enrollment Management and Student Services shall have jurisdiction, respectively, in all cases involving code violations under the Residence Hall Code of Conduct as set forth in Section 4. b.
 - ii. Personal actions on NMC Residence Hall property, adjacent areas, or at official Residence Hall sponsored functions, as proscribed in Section 4. b., are governed by the Residence Hall Code of Conduct.
 - b. **Prohibitive Behavior:** The following behavior and conduct is prohibited. This list is not intended to be exhaustive and incorporates by reference all prohibited personal behavior included in Section 3. b. of this publication for purposes of a warning. The College reserves the right to impose discipline for personal actions that may not be expressly identified in Section 4. b. if the student knew or should have known that the conduct was not appropriate under the circumstances.
 - i. The manufacture, use, or sale of alcohol, inhalants, and other drugs are prohibited. Alcohol containers and drug paraphernalia are also prohibited.
 - ii. Knowingly being present in a residence hall room where a prohibited substance is being used, but not using it or consuming it yourself.
 - iii. Any violation of a local ordinance, or state or federal law.
 - iv. Violation of posted quiet hours or making continued noise during other hours when requested by another resident to limit your noisemaking. These other hours are commonly referred to as *courtesy hours*.
 - v. Burning of items such as incense, candles, embers, natural fuel, oil, kerosene, propane, and charcoal.
 - vi. Keeping of fireworks, gasoline, and all other combustibles.
 - vii. Keeping or using any item which displays an open heating element, such as hot plates and hot pots.
 - viii. Keeping of motorcycles or other fuel-driven engines in your room.
 - ix. Keeping of natural cut trees, leaves, or greens in your room other than potted plants.
 - x. Keeping of firearms, weapons, including, but not limited to, hunting knives, swords, brass knuckles, and martial arts weapons.
 - xi. Keeping of look-alike weapons, including, but not limited to, pellet guns.
 - xii. Keeping of paintball guns and paintball pellets.
 - xiii. Allowing a guest to stay in your room or other resident's rooms for more than three nights per semester.
 - xiv. Allowing a guest of the opposite sex to stay in your room without the written and verbal permission of your roommate and suite-mate(s), filed a minimum of 24 hours prior to the visit with your resident assistant.
 - xv. Allowing a guest to enter the living areas of the Residence Halls without signing in at the Front Desk during the hours of 10:00 p.m. and 8:00 a.m.
 - xvi. Allowing guests in your room who are under the age of 18 years. The only exceptions are those guests who are NMC students or family members.
 - xvii. Smoking inside any areas of the Residence Halls including individual rooms.
 - xviii. Instigating offensive odors in any areas of the Residence Halls including individual rooms. Offensive odors may be defined as, but not limited to, clove cigarettes, pipes, potpourri, or use of fragrant sprays.
 - xix. The throwing of any material (including liquids) from windows.
 - xx. Entering a room through a window.
 - xxi. Unauthorized access to, and on the roof of either Residence Hall building, and the glass skylight area of the Student Center in West Hall.
 - xxii. Keeping your Residence Hall room in an unsafe or condition that hinders the health of yourself and others.
 - xxiii. Use of nails, tape, putty, glue, or any adhesive material as decorations in your room, which may cause damage.
 - xxiv. Writing directly on furniture, walls, doors, floors, and windows in your Residence Hall room.
 - xxv. Failure to remove your garbage to the dumpsters located behind West Hall.
 - xxvi. Disposing of garbage, including cigarette butts, on the ground.
 - xxvii. Entering the cafeteria without a shirt or shoes or in a swimsuit.
 - xxviii. Transferring use of your meal card to another person.
 - xxix. Decorating your room with alcohol bottles, cans, or boxes.
 - xxx. For your safety and the safety of others, all sports are banned inside the Residence Hall buildings. This includes bike riding, rollerblading, and any kind of ball play.
 - xxxi. Not evacuating during a fire alarm.
 - xxxii. Failure to comply with sanction(s) imposed under the Residence Hall Code of Conduct.
- c. **Report of Violations – Initial Inquiry**
- i. Any person may report that a student has allegedly violated the Resident Hall Code of Conduct to the Director of Residence Life and Judicial Affairs.
 - ii. Upon receiving such a report, the Director of Residence Life and Judicial Affairs, or his/her designee, may conduct an informal inquiry to determine:
 - (a) If there is jurisdiction over the alleged violation;
 - (b) Whether the accused is a student, as defined in Section 2.
 - (c) Whether the alleged conduct is prohibited; and
 - (d) Whether a sanction is probable, if the allegation is proven.
- d. **Procedures:** Following an informal inquiry, if the Director of Residence Life and Judicial Affairs, or his/her designee, determines that the alleged violation, if proven, would result in a written warning, then the procedures as set forth in Section 4. d. i. of the Residence Hall Code of Conduct will apply. If the Coordinator of Student Life or his/her designee determines that the alleged violation, if proven, could result in

the imposition of a sanction more severe than a warning, the procedures as set forth in Section 4. d. ii. of the Residence Hall Code of Conduct will apply.

- i. Upon completion of an investigation, if the Director of Residence Life and Judicial Affairs, or his/her designee, determines after discussing with the student that a violation has occurred and the appropriate sanction for the violation should be a written warning with appropriate counseling, the following procedures will be used:
 - (a) A written warning shall be administered and presented to the student by a Residence Life Supervisor, or the Director of Residence Life and Judicial Affairs, or any other authorized employee of the College.
 - (b) Written notice of the conduct constituting the violation and the nature of the warning shall be filed by the appropriate staff member with the Office of Residence Life.
 - (c) There shall be no appeal from this written warning.
 - (d) All written warnings and notices will be securely stored in the office of the Dean of Enrollment Management and Student Services. This material will be held for a minimum of three years.
- ii. If the Director of Residence Life and Judicial Affairs has a reasonable basis to believe a sanction other than a warning could be imposed for the alleged violation of the Residence Hall Code of Conduct, the following procedures shall be used:
 - (a) **Complaint.** A complaint shall be filed with the Director of Residence Life and Judicial Affairs as soon as reasonable following the date of the alleged violation. A complaint may be filed only where there is a good faith belief that there has been a violation of the prohibited conduct.
 - (b) **Form of Complaint.** The complaint shall include (1) facts alleged to constitute a violation; (2) the provision(s) of the Residence Hall Code of Conduct believed to have been violated; (3) the name of the student(s) alleged to have committed the violation.
 - (c) **Who May File.** The complaint can be filed by (1) a college administrator or staff person; (2) faculty member; (3) student; (4) resident hall staff; or (5) another individual as designated or confirmed by the Director of Residence Life and Judicial Affairs.
 - (d) **Service.** The student against whom the complaint is made shall be personally notified and provided a copy of the complaint and the probable sanction by the Director of Residence Life and Judicial Affairs as his/her designee as soon after the complaint is filed as possible.
 - (e) **Response.** A student served with a complaint shall elect one of the following options within three (3) college business days after service of the complaint by completing, signing, and returning the Student Response form to the Director of Residence Life and Judicial Affairs.
 - (i) The student may admit the alleged violation and be sanctioned accordingly.
 - (ii) The student may request mediation, if the Director of Residence Life and Judicial Affairs and other affected parties agree to mediation. If mediation fails or is not acceptable to the Director of Residence Life and Judicial Affairs or any of the other parties, the individual shall proceed under options (i) or (iii) of this section.
 - (iii) The student may deny the alleged violation. If the Student Response form is not completed and returned within the seven (7) college business days, the Director of Residence Life and Judicial Affairs may treat such action as an admission of a violation, and administer a sanction.
 - (f) **Investigation.** If the student denies the allegation, the Coordinator of Housing and Residence Life shall, within a reasonable period of time, but not more than fifteen (15) college business days, begin the investigation process. The Director of Residence Life and Judicial Affairs shall take the following action:
 - (i) Meet with the student and other appropriate parties.
 - (ii) If necessary, assign an impartial investigator to conduct further investigations pursuant to the College's "Investigation Guidelines."
 - (iii) Present the student with all of the evidence upon which

a decision will be made and provide the student with an opportunity to refute the evidence.

- (g) **Findings.** Following completion of the Investigation provided under (ii)(f) above, the Dean of Enrollment Management and Student Services shall take the following action:

- (i) Evaluate all evidence presented and, either:
- (ii) Dismiss the complaint for lack of clear and convincing evidence that a violation of the Residence Hall Code of Conduct occurred or that the accused did not commit the act that resulted in a violation, or
- (iii) Based on a finding of clear and convincing evidence, determine that the accused violated the Residence Hall Code of Conduct and impose an appropriate sanction.

- e. **Sanctions:** A sanction is an action taken when the Residence Hall Student Code of Conduct has been violated. Sanctions are meant to assist in creating a community which upholds the educational mission of the Residence Halls. If the student expressly waives his/her right to be sanctioned under this section, the College may impose a different sanction.

- i. **Warning.** Notice, orally, or in writing, that continuation or repetition of student conduct in violation of prohibited conduct as set forth in Section 3. b., and Section, 4. b., may be cause for more severe disciplinary action.
- ii. **Censure.** A written reprimand, including the possibility of more severe disciplinary sanctions in the event of a subsequent violation of a Residence Hall violation within a stated period of time.
- iii. **Letter of Apology.** The student will prepare and send a letter of apology to the victim(s) of the misconduct.
- iv. **Restitution.** Reimbursement for defacement, damage to, or misappropriation of property, or personal injury expenses.
- v. **Fines.** Differing from reimbursement in that the monetary amount required is a pre-set designation and is not tied to cost of defacement or damage.
 - (a) Smoking violation; \$25 fine per offense
 - (b) Throwing items from room window; \$50 fine per object
 - (c) Unauthorized or overextended guest; \$50 fine per night
 - (d) Garbage or personal belongings placed in unauthorized areas; \$25 fine per bag or \$15 fine per item
 - (e) Non-evacuation during fire alarm; \$100 fine per offense
 - (f) Tampering with fire safety equipment; \$500 fine per offense
 - (g) Unauthorized access on the roof; \$50 fine per offense
 - (h) Failure to comply with health and safety violation correction; \$25 fine per day
- vi. **Educational Design.** The individual enrolls in and completes a class or completes a study or paper that helps the person understand the harm caused by his or her conduct. Required for alcohol, substance abuse, and may be required in psychological assessments.
- vii. **Community Service.** The individual completes work projects assigned by the Director of Residence Life and Judicial Affairs. The work will be directly related to the prohibited action the student engaged.
- viii. **Disciplinary Housing Suspension.** Removal from the Residence Hall living areas and possibly public areas, such as cafeteria. The individual may be responsible for all remaining housing and meal charges. The individual forfeits his/her deposit. This sanction is in full effect during the appeals process if it is invoked. Re-admission may not be sought before the expiration of one academic year from the date of suspension.
- ix. **Permanent Housing Eviction.** Removal from the Residence Hall living areas and public areas. The individual may be responsible for all remaining housing and meal charges. The individual forfeits his/her deposit. This sanction is in full effect during the appeals process if it is invoked. No rights for future re-admission considered.
- x. **Emergency Suspension.**
 - a. Exclusion from housing privileges or activities for purposes of investigation and/or relieving the tension of the student body or class due to a serious infraction of housing or campus rules; or removing a threat to the well-being of the students, or removing for the good of the order of the college, a student or

- students whose presence would prevent the continued normal conduct of the academic or residential community.
- b. Emergency Suspension may be imposed immediately by the Director of Residence Life and Judicial Affairs or by his/her designee without the filing of a complaint. Emergency Housing Suspension will continue until reviewed by the Director of Residence Life and Judicial Affairs. If the Emergency Suspension is continued for more than three (3) college business days, the student shall have the right to appeal to the Dean of Enrollment Management and Student Services within three (3) college business days following the emergency suspension. A student may not appeal the decision of the Dean of Enrollment Management and Student Services. The decision of the Dean of Enrollment Management and Student Services is final.

f. **Appeal**

- i. An appeal of the Director of Residence Life and Judicial Affairs decision may be taken to the Dean of Enrollment Management and Student Services. All appeals must be filed, in writing, within ten (10) college business days after the student has received notice of the decision. All appeals must be based on the following reasons and pursuant to the following procedures:
 - (a) New evidence that is available that was not available during the investigation.
 - (b) The evidence upon which the decision was made was insufficient or failed to meet the burden of proof.
 - (c) The sanction was too severe for the offense.
- ii. The Dean of Enrollment Management and Student Services will decide the individual's appeal after a careful review of the evidence. The Dean's findings shall be in writing and submitted to the student within twenty (20) college business days after the appeal was filed. The Dean of Enrollment Management and Student Services may:
 - (a) Uphold the original decision.
 - (b) Reverse the original decision and dismiss all sanctions because the evidence did not meet the standard of proof.
 - (c) Replace the original sanction with one that is less severe.
- iii. A student may not appeal the decision of the Dean of Enrollment Management and Student Services. The decision of the Dean of Enrollment Management and Student Services is final.

5. **Academic Code of Behavior**

- a. **Cheating or Plagiarism:** Cheating or plagiarism on written or oral examinations, quizzes, papers, or other academic work is prohibited. Cheating is defined as falsifying data on a report, exam, summary, or paper; the giving or receiving of aid in an examination situation; and/or the use of unauthorized materials as an aid during an examination. Plagiarism consists of offering as one's own work, the words, ideas, or arguments of another person, without appropriate attribution by quotation, reference, or footnote. Plagiarism occurs both when the words of another are reproduced without acknowledgment, and when the ideas or arguments of another are paraphrased in such a way as to lead the reader to believe that they originated with the writer.
- b. **Procedures and Sanctions**
 - i. If the faculty member has substantial evidence that a student has cheated or plagiarized academic work in violation of Section 5. a., the faculty member, after a good faith effort to contact the student, may impose the following sanctions:
 - (a) **Warning.** Written notice that continuation or repetition of wrongful conduct may result in further disciplinary action.
 - (b) **Censure.** A written reprimand for breach of the Academic Code of Behavior, including the possibility of more severe disciplinary sanctions if there is further violation of any part of the code.
 - (c) **Course-level Sanctions.** Repeat relevant course requirements or lower grade on relevant course requirements by deducting the value of the examination paper or other evaluation instruments in which the violation occurred in part or in its entirety in the determination of the final grade for the course. Sanctions may also include but not be limited to failure for the assignment or exam where the dishonesty occurred and /or failure for the course.

- ii. The act of academic dishonesty also will be reported to the Dean of Enrollment Management and Student Services who may do one or more of the following:
 - (a) Conduct conferences with the student, the faculty member, and the Academic Discipline Chair to try and resolve the matter.
 - (b) If the Dean of Enrollment Management and Student Services determines that the act of academic dishonesty is egregious, then the Dean of Enrollment Management and Student Services may impose an appropriate sanction pursuant to Section 5. b. iii.
- iii. If the Dean of Enrollment Management and Student Services finds a violation of Section 5. a. of the Academic Code of Behavior, based on substantial evidence, he/she may impose one of the following sanctions:
 - (a) Suspension from the College, which constitutes ineligibility to continue at the College for a specified period of time not to exceed one calendar year.
 - (b) Dismissal from the College, which constitutes ineligibility to continue in the college, normally with no opportunity for readmission.
- c. **Appeal:** If the Dean of Enrollment Management and Student Services finds that a student has violated the Academic Code of Behavior, the student may appeal the decision to the Academic Review Board pursuant to Section 8. Notice of appeal must be submitted to the office of the Dean of Enrollment Management and Student Services, in writing, within ten (10) college business days after receiving notice of the decision.
- d. **Unfair Grading**
 - i. Unfair grading practices by faculty members are prohibited. Unfair grading practices are defined as the assignment of a particular grade to a student because of the student's age, color, disability/handicap, height, marital status, national origin, political affiliation, race, religion, gender, sexual orientation, veteran' status, or weight; and/or the failure to apply equal standards of academic evaluation to all students in a course; and/or the assignment of a grade on the bases of standards other than those announced in the syllabus or by the instructor. It is recognized that in college-level instruction, some reasonable non-quantifiable judgments must be made in determining grades.
 - ii. Students who wish to protest a faculty grading decision must do so in writing within twenty (20) college business days after assignment of the grade to the faculty member involved, with a copy delivered to the Dean of Enrollment Management and Student Services.
 - iii. The student complaint of unfair grading will be addressed through a series of informal conference(s) until the complaint is resolved. The order of the conferences is as follows: (1) the student and the faculty member; (2) the student, the faculty member, and the Department Head or Academic Chair; (3) the student, the faculty member, and the Dean of Enrollment Management and Student Services. The conferences shall be held expeditiously.
 - iv. If the conferences fail to resolve the dispute, the Dean of Enrollment Management and Student Services shall uphold the grade unless there is compelling evidence that warrants overturning the faculty member's decision. If a decision is made to overturn a grade, the Dean of Enrollment Management and Student Services shall be mindful of the following:
 - (a) Under no circumstances shall the Dean review the quality of an instructor's teaching methods, the course content, the appropriateness of the standards established for the course, or the right of the instructor to establish standards for the course.
 - (b) The due process system does not deny that the right and responsibility to assign grades rests with the faculty member. The responsibility to apply disciplinary rules related to the classroom and programs of instruction rests with the faculty member and, as appropriate, with administrators charged with program responsibility.
 - v. Either the faculty member or the student may appeal the decision of the Dean of Enrollment Management and Student Services to the Academic Review Board pursuant to Section 8. Notice of

appeal must be submitted to the office for the Dean of Enrollment Management and Student Services in writing within ten (10) college business days after receiving notice of the decision.

6. Miscellaneous Codes

- a. **Professional Standards for Occupational Programs:** Any conflict between the Professional Standards for Occupational Programs and the Student Rights and Responsibilities will be resolved in favor of the Professional Standards.
 - i. **Cadet Discipline, Great Lakes Maritime Academy.** These rules and regulation are described in the GLMA Cadet Rules and Regulations.
 - ii. **Health Occupational Students.** These rules and regulations are described in the Student Policies for each Health Occupation program.
 - iii. **Law Enforcement Students.** These rules and regulations are described in the NMC Law Enforcement Program Requirements.
 - iv. **Career Pilot Students.** These rules and regulations are described in the NMC Student Pilot Training Program Requirements.
- b. **Apartment Rules and Regulations:** The rules and regulations that apply to living in an NMC apartment can be found in the Northwestern Michigan College Apartment Living Handbook.
- c. **Motor Vehicle Rules and Sanctions**
 - i. Violations of the Uniform Traffic Code of Traverse City are within the jurisdiction of the City of Traverse City. Laws, rules, and regulations affecting the operation and use of vehicles on College property are found in the Uniform Traffic Code of Traverse City and in the College Rules and Regulations.
 - ii. Violations of the motor vehicle rules and regulations not covered under the Uniform Traffic Code of Traverse City are subject to College disciplinary action by the Coordinator of Security, or his/her designee.
- d. **Off-Campus Misconduct**
 - i. The College may take action regarding off-campus misconduct that does not occur at any official college function when that conduct constitutes a flagrant disregard for any person's health, safety, and/or property, and there is probable cause to believe that it is a violation of law.
 - ii. The Dean of Enrollment Management and Student Services will provide written notice to the student of any disciplinary action and the evidence upon which the college relied to impose the discipline. The student shall have ten (10) college business days to refute the evidence and request a rehearing in front of the Dean of Enrollment Management and Student Services.
- e. **Mandatory Assessment Procedures:** Instructions for Behavioral Incident Report Team (BIRT) Follow-Up with Students (Medical/Psychological Assessment). The BIRT may direct a student to participate in a medical or psychological evaluation whenever the behavior of a student appears to pose a serious threat to the health and safety to the student or others. The medical and/or psychological evaluation process is designated to assess the student's ability to safely participate in the educational programs at Northwestern Michigan College. In mandating an assessment, the college may determine:
 - i. Who the assessor will be;
 - ii. How many sessions the assessment will include, over what period of time;
 - iii. How soon the assessment must be completed;
 - iv. What information the student must consent to sharing with the college;
 - v. Who will pay for the assessment;
 - vi. Whether the student will be on interim suspension during the period of assessment
 - (a) Failure to respond to the directive by the BIRT to complete the medical and/or psychological evaluation, or failure to provide necessary records of prior treatment by the date requested, may result in judicial action in accordance with the NMC Student Rights and Responsibilities policy until the evaluation and records request requirements are met.
 - (b) The student, who leaves, withdraws, or fails to return to the

College before a medical and/or psychological evaluation is completed will be ineligible for readmission until the outstanding matter is resolved.

Interim Suspension: Based on a recommendation of BIRT, hospitalization or other indication that a student may represent a threat of harm to themselves or others, the Dean of Enrollment Management and Student Services, or designee, will attempt to talk with the student who is deemed "at-risk." The Dean will consult the appropriate staff, which may include a College counselor. After consultation, the situation will be assessed and a plan of action will be put into place. The student may be required to meet with the Dean of Enrollment Management and Student Services, or designee, to define the College's expectations of the student to discuss support measures to help the student succeed at the College. Depending on the situation, the at-risk student may be placed on interim suspension, which may prohibit them from living in the Residence Halls, the Campus Apartments, attending classes or participating in College activities until cleared by the Dean of Enrollment Management and Student Services, or designee, in consultation with a Counselor and/or Health Services Professional. If the student is allowed to continue at the College, the student and his or her parent(s) or guardian(s) may be asked to sign an agreement for continuation of enrollment. Students who are treated at a hospital due to suicidal behavior may be placed on interim suspension, which will require a meeting with Dean of Enrollment Management and Student Services before a student is permitted to return to campus. At minimum, the BIRT will require that student to gain professional assessment at the Counseling Office. The purpose of the assessment is to monitor the student's willingness and ability to adhere to a basic standard of self-care and to provide the student with the resources deemed necessary to that self-care. The student will be asked to sign a release of information that permits consultation between the counseling staff, other mental health professionals and the Dean of Enrollment Management and Student Services or his/her designee. If a student on interim suspension returns to campus without permission, the student will be considered a trespasser and Campus Security will be notified and the College may pursue judicial action.

Interim Suspension Procedure: The Dean of Enrollment Management and Student Services may initiate an administrative interim suspension from the College, Residence Halls, Campus Apartments of any student for the following reasons:

- i. Behavior that poses a threat to the health and safety of the student or others.
- ii. Completion of a mandated evaluation on the basis behavior that continues to pose a threat to the health and safety of the student and/or others.
- iii. Behavior continues to be disruptive to the community and/or a concern to campus constituents.

A student on interim suspension may not return to the College, Residence Halls or Campus Apartments until they have completed a medical and/or psychological evaluation, or otherwise has satisfied the terms of the interim suspension indicated that the student no longer poses a threat to their health and safety or the health and safety of others. Student will not be able to register for classes until the Dean of Enrollment Management and Student Services has readmitted the student.

Confidentiality

- a) All medical and counseling records associated with the disruptive behavior assessment are kept separately and do not appear as a part of the student's academic record. All other records regarding the student's behavior that are not medical or counseling records are private and kept in compliance with FERPA.
- b) All records associated with the mandated assessment are protected by state laws regarding confidentiality.

Voluntary Withdrawal Procedure: If a student is involved in a mandatory assessment procedure and decides to voluntarily withdraw, conditions of return will be determined at the time of withdrawal, and given to the student in writing. Involuntary Withdrawal Procedure "Direct Threat Determination" by BIRT

- a) To initiate the process, a recommendation for withdrawal must be issued from the BIRT.

- b) When the BIRT recommends involuntary withdrawal, it will prepare a report of its rationale and initiate the complaint for withdrawal to the Dean of Enrollment Management and Student Services.
- c) The Dean of Enrollment Management and Student Services will follow the NMC Student Rights and Responsibilities procedures for this complaint, in accordance with the complaint procedures as outlined in section 3.c. with the following amendments.
 - i. The Dean of Enrollment Management and Student Services may conduct a formal administrative hearing where both the student and the BIRT will share their positions. In this administrative hearing, the “direct threat” threshold must be met before a student can be involuntarily withdrawn.
 - ii. At the hearing, the Dean of Enrollment Management and Student Services will determine whether by a preponderance of evidence the student poses a high probability of substantial harm to themselves or others.
 - iii. The Dean of Enrollment Management and Student Services will make an individualized and objective assessment of the student’s ability to safely participate as a student at Northwestern Michigan College. If the Dean of Enrollment Management and Student Services determines the student is not a direct threat, the student will remain in good standing with the college. If the student is determined to be a direct threat, the Dean of Enrollment Management and Student Services will determine how separation will be accomplished, for what duration, and upon what conditions. Conditions for return will also be determined and delivered in writing with the Dean of Enrollment Management and Student Services’ decision to the student.
 - iv. In circumstances when it is determined that the student must leave the College, it is the responsibility of the student or the student’s parent(s) or guardian(s) to make arrangements for the student’s transportation home. If the parent(s) or guardian(s) are unable or unwilling to make such arrangements, the student’s welfare is still their responsibility.

Suicide Attempts

1) Procedures

- a) When BIRT receives a credible report that a student has threatened or attempted suicide, engaged in efforts to prepare to commit suicide or has expressed a preoccupation with suicide, the BIRT will make a recommendation to the Dean of Enrollment Management and Student Services that the student be required to attend professional assessment with a licensed mental health professional.
- b) The student will participate in the program’s requirement of a comprehensive and in-depth assessment of the precipitating incident, prior attempt and threats, and current suicidal intent.
- c) The first assessment will occur within three college business days of the incident or release from the hospital.
- d) The remaining assessments will occur based upon the therapist’s recommendations. Students are required to participate only in an assessment of their past and current suicidality. Students are not required to engage in counseling or therapy. A student may elect to go beyond the required assessment and participate in counseling or therapy.
- e) With the permission of BIRT, students may obtain the assessments with a private practitioner with comparable credentials at his or her own expense and after signing an authorization allowing that practitioner to communicate with members of BIRT. All professionals will make the incident, its

roots and implications a significant focus of each of the assessments.

- f) The student must provide the independent sources of information regarding the suicidal incident, if such reports exist. These include suicide notes, police reports, emergency room reports and eye witness accounts.
- g) Private practitioners will be required, during the period in which the assessment occurs, to provide the College with reports of instances in which the student threatened or attempted suicide, engaged in efforts to prepare to commit suicide, or expressed a preoccupation with suicide.
- h) During the first assessment appointment, the student will sign a release of authorization form allowing BIRT to communicate with the Dean of Enrollment Management and Student Services in the event he or she fails to attend the assessment session.
- i) Failure to adhere to this standard of self-welfare or failure to fulfill the requirements of the assessment following a suicidal incident may result in disciplinary action. The appropriate actions associated with this policy will be determined by the Dean of Enrollment Management and Student Services or his/her designee.
- j) The Dean of Enrollment Management and Student Services (or designee) may take other steps, including contacting the student’s parents and/or other significant others in the event of particularly potentially lethal suicide attempt or in the event of repeated suicide attempts.

2) Confidentiality

- a) All medical and psychological records associated with the reported incident are kept separate and do not appear as part of the Student academic or judicial record.
- b) All records associated with the mandated assessment are protected by state laws regarding confidentiality.

7. College Review Board

- a. ***Jurisdiction:*** Appellant jurisdiction over a student’s appeal from a disciplinary decision made by the Dean of Enrollment Management and Student Services under Section 3. (Student Code of Conduct) shall be vested in the College Review Board.
- b. ***Parameters***
 - i. The College Review Board is not a court of law. Its procedures are informal and its reviews shall not be perceived as an adversary process. The College Review Board shall have the right to make appropriate judgments about procedural questions as they arise. These judgments shall be made in light of the need for a fair, expeditious, and orderly review.
 - ii. In its deliberations, the College Review Board shall not consider the appropriateness of College rules and regulations or the right of faculty and administrators to enforce College rules and regulations. The right to define and establish appropriate standards, rules, and regulations, which govern various college functions and activities shall be reserved to the administrators and faculty members charged with the implementation and supervision of those functions and activities.
- c. ***Membership:*** The College Review Board shall be composed of the Faculty Council Chair, a staff person appointed by the Vice President for Educational Services, and the President of the Student Government Association. If any of the College Review Board members is involved in Board proceedings or has a conflict of interest, or cannot be present for the hearings, the appropriate body shall provide a substitute. The Faculty Council Chair, or the Chair’s substitute, shall serve as Chair and shall call the meetings.
- d. ***Procedures***
 - i. The aggrieved student, within ten (10) college business days, must

file a notice of appeal with the Dean of Enrollment Management and Student Services. The Dean of Enrollment Management and Student Services will notify the Chair of the College Review Board that a notice of appeal has been filed and that the Chair shall set a date for a hearing within twenty (20) college business days of the filing of the notice unless all parties agree to an extension.

- ii. Not less than ten (10) college business days prior to the hearing, the student and the College Review Board shall be provided with a copy of (1) the complaint; (2) the investigation file; and (3) the Dean's decision, including the sanction.
 - iii. The student shall be allowed to review and supplement the file with his/her statement, any witness statements, or any other relevant evidence, within five (5) college business days before the hearing.
 - iv. The College Review Board's proceedings shall be closed to the public to maintain confidentiality. The Board may request the presence of the accused student or any other person to clarify evidence on the record.
- e. **College Review Board Decisions**
- i. Decisions of the College Review Board shall be based upon the record of all material required to be furnished to the Board as set forth in Section 7. d. ii-iv.
 - ii. The College Review Board shall decide cases by a majority vote. After following the procedures described in this section, the Board may:
 - (a) Accept the decision of the Dean of Enrollment Management and Student Services and support the penalty imposed.
 - (b) Reverse the decision of the Dean of Enrollment Management and Student Services and dismiss the case because the evidence did not meet the standard of proof or there was a flagrant abuse of the process.
 - (c) Accept the decision of the Dean of Enrollment Management and Student Services, but reduce the sanction because it is too severe.
 - iii. The student shall be provided with written explanation of the reasons for any decisions rendered against him/her.

8. Academic Review Board

- a. **Jurisdiction:** Appellant jurisdiction over a decision made by the Dean of Enrollment Management and Student Services pursuant to Section 5. shall be vested in the Academic Review Board.
- b. **Parameters:** The Academic Review Board is not a court of law. The purpose of the Board shall be the discovery of the truth and the rendering of a just and fair decision. The Chair shall have the right to make appropriate judgments about procedural questions as they arise. These judgments shall be made in light of the need for fair, expeditious, and orderly reviews or hearings.
- c. **Membership:** The Academic Review Board shall be composed of the Academic Chair of the area within which the dispute arises; one member chosen from within the area which the dispute arises selected by the Vice President for Educational Services; two faculty members (not from the area in question) selected by the Vice President for Educational Services; and one student chosen by the Student Government Association. If the Academic Chair is the instructor involved in the complaint, the Vice President for Educational Services shall appoint an alternate for the Academic Chair.
- d. **Procedures:**
 - i. The aggrieved party, within ten (10) college business days, must file a notice of appeal stating the reasons for an appeal and any evidence supporting his/her position with the Dean of Enrollment Management and Student Services. The Dean of Enrollment Management and Student Services will notify the Academic Chair of the decision within which the dispute arose and he/she will serve as the Chair of the Academic Review Board and shall set a date for a meeting of the Board within twenty (20) college business days of the filing of the notice.
 - ii. Not less than ten (10) college business days prior to the hearing, the Board shall receive (1) the complaint, (2) any material used by the Dean of Enrollment Management and Student Services

upon which his/her decision was based, and (3) the notice of appeal along with any evidence supplied by the aggrieved party.

iii. The decision of the Academic Review Board shall be based upon the record of all material required to be furnished to the Board as set forth in Section 8. d. The decision will be by majority vote based on substantial evidence.

e. Academic Review Board Decision

- i. This Academic Review Board may uphold the findings of the Dean of Enrollment Management and Student Services.
- ii. The Academic Review Board may reverse the decision of the Dean of Enrollment Management and Student Services and dismiss the original complaint.
- iii. The Academic Review Board may find a violation, but reduce the sanctions and impose a less severe sanction as listed in Section 5.

f. Notice

- i. A written explanation shall be given to the aggrieved party of the reasons for any decisions rendered and/or any sanctions that have changed.
- ii. The records of the proceedings are regarded as confidential. They are to be kept for a minimum of three years in the office of the Dean of Enrollment Management and Student Services and are available only to those approved by the Dean of Enrollment Management and Student Services and in accordance with applicable policies and laws.

9. Student Complaints

- a. **Complaints:** Students with complaints regarding College operations not otherwise covered in the prior sections should report their concerns to the Dean of Enrollment Management and Student Services Office. The following procedures shall apply.

b. Procedures

- i. The Dean of Enrollment Management and Student Services will receive a student's verbal or written complaint. The Dean of Enrollment Management and Student Services will consider the merit of the complaint and will take any action considered appropriate or necessary. At this level, the student has the right to remain anonymous.
- ii. If the student's verbal or written complaint is not resolved to the student's satisfaction and the student wishes to continue to pursue the complaint, the student must submit a request in writing to the Dean of Enrollment Management and Student Services requesting further resolution. The written request must include the specific nature of the complaint, reasons for filing the complaint, and specific remedy requested. At this level, the student may no longer remain anonymous. The Dean of Enrollment Management and Student Services will seek a resolution by using the following means: Contact the appropriate college employee who is responsible for the College operation complained about and arrange a meeting between the parties involved to discuss a possible resolution. The written complaint will be forwarded to all appropriate parties involved in the conflict prior to the meeting. Should resolution not be reached, the Dean of Enrollment Management and Student Services will review the complaint and all supporting material and render a decision regarding the complaint.

c. Limitations

- i. Student complaints shall not be the basis for any discipline against a supervisor, staff member, or faculty member so long as there is no evidence of unfair treatment of the student or discriminatory practice against the student.
- ii. A student may not appeal the decision of the Dean of Enrollment Management and Student Services. All decisions of the Dean of Enrollment Management and Student Services shall be in writing with rationale and are final. No further appeal will be considered.

NMC Policies

Academic Policies

Northwestern Michigan College is committed to open access to higher education and to your academic success. Our intent is to offer support and remediation for students who are considered at risk of academic failure.

Attendance

Attendance is critical to student academic progress. Even though attendance expectations may differ from course to course, you are expected to be present, prepared, and be active participants in your classes. Students will receive a written attendance policy from the instructor at the first class meeting. A student who is repeatedly absent from class without good reason may be withdrawn from the course by the instructor.

Credit for Prior Learning

Students who have achieved competency in certain skill or course work areas may receive credit for classes or waivers of prerequisite classes. This competency could be gained through life, work, or military experience; vocational training at an area vocational, career or skill center; or completion of high school advanced placement courses. Assessment of proficiencies may be demonstrated through the following options:

- AP (Advanced Placement) credit achieved through high school courses;
- CLEP (College Level Examination Program);
- ACE (American Council on Education) for veterans;
- Competency Assessment in some NMC courses;
- Course waiver;
- Articulation credit for work at the Traverse Bay Area Career Tech Center

Students who wish to pursue credit or waivers for competencies should go to www.nmc.edu/records or contact the NMC Registrar in the Records and Registration Office in the Tanis Building. Students wanting information or to register for the CLEP exam should call (231) 995-1360.

Credit Equivalences

An associate degree requires a minimum of 64 semester credits, or 96 quarter credits. A bachelor's degree usually requires a minimum of 120-128 semester credits, or 180-192 quarter credits. Thus, when credits are transferred from a college on the quarter system to a college on the semester system, a quarter credit is equivalent to two-thirds of a semester credit. For example, 30 quarter credits become 20 semester credits. No credits are "lost;" they are simply converted to a different unit. This may result, however, in some fractional credits. Obtain complete transfer information from a counselor.

Adding Classes

Students (except for Dental Assisting, Nursing, Maritime, and Law Enforcement students) may be permitted to register without a signature into classes during the first week of its

session provided the students have the required prerequisites, the class still has open seats, and the class has not met yet. Dental Assisting, Nursing, Maritime, and Law Enforcement students need the approval of the appropriate Academic Area office. After the first class has met, the student must seek the permission to add the class from the Academic Area office. Some Academic Areas may not allow late registration. After the Drop/Add Period, students will not be permitted to add any courses. The only exceptions will be for special circumstances in the Aviation, Maritime, or Technical Programs. In these cases, students will need approval from the appropriate academic office.

Dropping Classes

Students must officially drop classes during the designated dates listed in the semester Registration Guide or online to obtain any refund or prevent receiving a grade at the end of the semester.

- Students dropping **all** of their classes must either drop courses online at www.nmc.edu/selfservice if there are no holds on the student's record. You may also complete an enrollment form in the Records and Registration Office, or mail or fax a letter to the Records Office at (231) 995-1956. Include name, NMC ID or social security number, semester and signature. The date the letter is received is the official date of the withdrawal.
- Students dropping some of their classes may do so online at www.nmc.edu/selfservice if no holds are present or in the Records and Registration Office.

If you wish to drop either some or all classes online and have a hold, call (231) 995-1049 for options. In most cases, the hold may be temporarily moved to allow you to drop.

Courses may be **dropped without record** through the add period of the session that the course is offered. Courses dropped after the add period and before the last 25 percent of the session will be **drop with record**. A grade of "W" (Withdrawn) will be assigned. This grade will not affect the NMC grade point average. Dropping a class is not permitted during the last 25 percent of the session in which the course is offered. It is the student's responsibility to notify their instructor(s) of the drop and be aware of any financial obligations.



Grades

STANDARD GRADING SYSTEM AT NMC:

- 4.0** - outstanding
- 3.5** - excellent
- 3.0** - good
- 2.5** - above average
- 2.0** - average
- 1.5** - below average
- 1.0** - deficient
- 0.0** - failed
- S** - satisfactory
- U** - unsatisfactory
- I** - incomplete
- W** - withdrawn
- FA** - failed to attend
- AU** - audit

S/U (satisfactory/unsatisfactory) may be given to designate the level of performance in courses which evaluate completion of specified competencies. (For designated courses only.)

I (incomplete) may be given at the discretion of the instructor if it is believed that the student has a valid reason for not having completed the course work and can fulfill the requirements of the course during the next semester. An incomplete not made up by the end of the next semester automatically becomes a 0.0. Incompletes may be extended one additional semester at the discretion of the instructor.

W (withdrawn) will be given to the student who officially withdraws from the class after the add period and before the last 25 percent of the session.

FA (failed to attend)—may be given if a student registered for a course but never attended and did not officially drop. FA will not affect a student's GPA.

AU (audit) can be issued at the time of registration upon full payment of tuition and fees if a student wishes to attend a class without receiving college academic credit or a grade. Changing from "credit" to "audit" may take place through the first half of the academic session. Changing from "audit" to "credit" must be completed during the add period. Dates can be found online or in the current Registration Guide.

GOOD STANDING

You are considered to be in academic good standing when you have a minimum overall grade point average of 2.0.

GRADE POINT AVERAGE

Grade point average (GPA) is a weighted average of grades. A grade for a course is multiplied by the credit hours for that course to obtain "points." Total points are then divided by total credit hours to determine the grade point average. A GPA calculator is available online.

When a course is repeated, both the most recent grade and the previous grade will appear on the transcript (official academic record). However, only the last grade will be counted in the NMC cumulative GPA. Grades of S, U, I, W, FA, and AU are not used in the computation of grade point averages. Consult with the Advising Center if this concerns you.

DEAN'S LIST

Students who have achieved a semester grade point average (GPA) of 3.5 or higher qualify for the Dean's List. Each full-time student (taking 12 credits or more) receives a congratulatory letter from the Vice President for Educational Services. Dean's List students will have their names listed in the lobby between the Biederman and Tanis buildings.

GRADE POINT RE-EVALUATION

Northwestern Michigan College offers you an opportunity to improve upon a cumulative grade point average by repeating a course or courses, or by petitioning for a grade point re-evaluation under special circumstances. These options provide you with the opportunity to achieve a cumulative grade point average that is truly representative of your capabilities. You may pursue this option by calling the Advising Center for petitions and further information: (231) 995-1040. Transfer institutions may or may not recognize GPA re-evaluation.

For more information on GPA re-evaluation, visit www.nmc.edu/records and click on "grades."

Academic Probation

Any student whose cumulative grade point average is below a 2.0 is considered academically at risk and will be placed on academic probation. The purpose of academic probation is to assure careful academic planning and referral to support services while the student attempts to improve his or her academic record.

SUPPORT & INTERVENTION FOR STUDENTS ON ACADEMIC PROBATION

Any student who is on probation must meet with a counselor or academic advisor prior to registering for any semester or session until the status of probation is removed. This enables the student to build a realistic academic program and receive appropriate referrals to support services that afford the maximum possibility for success. Students who are on probation may not take more than 12 semester credits during fall/spring semester, or six credits during the summer session. The status of academic probation is removed when the student's cumulative grade point average becomes 2.0 or higher.

Academic Suspension

When a student has been on probation for two semesters and is unable to maintain a current grade point average of 2.0 or higher, that student will be suspended from academic enrollment for a period of one semester of the regular academic year (not including summer.) A student may appeal academic suspension to the Registrar in writing.

REINSTATEMENT FOLLOWING ACADEMIC SUSPENSION

A student who has been academically suspended is encouraged to petition the Registrar for reinstatement when the waiting period is over if he/she feels that sufficient changes have occurred to enable academic success. This petition must be made in writing at least two weeks prior to the beginning of the semester for which the student is seeking re-entry.

Grade Alert

Learning is dependent upon regular feedback regarding student performance. Students and instructors are both responsible for this communication. Students achieving less than a 2.0 in any 15-week class may receive written notification around the midpoint of the academic session encouraging them to contact their instructor.

Repeating Courses

Northwestern Michigan College offers you an opportunity to improve upon a cumulative GPA by repeating a course or courses. All courses and grades will appear on the transcript (official academic record); however, only the last grade will be counted in the cumulative grade point average. Most courses at NMC can be taken a maximum of three times. Exceptions are activity courses such as physical education and applied music. Although NMC allows a student to repeat a class up to two times, Financial Aid may have further restrictions and should be consulted.

Transcripts

Students who plan to attend another college or university will need to send an official transcript of their academic record to that college. Often new employers require an official copy of your transcript. A transcript is a list of the academic courses taken at NMC and the grades earned. Your **official** transcript will be sent to colleges or employers upon your written request. If you request the transcript be sent to you, it may not be considered **official**. Each request should include:

1. Your name, permanent address, and NMC ID or social security number
2. Name and address where the transcript is to be mailed
3. Your signature
4. Your phone number
5. \$5 for each transcript

Requests may be made in person, by mail, online at www.nmc.edu/selfservice or by fax (231) 995-1956. Online or fax requests will be honored if you include your charge card number (Visa, MasterCard or Discover) and expiration date to cover the transcript fee.

Transcripts may be faxed to a third party but may not be considered official. Contact the third party for confirmation. To protect the confidentiality of the student, telephone requests cannot be honored. You may also obtain a student copy of your transcript. The official transcript has an embossed stamp and the student transcript does not. Both the official and student transcript fee is \$5. Transcript requests can be completed only if all fees and obligations to NMC have been fulfilled.

Current students may also go to www.nmc.edu/registration to view their transcript.

Inclement Weather Policy

It is the policy of Northwestern Michigan College to maintain normal college operations on all regularly scheduled days, except in very rare cases when severe weather conditions prevent this.

It is further the policy of NMC that each staff member and student will make his or her own determination concerning attendance on unfavorable travel days.

Given unfavorable weather conditions, the college may choose to delay or close, in which case the following actions will be taken:

- For daytime classes, a decision to delay the opening of the college or close entirely will be communicated by 6 a.m.
- For evening schedules, delays or closings will be announced by 3 p.m. There is a possibility that NMC would cancel all day classes and hold evening classes.
- If the college delays opening, students should report to class at the designated opening time. If a student's class begins before the designated opening time, that class would be canceled unless one-hour of instruction remains after the designated opening time. Up-to-date information regarding class cancellations and college closures will be communicated on the 24-hour telephone line at (231) 995-1100.
- College delays or closures will be reported to area radio and television stations (a list of stations is available in the Office of Institutional Advancement) campus video monitors, public access channel, NMC's general information number (231) 995-1000, and online.
- College delays or closures will be reported via email to all faculty and staff, via email to all student email accounts, and via text message to those students who are subscribed to receive alerts on their cell phones.
- For weekend academic courses, the college closure/delay decision will first be enforced. If, on the other hand, a faculty member determined he/she cannot make it to campus for their particular class, the faculty member teaching the weekend course will update his/her voice-mail greeting with the class cancellation information. Weekend students should then call their instructor's voicemail rather than the 24-hour telephone line.

Harassment Policy

Harassment of students and employees at NMC is unacceptable and will not be tolerated. Sexual harassment means unwelcome sexual advances and/or requests for sexual favors, and/or other verbal or physical conduct or communication of a sexual nature that creates an intimidating, hostile, or offensive environment for the student.

Upon receipt of any report or complaint of alleged harassment, NMC will promptly investigate. NMC will take reasonable measures to treat complaints discreetly and respect the personal privacy rights of the person making the complaint and any accused party. Upon conclusion of the investigation, appropriate action will be taken. For additional information, contact the Dean of Enrollment Management and Student Services in the Admissions Office, Tanis Building, (231) 995-1039. Employees may contact Human Resources, Tanis Building, (231) 995-1025. Go to www.nmc.edu/policies to view all NMC policies.

Right to Know

In 1990, Congress passed into law the Student Right-to-Know and Campus Security Act. The legislation is designed to provide better consumer information to students and their families by requiring institutions of higher education to compile and report completion or graduation rates, job placement statistics, crime statistics, as well as general information about the college. Job placement statistics, crime statistics, and general information about the college is available in the Registration Guide and the student newspaper, or may be obtained in the Admissions Office, Tanis Building, (231) 995-1054. For completion or graduation rates contact the NMC Registrar at (231) 995-1058. All Board of Trustee and Student Government meetings are open to students.

Campus Security & Safety Policy

The safety of students, faculty, staff and visitors is of vital concern to Northwestern Michigan College. Everyone in the campus community is involved in creating a safe environment and is encouraged to report all safety concerns by calling campus security, (231) 883-9099. Emergency outdoor phones are identified by a blue light; all incidents will be documented and investigated. NMC has a staff of campus security personnel who work closely with the Traverse City Police Department. On a regular basis, information and presentations are made available to students and employees on issues of importance to campus safety. The campus safety report is published in the Registration Guide each semester and is in compliance with the Student Right-to-Know and Campus Security Act. Visit www.nmc.edu/safety to view a daily crime log. Click on crime log.

Campus Safety Report

Mission: to establish a system of communication and response to provide for the safety of students and employees.

- A. Report Procedures: To report criminal actions, emergencies, or suspicious situations, call:
- Emergencies** **911**
- Campus Security**..... **(231) 883-9099**

Emergency outdoor phones are identified by a blue light and can be used to make on-campus calls. To make an emergency call, press the red button, state your location and the situation. Police personnel will respond.

- B. Access to Campus Facilities: All campus buildings are open from 7 a.m. to 10 p.m., Monday through Friday, and at other times on weekends depending on need. Residence halls are open from 7 a.m. to 12 midnight every day. Residents have keys and guests are required to register with the residence hall staff after midnight. All guests must be escorted by the resident they are visiting.
- C. Authority of Institutional Security Personnel: The NMC Campus Security personnel have the authority to confront the individuals related to an incident, require identification, and when necessary, contact the Traverse City Police Department. Officers keep a daily record of activities and all incidents are promptly reported to the Campus Liaison Officer.
- D. Information Programs: On a regular basis students and employees receive information on campus security and crime prevention and are invited to attend presentations on such subjects as sexual assault and rape; fire prevention; crime prevention; bomb threats; and alcohol and drug abuse prevention.
- E. Occurrence Statistics: The NMC Campus Security and Safety Department has compiled these statistics for incidents on NMC's four campuses from January 1, 2010 to December 31, 2010. Go to www.nmc.edu/security to view statistics for the past three years.

O = On Campus

R = On Campus Residential

N = Non-Campus Property

Offenses On Campus

	O	R	N
Murder / Non Negligent.....	0	0	0
Negligent Manslaughter	0	0	0
Sex Offenses: Forcible.....	2	2	0
Sex Offenses: Non forcible.....	0	0	0
Robbery	0	0	0
Aggravated Assault.....	0	0	0
Burglary.....	4	4	0
Motor Theft.....	6	0	0
Arson	3	1	0
Liquor Law Violations: Referred for action.....	4	3	0
Liquor Law Violations: Arrest.....	0	0	0
Drug Law Violations: Referred for action.....	4	4	0
Drug Law Violations: Arrest.....	1	1	0
Illegal Weapons Violations: Referred for action	1	1	0
Illegal Weapons Violations: Arrest	0	0	0
Hate Crime.....	1	0	0

The Michigan State Police make available the list of registered sex offenders at www.michigan.gov/msp select "Michigan Sex Offender Registry."

This information is published in compliance with the Student Right-to-Know and Campus Security Act, Public Law 101-542, as amended by the Higher Education Technical Amendments of 1991, Public Law 102-26.

Drug-Free Learning Environment Policy

It is the intent of Northwestern Michigan College to provide a drug-free workplace and learning environment for students, faculty and staff. Furthermore, NMC intends to comply with the provisions of the Drug-Free Schools and Communities Act of 1989. All students, employees, and visitors are expected to observe all federal, state and local laws and college regulations governing the use and possession of alcohol and illicit drugs. All students, employees and visitors are specifically forbidden to use or possess alcoholic beverages, or to be under the influence of any controlled substance while on college property (except as provided by policy for use of alcohol on campus) or violate conditions of Controlled Substance Act.

Tobacco-Free Policy

In the interest of providing a safe, clean and healthy environment for students, employees and visitors, NMC has prohibited smoking on all campuses.

Student Sexual Assault Policy

I. Legal and Behavioral Definition of Sexual Assault

Sexual assault is any unwanted sexual contact resulting from force, threat, or coercion, or when the victim is mentally incapacitated or physically helpless. State of Michigan statutes will be the guide in defining sexual assault and are available in the office of the Coordinator of Campus Security.

II. Reporting Sexual Assault

The following campus offices may be contacted to report a sexual assault:

Dean of Enrollment Management
and Student Services..... (231) 995-1039
Housing Office..... (231) 995-1408
Personnel Counseling..... (231) 995-1040
Student Health Services..... (231) 995-1256
Local law enforcement..... 911
Campus Security (231) 883-9099

The option of reporting to a supervisor in any discipline or department is also available.

Family Educational Rights & Privacy Act

The Family Educational Rights and Privacy Act (FERPA) helps protect the privacy of student records. The Act provides for the right to inspect and review educational records, the right to seek to amend those records and to limit disclosure of information from the records. Institutions may disclose information on a student without violating FERPA through what is known as "directory information." Directory information includes the student's name, address, telephone number, e-mail address, date and place of birth, major field of study, participation in officially recognized activities, enrollment status, dates of attendance, degrees and awards received. Questions about student records may be directed to the Registrar. Go to www.nmc.edu/records for more information.

Privacy Statement

In order to improve the instruction offered at Northwestern Michigan College and to meet the requirements of the Carl D. Perkins Vocational and Technical Education Act, Section 113 and the Workforce Investment Act of 1998, Section 122, we will be using your Social Security Number in order to compile summary reports. Section 113 of the Carl D. Perkins and Technical Education Act, 20 USC 2323, and section 122 of the Workforce Investment Act of 1998, 29 USC 2842, requires Northwestern Michigan College and the State of Michigan to assess the effectiveness of vocational and technical education programs aimed at training, placement, and retention of students in employment. Although these laws require that performance reports be compiled based on wage record information, neither law requires students to give their social security numbers (SSN) to the college.

Northwestern Michigan College reports currently enrolled student status to the National Student Clearinghouse each semester. This information is provided to assist students to defer repayment of student loans during the time a student is enrolled. Information is also provided to verify degrees earned and may be used by potential employers who contact the National Student Clearinghouse. Students may access the Clearinghouse website through NMC's secure website to obtain verification of their student status to be used for insurance purposes.

NMC.

Find it here.





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Advanced Study, Institute for Advanced Studies

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Ph.D., M.S., Michigan State University
B.S., Murray State University

Gillett, Michael L.

Technical Instructor
B.M.E., Kettering University

Goethals, Scott P.

Business Instructor
M.S., B.S., A.A.S., Ferris State University
A+, Net+, Security+

Goodchild, Daniel R.

Construction Technology Instructor
B.S., Grand Valley State University
A.A.S., Northwestern Michigan College
Master Electrician, State of Michigan

Gordon, Thomas A.

Humanities Instructor
M.A., Fort Hays State University
B.A., California Polytechnic State
University
A.A., Cuesta Community College

Gray, Nancy T.

Communications Instructor
M.A., Middlebury College
A.B., University of Michigan

Hamilton, Robert B.

Communications Instructor
M.A., B.A., Central Michigan University

Hendrix, Josephine L.

Health Occupations Instructor
M.S.N., Michigan State University
B.S.N., Saginaw Valley State University
A.A.S., Lake Michigan College

Hochscheidt, Michael W.

Maritime Instructor
 Licensed Merchant Marine Officer,
 Third Assistant
 B.A., Wayne State University
 A.A.S., Northwestern Michigan College

House, Lucille A.

Culinary Arts Instructor
 Diploma in Culinary Arts, Western
 Culinary Institute
 Certified Culinary Educator, American
 Culinary Federation

Houston, Robb E.

Science/Math Instructor
 M.A., Rice University
 B.S., Central Michigan University

Howard-Spreitzer, Sherry L.

Business Instructor
 M.S., B.S., Ferris State University
 A.A.A., Northwestern Michigan College

Howell, Mark D.

Communications Instructor
 Ph.D., Bowling Green State University
 M.A., B.A., Penn State University

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Science/Math and Social Sciences
 Instructor
 M.A., Western Illinois University
 B.S., Northern Michigan University

Jaquish, Laura L.

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Jason, Constance A.

Communications Instructor
 M.A., B.A., Western Michigan University

Jenkins, Anthony L.

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 M.S., Michigan State University
 B.S., Manchester College

Jones, Bronwyn R.

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 M.A., Hunter College
 B.A., Columbia University

Kelly, Keith E.

Business Instructor
 B.S., Lake Superior State University

Key, Blake D.

Science/Math Instructor
 Ph.D., Michigan State University
 M.S., B.S., Western Michigan University

Khan, Amjad A.

Social Sciences Instructor
 Ph.D., Oklahoma State University
 M.S., New Mexico State University

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 J.D., University of Colorado School of Law
 B.A., Michigan State University

LaCross, Gregory

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 M.S., Boston College
 M.S., Western Illinois University
 A.A.S., B.S., Ferris State University

Linsell, Mary Ann S.

Business Instructor
 M.L.I.R., B.A., Michigan State University

Lively, Janet S.

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 M.A., State University of New York
 B.S., Michigan State University

Livengood, Tamella

Health Occupations Instructor
 M.S.N., Michigan State University
 B.S.N., University of Michigan
 A.D.N., Northwestern Michigan College

Mahoney, Deirdre M.

Communications Instructor
 Ph.D., University of Arizona
 M.A., B.S., Northern Arizona University

Mason, Robert D.

Maritime Instructor
 Licensed Merchant Marine Officer
 First Class Great Lakes Pilot's License
 A.A.S., Northwestern Michigan College
 (GLMA)

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 Ph.D., B.S., Bowling Green State
 University
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 M.S., B.A., California State University

McCormick, Melisa R.

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 M.A., University of Missouri-Columbia
 B.S., Ball State University

McDonald, Kristy B.

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 M.A., Eastern Michigan University
 B.A., The University of Montana

Nelson, James D.

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 M.A., University of Idaho
 B.S., Ferris State University
 A.A., Northwestern Michigan College

Nelson, Mark D.

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 M.Ed., B.S., University of Illinois

Niergarth, Raymond D.

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Norris, Mary E.

Business Instructor
 M.B.A., Lake Superior State University
 B.S., Western Michigan University

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 B.A., Michigan State University
 A.A., Northwestern Michigan College

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Owens, Jay Barclay

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 Ph.D., Washington State University
 M.A., B.A., Central Washington
 University

Pahl, John C.

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 Advanced Study
 University of Michigan
 University of Wyoming
 University of Cambridge, England
 M.A., B.A., University of Michigan

Papcun, Joel

Culinary Arts Instructor
 Culinary Proficiency, Schoolcraft College
 Chef de Cuisine, American Culinary
 Federation

Parshall, Nancy J.

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 M.Ed., Temple University
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 B.S., Colorado State University

Pharo, Debra A.

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 M.A., University of Northern Colorado
 B.S., Texas A&M

Pierson, Robert B.

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 MCSA, CCNA, CCAI, A+, Net+, i-Net+,
 Server+

Press, James G.

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 B.A., Lake Superior State University

Roberts, Garyn G.

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 Ph.D., M.A., Bowling Green State
 University
 B.B.A., University of Wisconsin,
 Whitewater

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 B.S.N., University of Michigan
 A.D.N., Northwestern Michigan
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Ross, Mark G.

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 B.A., Michigan State University

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 Ph.D., Oklahoma State University
 M.S., Central Michigan University
 B.A., Alma College

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 M.A., Pepperdine University
 B.A., State University of New York
 at Oswego
 A.A.S., Onondaga Community College

Russell, Martha A.

Humanities Instructor
M.A., Midwestern State University
B.A., University of Science and Arts
of Oklahoma
B.S., University of Southern Colorado

Salathiel, Kristen M.

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M.A., B.A., University of Michigan

Schaefer-Hills, Caroline L.

Humanities Instructor
B.F.A., Center for Creative Studies

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Maritime Instructor
Third Assistant Engineer Any
Horsepower - Steam/Diesel
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A.A., Columbia College

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Sievert, Terry L.

Technical Instructor
B.S., Ferris State College
A.A.S., West Shore Community College

Skarupinski, Michael T.

Culinary Arts Instructor

Smith, Marjory M.

Communications Instructor
M.A., Michigan State University
M.A., University of Edinburgh

Snyder, Frank S.

Social Sciences Instructor
Ph.D., M.A., B.S., University of
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Sprenkle, Melissa P.

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Ph.D., M.A., University of Tennessee
B.A., University of Louisville

Straw, Jeffery J.

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M.S.E.E., B.S.E.E.,
Michigan Technological University
A+ Certification

Studinger, Marvin D.

Business Instructor
M.A., B.A., Michigan State University
Licensed Professional Counselor (LPC),
State of Michigan

Surgalski, Michael J.

Maritime Instructor
Masters License Great Lakes
Masters License Ocean
STCW95
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A.S., Northwestern Michigan College

Torre, Michael D.

Humanities Instructor
M.F.A., Indiana University
B.S., West Virginia Institute of
Technology

Trainees, David P.

Aviation Instructor
B.S., Johnson State College
Certified Flight Instrument Instructor
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Multiengine Instructor (MEI)

Vanderkolk, Mary D.

Health Occupations Instructor
M.B.A., Lake Superior State University
M.S.N., Wayne State University
B.S., B.S.N., Michigan State University

Walter, Linda A.

Health Occupations Instructor
M.S.N., Grand Valley State University
B.S.N., A.D.N., Ferris State University
L.P.N., Mercy School of Practical Nursing

Wooters, Rebecca L.

Health Occupations Instructor
A.A.S., Northwestern Michigan College
Certified Dental Assistant (CDA)
Registered Dental Assistant (RDA)

Zachman, John R.

Social Sciences Instructor
Ph.D., M.A., Duke University
B.A., Michigan State University

Zlojutro, Jane M.

Business Instructor
M.S.T., Grand Valley State University
B.B.A., Western Michigan University
Certified Public Accountant (CPA)

**Emeritus Faculty**

The following faculty members have retired with twenty or more years of service.

Glen Anderson	1959-85	Kenneth Masck	1975-02
Norman Averill	1966-96	Michael McIntosh	1970-04
Stephen Ballance	1975-00	Richard Minor	1972-00
Pauline Bayer	1951-75	Hettie Molvang	1974-94
Elaine Beardslee	1963-94	Henry Morgenstein	1971-00
Walter Beardslee	1951-85	Arlo Moss	1962-88
Joan Berg	1977-00	Peter Nelson	1964-88
Lyle Bradford	1968-88	Ray Niergarth	1979-10
Robert Buttleman	1970-06	Harry Oliver	1958-89
Larry Buys	1970-01	Jack Ozegovic	1968-89
Elizabeth Carden	1970-00	Richard Pascoe	1966-88
Larry Carps	1971-01	Anne Patrick	1984-07
Richard Cookman	1970-00	Joseph Rogers	1955-84
Helen Core	1952-74	Kenneth Rose	1968-00
Sharon Dean	1965-92	Walter Ross	1972-97
Joseph Dionne	1971-06	Robert Rudd	1963-98
Kathleen Donnelly	1961-85	William Scharf	1964-91
David Donovan	1971-01	Maureen Schneider	1985-06
Sallie Donovan	1975-06	William Shaw	1964-94
William Faulk	1965-01	Jacqueline Shinnors	1989-10
Adam Gahn	1963-01	Allison Shumsky	1957-95
Ernest Gaunt	1952-77	William Skinner	1961-88
Richard Gertz	1968-88	James Spenceley	1957-80
Richard Goertz	1970-00	Frederick Tank	1966-07
Michele Grooters	1977-01	John Tanner	1974-95
Jill Hinds	1979-04	Roberta Teahen	1975-01
Karen Howie	1987-10	Roy Terdal	1964-94
Dianne Keelan	1974-01	David Terrell	1969-07
Francis Kullman	1968-96	Jacqueline Tompkins	1955-84
John Leishman	1968-94	Martin Trapp	1988-11
Loretta Lockman	1964-84	David Vermetten	1962-96
William Long	1965-88	Paul Welch	1964-87
David Loveland	1973-94	Lila Wilkinson	1951-74
Keith MacPhee	1962-96	Jerry Williams	1970-05
Kenneth Marek	1968-01		

Adjunct Faculty

Annis, Joedy M.

Physical Education Instructor

Assendelft, Barbara A.

Business and Social Sciences Instructor

J.D., Detroit College of Law

B.A., Michigan State University

A.A., Macomb Community College

Auch, Thomas F.

Humanities Instructor

M.A., Michigan State University

B.S., Colorado State University

Ballance, Stephen J.

Humanities Instructor

M.A., Ohio University

B.A., Michigan State University

Barnes, Jenny L.

Business Instructor

B.S., Ferris State University

A.A.S., Northwestern Michigan College

Bartlett, Beverly A.

Science/Math Instructor

M.A., B.S., Michigan State University

Bartlett Jr., Fred P.

Technical Instructor

M.B.A., Averett College

B.S., Lawrence Technological University

Beach, Rebecca C.

Communications Instructor

Ed.D., University of Missouri

Beaver, Ryan L.

Business Instructor

B.S., Ferris State University

Beeby, George W.

Business Instructor

J.D., Wayne State University Law School

B.S., Michigan Technological University

Beery, John W.

Humanities Instructor

Ph.D., Michigan State University

M.A., B.M.E., Central Michigan University

Borkovich, Michael L.

Social Sciences Instructor

B.S., Michigan State University

A.A., Mott Community College

A.A., Lansing Community College

Brady, Teri A.

Health Occupations Instructor

B.S.N., Northern Michigan University

Brown, Andrea L.

Science/Math Instructor

M.Ed., B.S., Oakland University

Bucco, Annette

Health Occupations Instructor

B.S.N., University of Michigan

Buchanan, Joan M.

Health Occupations Instructor

A.D.N., Northwestern Michigan College

Bujak, Mary J.

Communications Instructor

Bullis, Jo

Social Sciences Instructor

J.D., B.S., University of North Dakota

Buss, Thomas A.

Business Instructor

B.S., A.A.S., Ferris State University

Cannon, Nelson J.

Social Sciences Instructor

Carlson, Craig A.

Physical Education Instructor

B.S., Ferris State University

A.S., A.A.S., Northwestern Michigan

College

Casperson, Leslie K.

Health Occupations Instructor

B.S.N., Western Michigan University

Casperson, Todd A.

Construction Trades Instructor

Cataldo, Horace P.

Technical Instructor

B.S., A.S., Ferris State University

Cavendish, Laura E.

Humanities Instructor

Cherry, William M.

Social Sciences Instructor

Chubb, Jr., Kenneth A.

Social Sciences Instructor

A.A.S., Northwestern Michigan College

Cochran, Michael L.

Social Sciences Instructor

B.S., Grand Valley State University

A.S., Grand Rapids Community College

Connor, Kathleen A.

Health Occupations Instructor

B.S.N., Grand Valley State University

Cook, Aaron C.

Aviation Instructor

B.S., Davenport University

A.A.S., Northwestern Michigan College

Air Transport Pilot (ATP)

Certified Flight Instrument Instructor

(CFII)

Multiengine Instructor (MEI)

Cook, Gary A.

Construction Technology Instructor

Licensed Residential Builder, State of

Michigan

Licensed Architect, State of Michigan

Cooney, Robert

Social Sciences Instructor

J.D., Detroit College of Law

B.S., Michigan Technological University

Crawford, Jack D.

Business and Technical Instructor

B.S., Ferris State University

Crockett, James E.

Communications Instructor

B.A., Michigan State University

Cron-Huhta, Patricia A.

Culinary Arts Instructor

B.A., Michigan State University

Davis, Michael J.

Humanities Instructor

B.S., University of Saint Francis

B.S., Ball State University

Dawson, James L.

Social Sciences Instructor

M.T.E., Ferris State University

B.S., Lake Superior State University

DeCamillis, Susan L.

Business Instructor

M.L.S., Eastern Michigan University

B.S., Ferris State University

A.C., Alpena Community College

Denton, Shawn L.

Physical Education Instructor

M.S., B.S., Michigan State University

Deutsch, Mary Lou

Business and Health Occupations

Instructor

B.A., Valparaiso University

Ditri, Jane W.

Health Occupations Instructor

M.S.N., Wayne State University

Drzewiecki, Stephen M.

Social Sciences Instructor

Dunn, Timothy M.

Maritime Instructor

A.A.S., Northwestern Michigan College

Eisenstein, Dorothy B.

Humanities Instructor

M.A.L.S., Wesleyan University

B.F.A., University of Illinois

Elston, Lee A.

Health Occupations Instructor

Emerson, Richard S.

Technical Instructor

Master Heavy Duty Truck Mechanic,

State of Michigan

Certified Automobile Technician,

National Institute for Automotive

Service Excellence

Falberg, Amy J.

Communications Instructor

Feague, Robert C.

Science/Math Instructor

M.A., Michigan State University

B.S., Central Michigan University

Filkins, James D.

Communications Instructor

M.A., B.S., Central Michigan University

A.A., Northwestern Michigan College

Fisher, Robin S.

Physical Education Instructor

Fitzpatrick, John G.

Business Instructor

M.B.A., Stanford University

B.A., Denison University

Friedgen, Shannon J.

Culinary Arts Instructor

B.S., Michigan State University

A.A.S., Northwestern Michigan College

Gentry, Ronald W.

Humanities Instructor

George, Robert P.

Culinary Arts Instructor

M.S., B.E.D., University of Michigan

A.A.S., Northwestern Michigan College

Gingras, William R.

Construction Trades Instructor

Certificate, Washtenaw Community

College

Certificate, Lake Michigan College

Gleason, Paul A.

Science/Math Instructor

M.A., B.S., Stetson University

Hagen, John F.

Communications Instructor

B.A., Michigan State University

Hainen, Michael J.

Great Lakes Maritime Academy Instructor

B.S., US Merchant Marine Academy

Harmon, BJ

Science/Math Instructor
Ph.D., Wayne State University
M.S., B.S., Ball State University

Haselton, Dean C.

Culinary Arts Instructor

Hazelwood, Constanza C.

Communications and Science/Math
Instructor
Ph.D., M.A., Michigan State University
B.A., Los Angeles Harbor College

Heffner, Brian D.

Business and Social Sciences Instructor
M.A., Eastern Michigan University
M.S., B.S., Ferris State University
A.A.S., Northwestern Michigan College

Heins, Conrad F.

Construction Technology Instructor

Hill, Darla K.

Social Sciences Instructor
M.A., Michigan State University
B.A.A., Central Michigan University

Hill, Devin L.

Construction Technology Instructor

Hines, Eric C.

Communications Instructor
M.A., Rutgers State University of
New Jersey
A.B., Lafayette College

Hoadley, Richard S.

Health Occupations Instructor
D.D.S., Ohio State University

Holley, Mark W.

Social Sciences Instructor
B.G.S., University of Michigan

Hosler, David C.

Business Instructor
A.A.S., Northwestern Michigan College

Howe, Gary L.

Social Sciences Instructor
B.S., Northern Michigan University

Hunt, Anita C.

Communications Instructor
M.A., Central Michigan University
B.A., Denison University

Hunt, Charles K.

Technical Instructor
M.A., Western Michigan University
B.S., Ferris State University

Hunter, Michael F.

Humanities Instructor
B.A., Central Michigan University

Husser, David A.

Humanities Instructor
M.M., University of Oklahoma
B.M.E., University of Illinois

Irish, Travis S.

Construction Technology Instructor
Licensed Master Plumber, State of
Michigan
Licensed Mechanical Contractor, State
of Michigan

Jabour, Frank E.

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Certified Flight Instrument Instructor
(CFII)
Multiengine Instructor (MEI)

Jaquish, Marilyn S.

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Jerome, Matthew J.

Social Sciences Instructor
A.A.S., Northwestern Michigan College

Johnson, Maria E.

Communications Instructor
B.S., Harry S. Truman College

Jones, Rebecca T.

Health Occupations Instructor
B.S.N., Indiana University,
Bloomington

Kahler, Chandler

Physical Education Instructor
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Kahler, Karen L.

Social Sciences Instructor
M.A., B.S., Michigan State University

Kalish, Todd G.

Science/Math Instructor
M.S., University of Wisconsin - LaCrosse
B.S., University of Wisconsin - Platteville

Keller, Robert C.

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B.S., Michigan State University
A.S., Lansing Community College

Kendra, Raymond J.

Construction Technology Instructor
B.S., Lawrence Technological University

Klein, Constance J.

Science/Math Instructor

Klein, Leonard E.

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M.Ed., Wayne State University
M.S., Purdue University
B.A., Oakland University

Kopka, Susan J.

Humanities Instructor
M.S., B.S., Ohio State University
M.S.W., Grand Valley State University

Krupp-Wilmeth, Lisa J.

Social Sciences Instructor
B.A., Michigan State University

LaCourse, Peter W.

Physical Education Instructor
B.S., Central Michigan University

Laughlin, Frederick L.

Culinary Arts Instructor
M.S., Rochester Institute of Technology
B.A., SUNY College - Potsdam

Laughlin, Linda

Business and Culinary Arts Instructor
B.A., Empire State University

Law, Barbara J.

Health Occupations Instructor
B.S.N., Wayne State University

Lee, Loren G.

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Lentz, Pamela S.

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Light, Jack N.

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Lutes, Charlene A.

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Ph.D., Michigan State University
M.S., Central Michigan University
B.S., Ball State University

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Maasberg, Michael

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M.S., Michigan State University
B.S., United States Military Academy -
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Certified Food Safety Manager, National
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B.S., Central Michigan University

Maloney, Vincent J.

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J.D., Wayne State University
M.S.W., A.B., University of Michigan

Masterson-Bzdok, Colleen F.

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M.S., Michigan State University
B.Ed., University of Western Ontario
B.S., University of Windsor

Mathis, Richard A.

Technical Instructor

Mayer, Sharon L.

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Mayo, Claffee E.

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McCall, Brian D.

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McConnell, Gary J.

Social Sciences Instructor

McKee, Carole J.

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M.S.N., University of Michigan
B.S.N., University of Akron

Mehl, Douglas K.

Physical Education Instructor

Miller, Karen L.

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Moody, Wayne A.

Automotive Instructor
Master Certification, National Institute
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Master Auto Mechanic, State of Michigan

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Morton, Mindy A.

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M.S., Portland State University
B.S., Michigan State University
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Nadji, Taoufik

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Nolf, Kristal M.

Business Instructor
M.S., University of Phoenix
B.S., Park College
A.A.S., Air Force Community College

Nuffer, Eric S.

Aviation Instructor

Oberlin, Michael B.

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Ph.D., M.A., B.S., Western Michigan University

Oberski, Danial J.

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M.Ed., B.S., Oakland University

O'Connor Heitjan, Mary

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Odgers, Susan L.

Social Sciences Instructor
Ph.D., M.A., Wayne State University
B.A., Oakland University

Oliver, Janet W.

Business Instructor
M.A., Western Michigan University
B.S., A.A.S., Ferris State University

Olson, Patricia J.

Social Sciences Instructor
M.A., Marygrove College
B.A., University of Michigan

Owens, Dianne H.

Communications Instructor
M.Ed., B.A., Central Washington University

Phillips, Mark E.

Maritime Academy Instructor
M.S., Maine Maritime Academy

Podolka, Deborah A.

Humanities Instructor

Poertner, Michelle L.

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M.A., Michigan State University
B.S., Ferris State University
A.A.S., Northwestern Michigan College

Puckett, Julie A.

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M.A., B.S., University of Michigan

Quick, Stephen H.

Humanities Instructor

Rand III, Charles S.

Communications Instructor
M.Ed., B.S., University of North Texas

Reisig, Terri

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M.A., Governors State University
B.A., University of Illinois

Richards, Sonja L.

Communications Instructor

Richey, Michael A.

Business Instructor
J.D., Wayne State University Law School
B.A., Michigan State University

Richmond, Kenneth C.

Humanities Instructor
M.A., B.A., University of Notre Dame

Richmond, Joan G.

Humanities Instructor
M.F.A., University of Notre Dame
B.F.A., Art Academy of Cincinnati

Robertson, Troy D.

Business Instructor
M.A., Georgia College
B.A., Michigan State University
A.A.S., Northwestern Michigan College

Robinson, Erin M.

Health Occupations Instructor

Ruedinger, Karen M.

Business Instructor
M.B.A., University of Michigan
B.A., Alma College

Samarasinghe, Diane A.

Physical Education Instructor
M.S.W., Grand Valley State University
B.S., Michigan State University

Sanborn, Gary K.

Business Instructor
A.B., University of Michigan, Flint

Sanderson, Corey J.

Humanities Instructor
B.A., University of Massachusetts, Amherst
A.S., New England Institute of Technology

Sauerbrey, Anthony G.

Aviation Instructor
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Certified Flight Instrument Instructor (CFII)
Multiengine Instructor (MEI)

Schaub, Adam D.

Physical Education Instructor

Schneider, Mary Ann

Communications Instructor
M.A., Eastern Michigan University
B.S.W., Madonna University
A.A., Lansing Community College

Scollon, Teresa J.

Communications Instructor
M.B.A., University of Michigan
M.F.A., University of Southern Maine
B.A., Michigan State University

Sensenbaugh-Padgett, Sue E.

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B.S., Grand Valley State University
A.A., A.A.S., Northwestern Michigan College

Sheehan, Priscilla G.

Humanities Instructor
M.A., University of Michigan
M.A., Wayne State University
B.A., Michigan State University

Sheerin, Julia J.

Science/Math Instructor
B.S., Indiana University

Simkins, Frank A.

Business Instructor
A.A.S., Northwestern Michigan College

Smith, Mark

Communications Instructor
M.A., Central Michigan University
B.A., University of Edinburgh
A.B., University of Michigan

Smith, Timothy R.

Social Sciences Instructor

Spaulding, Holly W.

Communications Instructor
M.A., University of Dublin School of English
B.A., University of Michigan

Springborn, Darci J.

Culinary Arts Instructor

Stafford, Sheila G.

Humanities Instructor
M.A., Central Michigan University
B.A., University of Michigan

Stivani, Michael, J.

Science/Math Instructor
B.S., Ferris State University

Stocking, Carol L.

Business Instructor
M.S., B.S., Central Michigan University

Stott, William T.

Science/Math Instructor
M.S., University of Nebraska
B.S., University of Wisconsin

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Mashburn, Laura A.

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Maintenance Mechanic





Glossary

Academic Advising

The process by which faculty members assist students with course selection and career advisement; students are assigned to an advisor based on their program of study.

Accreditation

Recognition that the college or a college program has met standards or requirements set up by a governing organization.

Admission

Acceptance of an applicant for enrollment in the college.

Articulation

The process of identifying the transferability of NMC courses to other colleges and universities.

Associate Degree

A degree issued to a student who has completed a prescribed curriculum/program of courses totaling a minimum of 64 semester credits, generally completed in two years of full-time attendance; students earn an Associate of Science and Arts, Associate in Applied Science, or Associate Degree in Nursing, depending on their area of emphasis.

Audit

To enroll in an academic course on a non-credit basis; all regular fees and charges apply.

Baccalaureate Degree

A degree issued to a student who has completed a prescribed curriculum/program of courses totaling 120 to 128 semester credits, generally completed in four years of full-time attendance.

Catalog

A college's official publication outlining general information, requirements for admission, degree and certificate programs, special services, course descriptions, and faculty/staff listing.

Certificate Program

A prescribed curriculum/program of courses in a job specialty area which includes some basic education, designed as preparation for immediate employment; requirements for certificates vary considerably and details are found in this catalog.

Class Schedule

A publication listing all classes offered for a given semester including credit hours, class hours, costs, instructors, and locations.

COMPASS

An assessment of academic skills given to new students who are pursuing certificate or degree programs or who wish to enroll in English or math; the results are used by advisors in course advisement.

Co-requisite

An additional course or instructional experience which is required to be taken simultaneously with certain courses, such as a science lab which may be required to be taken with a science lecture course.

Counseling, Personal

Assistance which students may receive from the Counseling Center regarding personal issues.

Credit

A value measurement assigned to academic classes; earned credits certify that a student has successfully completed a course of study.

Curriculum

A group of courses offered by a school or college; a group of courses required for a specific major or program at a school or college.

Drop/Add

The official procedure for dropping or adding classes to a student's schedule, accomplished by filing a "drop/add" form.

Elective

A course which a student may choose to take from a number of alternative courses in order to fulfill a program requirement.

Faculty Advisor

A faculty member who assists students with decisions about programs of study and courses.

Fees

Charges assessed to students other than tuition charges.

Financial Aid

Various forms of financial assistance to help pay college costs (see Grants, Loans, and Scholarships).

GPA

Grade Point Average. Students taking academic classes for credit are assigned a grade which is equal to a certain number of points: A = 4., B = 3., C = 2., D = 1., and E = 0. Grade Point Average is determined by the number of grade points earned divided by the number of credit hours completed.

Grant

A monetary award given to a student based on financial need; a grant does not have to be repaid.

Honors

A program at NMC through which students may earn honors credit by 1) taking special honors classes and/or 2) taking regular classes for honors credit by making arrangements with individual instructors.

In-District

A designation identifying the residency status of a student who lives in Grand Traverse County and pays NMC's lowest general tuition.

In-State

A designation identifying the residency status of a student who lives in a Michigan county other than Grand Traverse and pays higher tuition, also called "Out-of-District."

Independent Study

Individual in-depth study on a special subject under the guidance of a faculty member.

Liberal Arts

A curriculum which ranges across the broad field of human knowledge, including communications, humanities, social sciences, mathematics and the sciences.

Loan

A monetary award given to a student from a lender (college, bank, savings and loan, credit union) based on financial need; loans must be repaid.

Non-credit

Courses which do not qualify as graduation requirements, such as developmental or specific topic courses; completion of these courses is recorded on a student's permanent record as a "Q" (qualified) or as a "NQ" (not qualified), but these grades are not part of a student's grade point average.

Occupational Studies

A curriculum which provides career-specific courses as well as core education courses, designed to prepare graduates for immediate entry into the workforce.

Orientation

A required program for all new NMC students which features an opportunity to become acquainted with campus resources and policies while registering for the first semester of NMC classes.

Out-of-District

A designation identifying the residency status of a student who lives in a Michigan county other than Grand Traverse and pays higher general tuition, also called "In-State."

Out-of-State

A designation identifying the residency status of a student who lives outside of Michigan and pays NMC's highest general tuition.

Permanent Record

A listing of each student's academic history maintained by NMC's Records Office; these records are confidential.

Postsecondary Education

Education beyond the high school level.

Pre-requisite

Requirements which must be met or courses which must be successfully completed prior to enrolling in a specific course or program.

Program

A planned curriculum in a field of study which includes a list of specific requirements.

Readmission

The process of officially re-entering college at registration time for students who have been away from NMC for one or more semesters.

Registration

The process of officially enrolling in a course(s) and paying tuition.

Residency

The official home address of a student which is used to determine the tuition rate charged; residency classifications are In-District, In-State, and Out-of-State.

Scholarship

A monetary award based on academic ability and/or financial need and/or a donor's specific preferences; scholarships do not have to be repaid.

Semester

An academic session lasting approximately 15 weeks.

Service Area

The six-county area from which NMC primarily draws its students: Antrim, Benzie, Grand Traverse, Kalkaska, Leelanau, and Wexford.

Session

The number of weeks a course meets (15 weeks, 8 weeks, 5 weeks, etc.) during a semester.

Transcript

A copy of a student's permanent record (grades) available upon written request by a student to be released to a third party from NMC's Records Office.

Tuition

The monetary charge a student must pay at registration which typically equals the number of contact hours with the instructor multiplied by the student's tuition rate, which is based on his/her residency status.

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