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2014-2015
Course Catalog

HIGHER
LEARNING SPORTS
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FACULTY CAMPUS
SCHOLARSHIP
UNIVERSITY

Muskegon Community College

Muskegon Community College
221 S. Quarterline Road, Muskegon, MI 49442
(231) 773-9131

**The information contained in this catalog
is also available on the MCC website:**

www.muskegoncc.edu

Muskegon Community College

Hello and Welcome to Your MCC!

It is my pleasure to welcome you to Muskegon Community College, an outstanding institution of higher education serving Muskegon, Ottawa, Newaygo, and Oceana counties, as well as students online around the world. Our mission is to provide a center for lifelong learning that meets individual, community, and global needs. We are proud of our dedication to excellence and of our ability to help meet a wide range of educational goals. Particularly in these challenging economic times, the quality of education at MCC is an excellent investment in yourself and in our community.
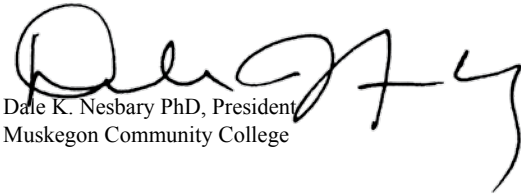
Whether you are here to take courses to transfer toward a higher educational degree or to retrain for the jobs of tomorrow, our credits will help you achieve your goals. With over 80 areas of study, MCC provides the opportunity for you to become a nurse, drive a big rig, research wind and solar power, and design computer games. You will learn in the classroom, online, at internships around the world, on the athletic field, and even on the beach!

In addition to having some of the best academic and technical programs in the state, MCC provides comprehensive student services that enhance your educational experience. An outstanding faculty, small class sizes, and excellent facilities only add to the value. Designed by award-winning architect Alden B. Dow, our beautiful campus features buildings spanning a stream in a forested area with nature trails, a golf course, and our state-of-the-art library and information technology center. We invite you to tour our campus, meet with our dedicated instructors and caring staff, and learn for yourself how MCC can help you get anywhere you want to go.

Take the first step today by calling us at (866) 711-4622 or by visiting www.muskegoncc.edu.

We appreciate your interest in Muskegon Community College and look forward to working with you to achieve your goals.

Regards,

Dale K. Nesbary PhD, President
Muskegon Community College

The Mission of Muskegon Community College

Muskegon Community College, an associate degree-granting institution of higher education, is a center for lifelong learning which provides persons the opportunity to attain their educational goals by offering programs that respond to individual, community and global needs. To fulfill its mission, MCC is committed to:

1. Prepare students for successful transfer to four-year colleges and universities, and enable students to pursue higher-level degree opportunities through our local partnerships with university programs.
2. Prepare students in critical thinking, communication and long-term learning skills for the changing challenges of the future.
3. Develop technical and vocational skills necessary to enter and/or advance in the technologically sophisticated workplace of the 21st century.
4. Provide for the assessment and/or improvement of learning skills and attitudes necessary for a successful educational experience.
5. Meet the unique educational, cultural, and societal needs in the community through special courses, seminars, and exhibits.
6. Respond in a rapid fashion to the ever-changing educational and training needs of local and regional business and industry.
7. Stimulate intellectual curiosity, promote humanitarian values and enhance the general educational experiences necessary for persons to function as effective citizens.
8. Create an atmosphere where diversity is acknowledged and encouraged.
9. Provide comprehensive student services that are conducive to student learning and satisfaction in all facets of the college experience and appropriate to an open door community college.

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POLICIES & PROCEDURES

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Introduction

No matter where you want to go, our credits can get you there. If you're unsure about your future, our friendly counselors and instructors will help you find your way. Focus™2 testing and other resources will help ensure you get on the right path–and may even reveal undiscovered skills.

Located near the shores of Muskegon Lake and Lake Michigan, Muskegon Community College (MCC) provides service to the Lakeshore region of West Michigan. MCC serves a broad and diverse body of over 5,000 students with an average age of 27 years, and offers 54 Associate Degree programs, 42 Certificate programs, and 1 diploma program.

History

Muskegon Community College was founded as Muskegon Junior College in 1926, and has been continually accredited by the North Central Association's Higher Learning Commission since 1929. The community college district was created via the Michigan Constitution of 1963, along with an elected Board of Trustees. The college moved to its current campus location, an Alden B. Dow designed facility, in 1967. In 1995, the Stevenson Center for Higher Education, comprising a consortium of Ferris State University, Grand Valley State University, and Western Michigan University, was added to increase access to educational opportunities for Muskegon residents. In 2010, the Outdoor Learning Lab, a focal point of green technology and center for MCC's new Alternative and Renewable Energy certificate program, opened. The college is located on a 111-acre campus in Muskegon, with extension centers in Fremont, Grand Haven, and Newaygo. A more detailed history can be found on

Accreditation

Muskegon Community College is accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools, 30 N. LaSalle Street, Chicago, Illinois, 60602-2504. The Commission may be contacted by phone, (800) 621-7440, by fax, (312) 263-7462, or by email, info@hlcommission.org. They may also be contacted online at www.ncahlc.org. Any interested persons may review a copy of the accreditation documents online at www.muskegoncc.edu/hlc.

Equal Opportunity

Muskegon Community College is an equal opportunity institution and does not discriminate on the basis of race, color, religion, gender, national origin, marital status, sexual orientation, political persuasion, disability, height, weight, or age in any of its educational programs, activities, and employment.

PROGRAMS

Your Destination for
Higher Education
muskegoncc.edu

Associate in Science and Arts

Associate in Applied Science

ALLIED HEALTH PROGRAMS

BUSINESS PROGRAMS

BUSINESS TECHNOLOGY PROGRAMS

EDUCATION PROGRAMS

APPLIED TECHNOLOGY PROGRAMS

ADDITIONAL ENTREPRENEURIAL STUDY PROGRAMS

Certificates

Certificates
(Continued)

Higher Education Partnership Programs

Professional Truck Driver Training

The Purposes of General Education

For the Associate in Science and Arts Degree at Muskegon Community College

Introduction

The College shares the view held by many that an education should prepare you not only for a career, but also for life. It is primarily through the curriculum of the general education program for the Associate in Science and Arts Degree that the College seeks to help you acquire the knowledge and skills necessary to understand both yourself and the world you live in. General education encourages community by providing access to the knowledge common to all educated men and women, regardless of their vocation. General education is designed to cultivate in each student four general abilities of an educated person:

- **Communication**: Knowledge and application of written and verbal communication competencies using college level information literacy skills
- **Problem Solving and Technology**: Knowledge and problem solving skills using logical, mathematical, and scientific reasoning as well as technological resources
- **Ethical Reasoning and Creativity**: Knowledge and application of creativity in the arts as well as knowledge of, and the ability to critically examine ethical values, principles, and issues.
- **Personal, Social, and Cultural Awareness**: Knowledge and life skills required of an effective member of a diverse and global community

Assessing Student Academic Achievement

Muskegon Community College is fully accredited by the Higher Learning Commission of the North Central Association of Colleges and Schools. Accreditation helps ensure students that they are receiving a quality education and can transfer to other colleges and universities with ease and confidence. MCC is committed to an essential part of the accreditation process: assessing student learning.

Credit Hours

A credit hour is an amount of work represented in intended learning outcomes and verified by evidence of student achievement. Academic credit for each course is approved and assigned by the Instructional Affairs Council and the Coordinating Council. This information is published in the MCC catalog, the class schedule, and the online student registration system.

The standard of class time shall be one hour of class and two hours of out-of-class (homework) student work per week over a semester.

Most colleges, including Muskegon Community College, require a semester credit hour to be not less than 800 instructional minutes.

Muskegon Community College follows a semester schedule for its academic programs. In addition to a fall and winter semester of fifteen weeks, the College offers a twelve-week summer session.

Program length is determined by the number of credits required for each degree. All Associate in Science and Arts (ASA) and Associate in Applied Science (AAS) degrees require at least 62 credits. A full-time student could complete an ASA or AAS degree in two years, provided the classes are available in the correct sequence for the student. The College also offers a variety of certificate programs, which range from the 12-credit Customer Service Specialist Certificate to the 39-credit Electronics Technology Certificate.

Contact Hours

Tuition is assessed by the number of weekly contact hours. The contact hours for a course are the number of hours per week in which a course meets. The definition of a contact hour is a total of 55 minutes of student instruction in which the student comes into contact with an instructor or with tutorial or laboratory equipment.

Laboratory

For laboratory experiences where the contact hours exceed the number of credit hours for a course, the academic department will decide, based on past experience, how much of the designated contact time will be devoted to lecture or classroom activities, and how much contact time will be devoted to laboratory experiences. This information will be spelled out in the class syllabus. For every one hour of laboratory time per week, the students will be responsible to complete two hours of outside student learning activities or homework for the length of the semester.

Distance Education

For online or hybrid classes, the same 55 minute credit and contact requirement for regular classes will be followed. The standard of class time shall be one hour of class and two hours of out-of-class student work per week over a semester for a semester. For distance education, academic engagement is defined as, but not limited to, submitting an academic assignment; taking an exam, an interactive tutorial, or computer-assisted instruction; attending a study group that was assigned by the institution; contributing to an academic online discussion; and initiating contact with a faculty member to ask a question about the academic subject studied in the course. Merely logging into an online class does not constitute academic engagement or attendance. Each faculty member shall maintain an accurate record of attendance of each student enrolled in each of the faculty member's classes, while also defining "online attendance" in their distance learning courses.

For more detailed information, go to www.muskegoncc.edu/pages/1524.asp.

Internships

For internship experiences, one credit is equal to 60 hours of supervised training or work experience. Students can earn 1-5 credits through a documented and approved internship experience.

Visit www.muskegoncc.edu/internships for more information.

MCC ACADEMIC PROGRAMS

Associate in Science and Arts Degree

This degree is for students intending to transfer to a four-year college or university. If you wish to major in a program that requires you to transfer to a four-year college, such as Social Work or Computer Science, the courses you need to take are outlined in the transfer guides available online at www. muskegoncc.edu. These programs are planned to enable students to transfer to bachelor degree-granting colleges and universities with advanced standing. Students graduating from Muskegon Community College with an Associate in Science and Arts Degree are generally admitted to the bachelor degree-granting institutions with junior year standing.

Associate in Applied Science Degree

If you wish to major in an occupational program that requires only two years of study, such as Electronics or Administrative Assistant, the courses you need to take are outlined in this catalog. You will want to pursue the Associate in Applied Science Degree. The Associate in Applied Science Programs (Business, Allied Health, Technology) were designed in conjunction with active advisory committees, so that a student may reasonably expect employment upon successful completion of his/her degree work. The Associate in Applied Science Degree may also be used as a transfer degree to a limited number of baccalaureate programs, but AAS degree programs are not specifically designed to transfer to four-year colleges or universities.

Diplomas and Certificates

Certificates are offered in many of the same occupationally-oriented programs as the Associate in Applied Science Degrees but are not as comprehensive in nature. These certificate programs were developed with the assistance of an advisory committee, and students may reasonably expect employment upon completion of these programs. New certificate programs are continually being developed at Muskegon Community College. Students should check with counselors for information on other certificate programs that may be available.

IT IS STRONGLY RECOMMENDED THAT STUDENTS SEE A COUNSELOR TO DEVELOP A COURSE PLAN FOR PURPOSES OF TRANSFERRING TO A FOUR-YEAR INSTITUTION or OBTAINING A TWO-YEAR DEGREE or CERTIFICATE.

Students returning to Muskegon Community College after an absence of THREE YEARS or LONGER will be under the requirements of the CURRENT CATALOG.

Associate in Science and Arts Degree Programs

Associate in Science and Arts

The College shares the view held by many that an education should prepare a person not only for a career, but also for life. It is primarily through the curriculum of the general education program for the Associate in Science and Arts Degree that the College seeks to help students acquire the knowledge and skills necessary to understand both themselves and the world in which we live. For a complete statement regarding the purposes of general education, please see page page 13 of this catalog.

GENERAL EDUCATION REQUIREMENTS

At the time of printing the MCC catalog all Associate in Science and Arts degrees were being revised in keeping with a recent State of Michigan mandate. The intention of the mandate is to ensure more efficient transfer between Michigan post-secondary institutions. For information as to the Foundational Skills and General Education requirements for the ASA please check with the MCC Counseling and Advising Center or the MCC website.

ELECTIVES   **27 CR. HRS.**
These courses generally relate to a student's major and minor

TOTAL 62

Electives

Electives are courses a student chooses, in addition to the other degree requirements, based on the anticipated major and the transfer school the student will be attending. Electives should be choosen carefully, with the advice of a counselor who will provide a student with a transfer guide that lists specific courses four-year schools recommend students take at the community college level.

To meet the College's technology goals, students are strongly recommended to complete CIS 110, 120A, or 129. The following courses will not count toward graduation: ENG 085, 089, 091; RDG 040, 050, 060; MATH 035F, 036A, 036FT, 038, 038FT, 040, 041.

If you are uncertain about your major, the College recommends that you complete your General Education Requirements first. All students, whether majoring in English or Engineering, must complete the general education requirements.

Foreign Language

Some four-year colleges and universities require a second-year proficiency in a foreign language. Some graduate school admissions committees prefer candidates with a foreign language background. Students who think they might one day seek admission to a graduate program should consider studying a foreign language at Muskegon Community College.

Transfer Guides

Transfer guides tell you what courses to take at Muskegon Community College before transferring to a senior college. There are transfer guides available for the most popular majors and transfer schools. For example, if you want to study education and transfer to Grand Valley State University, there is a transfer guide which tells you which courses Grand Valley State University recommends you to take at MCC before transferring.

Transfer guides are available online at www.muskegoncc.edu/pages/1024.asp.

It is important to meet with an MCC counselor when deciding which courses to take and when.

Associate in Science and Arts
Broadcasting and Multimedia/Performance

The Broadcasting and Multimedia/Performance curriculum is designed to prepare students for entry into related degree tracks at four-year colleges and universities. Traditionally, these programs provided classes and experience for those desiring on-camera or behind-the-mic jobs in broadcasting, but now radio and television seek employees with both performance and production skills. Therefore, classes in television and audio production are required and classes in graphic design, web design, and video editing are strongly recommended. Students will find a variety of on-air opportunities in sports reporting, weather delivery, news standup, and talk show hosting through MCC's own media outlets.

GENERAL EDUCATION REQUIREMENTS

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BROADCASTING AND MULTIMEDIA/
PERFORMANCE REQUIREMENTS   28 CR. HRS.
COM 101 3
ORAL COMMUNICATIONS
COM 102 3
MASS MEDIA
COM 107 3
INTRODUCTION TO JOURNALISM
COM 112..2
AUDIO PRODUCTION
COM 113..2
PRACTICAL RADIO
COM 201 3
PUBLIC SPEAKING
COM 212 3
TELEVISION PRODUCTION
TH 160 3
ACTING FOR TV AND FILM
Choose One (1) Course From: 3
CIS 110   COMPUTER CONCEPTS
CIS 120A   INTRO TO COMPUTER
             INFORMATION SYSTEMS
Choose One (1) Course From: 3
TH 102   INTRODUCTION TO ACTING I
TH 203   READERS THEATER

SUGGESTED ELECTIVES   4-6 CR. HRS.
BUS 263...3
ADVERTISING DYNAMICS
CIS 119PP 1
INTRODUCTION TO PRESENTATION GRAPHICS
CIS 167A/ GRD 167A 1
INTRODUCTION TO INTERNET ANIMATION
CIS 177DW..1
INTRODUCTION TO HTML EDITORS
CIS 187 3
MULTIMEDIA DIGITIZING
CIS 287 3
PERSONAL COMPUTER DIGITAL VIDEO EDITING
COM 202 3
HUMAN COMMUNICATION
COM 203/ ENG208 3
INTRODUCTION TO CINEMA
COM 290CI* 3
COOPERATIVE INTERNSHIP
ENG 221 3
ADVANCED WRITING
ENG 222 3
CREATIVE WRITING
GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN

TOTAL 66-68

*COM 290CI requires successful completion of at least 21 credit hours in the Broadcasting and Multimedia/Performance requirements, 30 credit hours overall, 2.5 GPA and recommendation from department faculty.

Associate in Science and Arts
Criminal Justice/Corrections

GENERAL EDUCATION REQUIREMENTS

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CRIMINAL JUSTICE REQUIREMENTS   24 CR. HRS.

CJ 101 3
INTRO TO LAW ENFORCEMENT
CJ 102 3
POLICE ADMINISTRATION I
CJ 104 3
CRIMINOLOGY
CJ 109 3
CRIME PREVENTION AND JUVENILE DELINQUENCY
CJ 201 3
CRIMINAL LAW
Choose Three (3) Courses From: 9
CJ 250   *INTRODUCTION TO CORRECTIONS*
CJ 251A   *LEGAL ISSUES IN CORRECTIONS*
CJ 252A   *CORRECTIONAL INSTITUTIONS/FACILITIES*
CJ 257   *CLIENT RELATIONS IN CORRECTIONS*
CJ 258A   *CLIENT GROWTH AND DEVELOPMENT*

SUGGESTED ELECTIVES   4 CR. HRS.

CJ 110 3
DEFENSIVE TACTICS
CJ 112 1
EMERGENCY VEHICLE OPERATIONS
CJ 120 2
FIREARMS CERTIFICATION
CJ 122 3
THE POLICE PATROL FUNCTION
CJ 123 3
TRAFFIC ENFORCEMENT
CJ 130 3
TACTICAL COMMUNICATION
CJ 193 1
HAZ-MAT COMMUNICATIONS
CJ 202 3
POLICE ADMINISTRATION II
CJ 204 3
CRIMINAL INVESTIGATIONS
CJ 205 3
INTERROGATION AND CASE PREPARATION
CJ 206 3
EVIDENCE AND CRIMINAL PROCEDURE
CJ 207 3
POLICE AND COMMUNITY RELATIONS
CJ 208 3
POLICE SCIENCE LABORATORY I
CJ 298 3
INSTRUCTOR SKILL DEVELOPMENT

TOTAL 62

All CJ classes must be passed with a minimum grade of "C."

Associate in Science and Arts
Criminal Justice/Geospatial Technology

PROGRAMS

GENERAL EDUCATION REQUIREMENTS

At the time of printing the MCC catalog all Associate in Science and Arts degrees were being revised in keeping with a recent State of Michigan mandate. The intention of the mandate is to ensure more efficient transfer between Michigan post-secondary institutions. For information as to the Foundational Skills and General Education requirements for the ASA please check with the MCC Counseling and Advising Center or the MCC website.

CRIMINAL JUSTICE REQUIREMENTS   15 CR. HRS.
CJ 101 3
INTRO TO LAW ENFORCEMENT
CJ 102 3
POLICE ADMINISTRATION I
CJ 104 3
CRIMINOLOGY
CJ 109 3
CRIME PREVENTION AND JUVENILE DELINQUENCY
CJ 201 3
CRIMINAL LAW

**GEOSPATIAL
TECHNOLOGY REQUIREMENTS   12 CR. HRS.**
CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS
GEOG 230 3
ELEMENTS OF MAP DESIGN
GEOG 231 3
INTRO TO GEOGRAPHIC INFORMATION SYSTEMS
GEOG 232 3
APPLICATIONS OF GEOGRAPHIC INFO SYSTEMS

APPROVED ELECTIVES   6 CR. HRS.
CAD 100 3
INTRODUCTION TO DRAFTING
CIS 253A...3
DATABASE DESIGN AND IMPLEMENTATION
GEOG 101A...4
PHYSICAL GEOGRAPHY
GEOG 215 4
INTRODUCTION TO WEATHER AND CLIMATE
GEOG 290CI 1-4
COOPERATIVE INTERNSHIP PROGRAM
GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN
Choose One (1) Course From: 9
BUS 105   BUSINESS STATISTICS
MATH 115   PROBABILITY AND STATISTICS

TOTAL 67

All CJ classes must be passed with a minimum grade of "C."

Associate in Science and Arts
Criminal Justice/Law Enforcement

GENERAL EDUCATION REQUIREMENTS

At the time of printing the MCC catalog all Associate in Science and Arts degrees were being revised in keeping with a recent State of Michigan mandate. The intention of the mandate is to ensure more efficient transfer between Michigan post-secondary institutions. For information as to the Foundational Skills and General Education requirements for the ASA please check with the MCC Counseling and Advising Center or the MCC website.

CRIMINAL JUSTICE REQUIREMENTS   24 CR. HRS.

CJ 101 3
INTRO TO LAW ENFORCEMENT
CJ 102 3
POLICE ADMINISTRATION I
CJ 104 3
CRIMINOLOGY
CJ 109 3
CRIME PREVENTION AND JUVENILE DELINQUENCY
CJ 201 3
CRIMINAL LAW
Choose Three (3) Courses From: 9
CJ 202   POLICE ADMINISTRATION II
CJ 204   CRIMINAL INVESTIGATIONS
CJ 205   INTERROGATION AND CASE PREPARATION
CJ 206   EVIDENCE AND CRIMINAL PROCEDURE
CJ 207   POLICE AND COMMUNITY RELATIONS
CJ 208   POLICE SCIENCE LABORATORY I

SUGGESTED ELECTIVES   4 CR. HRS.

CJ 110 3
DEFENSIVE TACTICS
CJ 112 1
EMERGENCY VEHICLE OPERATIONS
CJ 120 2
FIREARMS CERTIFICATION
CJ 122 3
THE POLICE PATROL FUNCTION
CJ 123 3
TRAFFIC ENFORCEMENT
CJ 130 3
TACTICAL COMMUNICATION
CJ 193 1
HAZ-MAT COMMUNICATIONS
CJ 250 3
INTRODUCTION TO CORRECTIONS
CJ 251A...3
LEGAL ISSUES IN CORRECTIONS
CJ 252A...3
CORRECTIONAL INSTITUTIONS/FACILITIES
CJ 257 3
CLIENT RELATIONS IN CORRECTIONS
CJ 258A...3
CLIENT GROWTH AND DEVELOPMENT
CJ 298 3
INSTRUCTOR SKILL DEVELOPMENT

TOTAL 62

All CJ classes must be passed with a minimum grade of "C."

Associate in Science and Arts
Early Childhood Education

This degree is intended for students who would like to work in a pre-kindergarten setting, such as a Head Start program. Please note it does not lead to a teaching certificate for K-12.

GENERAL EDUCATION REQUIREMENTS

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EARLY CHILDHOOD
EDUCATION REQUIREMENTS   **26 CR. HRS.**

ED 109 3
THE PARENT-CHILD CONNECTION

ED 111..3
INTRO TO THE EDUCATION OF YOUNG CHILDREN

ED 120B..3
EARLY CHILDHOOD EDUCATION

ED 210 3
CHILD CARE AND GUIDANCE

ED 214 3
INFANTS AND TODDLERS

ED 220A..2
EARLY CHILDHOOD ASSESSMENT

ED 230 3
CHILDREN'S LITERATURE

ED 252A..3
CHILD DEVELOPMENT PRACTICUM

Choose One (1) Course From: 3
ED 225   CHILD DEVELOPMENT
ED 250   HUMAN GROWTH AND LEARNING

RECOMMENDED ELECTIVES   **2 CR. HRS.**
ED 107 3
CHILD CARE: OPERATING A SUCCESSFUL BUSINESS

ED 118 3
CREATIVE CURRICULUM FOR CHILDREN

ED 211 3
BEHAVIOR MANAGEMENT

ED 223 3
CHILD CARE ADMINISTRATION

ED 226 3
INTERDISCIPLINARY APPROACHES TO
EARLY INTERVENTIONS

ED 251 3
HEALTH NEEDS OF THE YOUNG CHILD

TOTAL 62

Associate in Science and Arts
Engineering

This curriculum is designed to provide a solid foundation in math, science, and engineering for students who are interested in transferring to a four-year institution to complete a Bachelor's Degree in Engineering. Successful completion of the program leads to the degree of Associate in Science and Arts. This degree is designed for transfer.

GENERAL EDUCATION REQUIREMENTS

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ENGINEERING-RELATED
REQUIREMENTS   19 CR. HRS.
ENGR 202 3
STATICS
ENGR 204 3
ENGINEERING DYNAMICS
MATH 283 4
CALCULUS III
MATH 295 4
DIFFERENTIAL EQUATIONS
PHYS 204L&L 5
ENGINEERING PHYSICS

ENGINEERING ELECTIVES   9 CR. HRS.
CAD 110 3
INTRODUCTION TO COMPUTER-AIDED DRAFTING
CHEM 101LEC & CHEM 101A 5
GENERAL AND INORGANIC CHEMISTRY, L&L
CHEM 102LEC & CHEM 102A 5
GENERAL AND INORGANIC CHEMISTRY, L&L
CIS 185 3
"C" PROGRAMMING
ENGR 105 4
INTRODUCTION TO ENGINEERING
GEOL 101A 4
INTRODUCTION TO PHYSICAL GEOLOGY
GEOL 102 4
INTRODUCTION TO EARTH HISTORY
MATH 215 3
PROBABILITY AND STATISTICS FOR ENGINEERING
TOTAL 62

Associate in Science and Arts
Health Science

This is a new degree. Please see a counselor for specific requirements.

Associate in Science and Arts
Interactive Media and Gaming: Game Designer

A game designer develops the concept, layout, genre, story, and gameplay of this form of interactive media. This may include playfield, design, hardware specifications, writing, plus all the other properties that balance and tune the gameplay experience. This individual must possess good writing skills, some graphic design/art and programming skills, plus a solid background in the conceptual structures of a game (such as human relations, history, geography/geology, criminal investigation, etc). A minimum of 34 credits of General Education requirements must be fulfilled.

GENERAL EDUCATION REQUIREMENTS

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CORE REQUIREMENTS   **12 CR. HRS.**
CIS 120A..3
INTRO TO COMPUTER INFORMATION SYSTEMS
CIS 124 3
INTRODUCTION TO GAME DEVELOPMENT
CIS 284 3
INTERACTIVE MEDIA AND GAME DESIGN
GRD 120...3
INTRODUCTION TO GRAPHIC DESIGN

GAME DESIGNER REQUIREMENTS   **18 CR. HRS.**
*ART 198...3
ART HISTORY I
BUS 127..3
HUMAN RELATIONS
COM 102 3
MASS MEDIA
*ENG 218 3
POPULAR LITERARY GENRES
ENG 222 3
CREATIVE WRITING
*Choose One (1) Course From: 3
GEOG 104   *CULTURAL GEOGRAPHY*
GEOG 105   *WORLD REGIONAL GEOGRAPHY*

* These courses may also fulfill general education requirements.*

ELECTIVES   **VARIABLE CR. HRS.**
If needed to reach 64 credits .... Variable

TOTAL 64

Associate in Applied Science
Degree Programs and Certificates

Associate in Applied Science
Broadcasting and Multimedia/Technical

The Broadcasting and Multimedia/Technical curriculum is designed to prepare students for entry into the production side of television, radio, and related careers in news media. Core requirement classes strive to provide real world experience within the college's radio and television stations. As broadcasting transitions to digital delivery and expands to web and other new media methods of reaching listeners and viewers, this curriculum requires students to broaden their experiences to include networking, web design and graphic design. This program is not designed to transfer to a four-year institution. Any student wishing to transfer to a four-year college is urged to consult with a counselor.

GENERAL EDUCATION
REQUIREMENTS   **20-22 CR. HRS.**
BCOM 101...3
BUSINESS & TECHNICAL COMMUNICATIONS

BCOM 102...3
ADVANCED BUS & TECH COMMUNICATIONS

Choose One (1) Course From: 3-4
BUS 126   BUSINESS MATH
MATH 109   COLLEGE ALGEBRA WITH APPLICATIONS

Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
BUS 166   QUALITY CUSTOMER SERVICE

Choose One (1) Course From: 3
CIS 110   COMPUTER CONCEPTS
CIS 120A   INTRO TO COMPUTER
            INFORMATION SYSTEMS

Choose One (1) Course From: 3-4
GEOG 104   CULTURAL GEOGRAPHY
PHIL 205   BUSINESS ETHICS
PSCI 111   INTRO TO AMERICAN GOVERNMENT
PSCI 211   COMPARATIVE GOVERNMENTS
PSYC 102   APPLIED PSYCHOLOGY
PSYC 201   GENERAL PSYCHOLOGY

PEA/DNC 2
ONE CREDIT HOUR FROM PEA 101A, PEA 103,
PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT OF CHOICE

BROADCASTING AND
MULTIMEDIA/TECHNICAL
CORE REQUIREMENTS   **38 CR. HRS.**
CIS 109/ELTR 109..3
PERSONAL COMPUTER MAINTENANCE

CIS 143 3
INTRODUCTION TO LOCAL AREA NETWORKS

CIS 177DW..1
INTRODUCTION TO HTML EDITORS

CIS 187 3
MULTIMEDIA DIGITIZING

CIS 287 3
PERSONAL COMPUTER DIGITAL VIDEO EDITING

COM 101 3
ORAL COMMUNICATIONS

COM 102 3
MASS MEDIA

COM 112...2
AUDIO PRODUCTION

COM 113...2
PRACTICAL RADIO

COM 212 3
TELEVISION PRODUCTION

COM 290CI* 3
COOPERATIVE INTERNSHIP

GR 160 3
DIGITAL IMAGING

GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN

TH 120 3
TECHNICAL THEATER I

SUGGESTED ELECTIVES   **5-7 CR. HRS.**
BUS 200..3
INTERNATIONAL BUSINESS

BUS 263 3
ADVERTISING DYNAMICS

COM 107 3
INTRODUCTION TO JOURNALISM

COM 201 3
PUBLIC SPEAKING

COM 202 3
HUMAN COMMUNICATION

COM 203/ENG 208 3
INTRODUCTION TO CINEMA

ENG 221 3
ADVANCED WRITING

ENG 222 3
CREATIVE WRITING

                  TOTAL 65

*COM 290CI requires successful completion of
at least 21 credit hours in the Broadcasting and
Multimedia/Technical Core Requirements, 30 credit
hours overall, 2.5 GPA and recommendation from
department faculty.

Video Editing Certificate

The Video Editing certificate provides an opportunity to receive training in non-linear digital video editing in a fall-winter, one-year sequence.

CERTIFICATE REQUIREMENTS   **17 CR. HRS.**

CIS 187 3
MULTIMEDIA DIGITIZING

CIS 287 3
PERSONAL COMPUTER DIGITAL VIDEO EDITING

COM 112..2
AUDIO PRODUCTION

COM 212 3
TELEVISION PRODUCTION

GR 160 3
DIGITAL IMAGING

Choose One (1) Course From: 3
CIS 110   COMPUTER CONCEPTS
CIS 120A   INTRO TO COMPUTER
*   INFORMATION SYSTEMS*

                TOTAL 17

Corrections

Since October 1, 1987 ALL Michigan State Corrections Officers hired are required to have 15 semester or 23 quarter college credit hours earned through one of the following options:

OPTION I

Corrections Certificate

Five (5) specific corrections courses as determined by the Michigan Correctional Officer's Training Council. Each course must be passed with a minimum "C" grade (2.0 GPA).

MCC CORRECTIONS PROGRAM   15 CR. HRS.

CJ 250 3
INTRODUCTION TO CORRECTIONS

CJ 251A..3
LEGAL ISSUES IN CORRECTIONS

CJ 252A..3
CORRECTIONAL INSTITUTIONS/FACILITIES

CJ 257 3
CLIENT RELATIONS IN CORRECTIONS

CJ 258A..3
CLIENT GROWTH AND DEVELOPMENT

TOTAL 15

Students completing Option I will receive an MCC Certificate in Corrections. Please contact the Business Department for your certificate.

OPTION II

Fifteen credits in the following areas: Corrections, Criminal Justice, Guidance and Counseling, Educational Psychology, Family Relations, Psychology, and Sociology. Each course must be passed with a minimum "C" grade (2.0 GPA).

OPTION III

ASA degree in Criminal Justice is recommended. Program should include the five (5) Corrections courses listed in Option I. Each Corrections course must be passed with a minimum "C" grade (2.0 GPA).

Associate in Applied Science
Criminal Justice/Corrections

GENERAL EDUCATION REQUIREMENTS   **20-22 CR. HRS.**

BCOM 101 3
BUSINESS & TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS & TECH COMMUNICATIONS

Choose One (1) Course From: 3-4
BUS 105   BUSINESS STATISTICS
BUS 126   *BUSINESS MATH*
MATH 109   *COLLEGE ALGEBRA WITH APPLICATIONS*
MATH 115   PROBABILITY AND STATISTICS

Choose One (1) Course From: 3
BUS 127   *HUMAN RELATIONS*
COM 101   *ORAL COMMUNICATIONS*

Choose One (1) Course From: 3-4
GEOG 104   *CULTURAL GEOGRAPHY*
PHIL 205   *BUSINESS ETHICS*
PSCI 111   *INTRO TO AMERICAN GOVERNMENT*
PSCI 211   *COMPARATIVE GOVERNMENTS*
PSYC 102   *APPLIED PSYCHOLOGY*
PSYC 201   *GENERAL PSYCHOLOGY*

Choose One (1) Course From: 3
CIS 110   *COMPUTER CONCEPTS*
CIS 120A   *INTRO TO COMPUTER*
    INFORMATION SYSTEMS

PEA/DNC 2
ONE CREDIT HOUR FROM PEA 101A, PEA 103,
PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT OF CHOICE

CRIMINAL JUSTICE REQUIREMENTS   **15 CR. HRS.**

CJ 101 3
INTRO TO LAW ENFORCEMENT

CJ 102 3
POLICE ADMINISTRATION I

CJ 104 3
CRIMINOLOGY

CJ 109 3
CRIME PREVENTION AND JUVENILE DELINQUENCY

CJ 201 3
CRIMINAL LAW

CORRECTIONS REQUIREMENTS   **15 CR. HRS.**

CJ 250 3
INTRODUCTION TO CORRECTIONS

CJ 251A 3
LEGAL ISSUES IN CORRECTIONS

CJ 252A 3
CORRECTIONAL INSTITUTIONS/FACILITIES

CJ 257 3
CLIENT RELATIONS IN CORRECTIONS

CJ 258A 3
CLIENT GROWTH AND DEVELOPMENT

SUGGESTED ELECTIVES   **10-12 CR. HRS.**

CJ 110 3
DEFENSIVE TACTICS

CJ 112 1
EMERGENCY VEHICLE OPERATIONS

CJ 120 2
FIREARMS CERTIFICATION

CJ 122 3
THE POLICE PATROL FUNCTION

CJ 123 3
TRAFFIC ENFORCEMENT

CJ 130 3
TACTICAL COMMUNICATION

CJ 193 1
HAZ-MAT COMMUNICATIONS

CJ 202 3
POLICE ADMINISTRATION II

CJ 204 3
CRIMINAL INVESTIGATIONS

CJ 205 3
INTERROGATION AND CASE PREPARATION

CJ 206 3
EVIDENCE AND CRIMINAL PROCEDURE

CJ 207 3
POLICE AND COMMUNITY RELATIONS

CJ 208 3
POLICE SCIENCE LABORATORY I

CJ 298 3
INSTRUCTOR SKILL DEVELOPMENT

TOTAL 62

All CJ classes must be passed with a minimum grade of "C."

** BUS 105 Business Statistics and MATH 115 Probability and Statistics are **identical** in content and material.*

Associate in Applied Science
Criminal Justice/Geospatial Technology

GENERAL EDUCATION REQUIREMENTS   **20-22 CR. HRS.**
BCOM 101 3
BUSINESS & TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS & TECH COMMUNICATIONS

Choose One (1) Course From: 3-4
BUS 105   BUSINESS STATISTICS
BUS 126   BUSINESS MATH
MATH 109   COLLEGE ALGEBRA WITH APPLICATIONS
MATH 115   PROBABILITY AND STATISTICS

Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

Choose One (1) Course From: 3-4
GEOG 104   CULTURAL GEOGRAPHY
PHIL 205   BUSINESS ETHICS
PSCI 111   INTRO TO AMERICAN GOVERNMENT
PSCI 211   COMPARATIVE GOVERNMENTS
PSYC 102   APPLIED PSYCHOLOGY
PSYC 201   GENERAL PSYCHOLOGY

Choose One (1) Course From: 3
CIS 110   COMPUTER CONCEPTS
CIS 120A   INTRO TO COMPUTER INFORMATION SYSTEMS

PEA/DNC 2
ONE CREDIT HOUR FROM PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT OF CHOICE

CRIMINAL JUSTICE REQUIREMENTS   **15 CR. HRS.**
CJ 101 3
INTRO TO LAW ENFORCEMENT

CJ 102 3
POLICE ADMINISTRATION I

CJ 104 3
CRIMINOLOGY

CJ 109 3
CRIME PREVENTION AND JUVENILE DELINQUENCY

CJ 201 3
CRIMINAL LAW

GEOSPATIAL TECHNOLOGY REQUIREMENTS   **15-17 CR. HRS.**
GEOG 230 3
ELEMENTS OF MAP DESIGN

GEOG 231 3
INTRO TO GEOGRAPHIC INFORMATION SYSTEMS

GEOG 232 3
APPLICATIONS OF GEOGRAPHIC INFO SYSTEMS

Choose Two (2) Courses From: 6-8
BUS 105   BUSINESS STATISTICS
CAD 100   INTRODUCTION TO DRAFTING
CIS 253A   DATABASE DESIGN AND IMPLEMENTATION
GEOG 101A   PHYSICAL GEOGRAPHY
GEOG 215   INTRO TO WEATHER AND CLIMATE
GEOG 290CI   COOPERATIVE INTERNSHIP PROGRAM
GRD 120   INTRODUCTION TO GRAPHIC DESIGN
MATH 115   PROBABILITY AND STATISTICS

SUGGESTED ELECTIVES   **12 CR. HRS.**
CJ 110 3
DEFENSIVE TACTICS

CJ 112 1
EMERGENCY VEHICLE OPERATIONS

CJ 120 2
FIREARMS CERTIFICATION

CJ 122 3
THE POLICE PATROL FUNCTION

CJ 123 3
TRAFFIC ENFORCEMENT

CJ 130 3
TACTICAL COMMUNICATION

CJ 193 1
HAZ-MAT COMMUNICATIONS

CJ 208 3
POLICE SCIENCE LABORATORY I

CJ 250 3
INTRODUCTION TO CORRECTIONS

CJ 251A 3
LEGAL ISSUES IN CORRECTIONS

CJ 252A 3
CORRECTIONAL INSTITUTIONS/FACILITIES

CJ 257 3
CLIENT RELATIONS IN CORRECTIONS

CJ 258A 3
CLIENT GROWTH AND DEVELOPMENT

CJ 298 3
INSTRUCTOR SKILL DEVELOPMENT

TOTAL 62

All CJ classes must be passed with a minimum grade of "C."

Associate in Applied Science
Criminal Justice/Law Enforcement

GENERAL EDUCATION REQUIREMENTS
20-22 CR. HRS.

BCOM 101 3
BUSINESS & TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS & TECH COMMUNICATIONS

Choose One (1) Course From: 3-4
*BUS 105   BUSINESS STATISTICS
BUS 126   BUSINESS MATH
MATH 109   COLLEGE ALGEBRA WITH APPLICATIONS
MATH 115   PROBABILITY AND STATISTICS

Choose One (1) Course From: 3
*BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS*

Choose One (1) Course From: 3-4
*GEOG 104   CULTURAL GEOGRAPHY
PHIL 205   BUSINESS ETHICS
PSCI 111   INTRO TO AMERICAN GOVERNMENT
PSCI 211   COMPARATIVE GOVERNMENTS
PSYC 102   APPLIED PSYCHOLOGY
PSYC 201   GENERAL PSYCHOLOGY*

Choose One (1) Course From: 3
*CIS 110   COMPUTER CONCEPTS
CIS 120A   INTRO TO COMPUTER
                INFORMATION SYSTEMS*

PEA/DNC 2
*ONE CREDIT HOUR FROM PEA 101A, PEA 103,
PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT OF CHOICE*

CRIMINAL JUSTICE REQUIREMENTS
15 CR. HRS.

CJ 101 3
INTRO TO LAW ENFORCEMENT

CJ 102 3
POLICE ADMINISTRATION I

CJ 104 3
CRIMINOLOGY

CJ 109 3
CRIME PREVENTION AND JUVENILE DELINQUENCY

CJ 201 3
CRIMINAL LAW

LAW ENFORCEMENT REQUIREMENTS
15 CR. HRS.

CJ 202 3
POLICE ADMINISTRATION II

CJ 204 3
CRIMINAL INVESTIGATIONS

CJ 205 3
INTERROGATION AND CASE PREPARATION

CJ 206 3
EVIDENCE AND CRIMINAL PROCEDURE

CJ 207 3
POLICE AND COMMUNITY RELATIONS

SUGGESTED ELECTIVES
10-12 CR. HRS.

CJ 110 3
DEFENSIVE TACTICS

CJ 112 1
EMERGENCY VEHICLE OPERATIONS

CJ 120 2
FIREARMS CERTIFICATION

CJ 122 3
THE POLICE PATROL FUNCTION

CJ 123 3
TRAFFIC ENFORCEMENT

CJ 130 3
TACTICAL COMMUNICATION

CJ 193 1
HAZ-MAT COMMUNICATIONS

CJ 208 3
POLICE SCIENCE LABORATORY I

CJ 250 3
INTRODUCTION TO CORRECTIONS

CJ 251A 3
LEGAL ISSUES IN CORRECTIONS

CJ 252A 3
CORRECTIONAL INSTITUTIONS/FACILITIES

CJ 257 3
CLIENT RELATIONS IN CORRECTIONS

CJ 258A 3
CLIENT GROWTH AND DEVELOPMENT

CJ 298 3
INSTRUCTOR SKILL DEVELOPMENT

TOTAL 62

*All CJ classes must be passed with a minimum grade
of "C."*

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* BUS 105 Business Statistics and MATH 115 Probability and Statistics are **_identical_** in content and material.

Associate in Applied Science

Political Campaigning Entrepreneur

This degree program provides students with the foundation skills to freelance in the political campaign process. Students are introduced to public communications skills through audio and television production, video editing and effective selling techniques using social, visual and print media. They will learn to integrate electronic spreadsheets, database management, webpage editors and image editors into political campaign operations. Through an internship program students are asked to be actively involved in a campaign of their choice. This degree is wrapped around learning fundamental campaign skills in business communications, general accounting and graphic design. Students completing this program will learn the American electoral process and identify their employment possibilities within this system.

GENERAL EDUCATION
REQUIREMENTS   **20 CR. HRS.**
BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS

CIS 120A 3
INTRO TO COMPUTER INFORMATION SYSTEMS

PHIL 205 3
BUSINESS ETHICS

Choose One (1) Course From: 3
*BUS 105   BUSINESS STATISTICS
*MATH 115   PROBABILITY AND STATISTICS

Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

PEA/DNC 2
ONE CREDIT HOUR FROM PEA 101A, PEA 103,
PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT OF CHOICE

ENTREPRENEUR CORE
REQUIREMENTS   **13 CR. HRS.**
BUS 104...3
ACCOUNTING FOR BUSINESS OWNERS

BUS 131...1
INTRODUCTION TO ENTREPRENEURSHIP

BUS 230...3
ENTREPRENEURIAL PLANNING

BUS 240...3
ENTREPRENEURSHIP CAPSTONE

Choose One (1) Course From: 3
BUS 161A   EFFECTIVE SELLING
**BUS 220   E-BUSINESS
**CIS 220   E-BUSINESS

DEGREE REQUIREMENTS   **29 CR. HRS.**
ACC 201 4
PRINCIPLES OF ACCOUNTING

BUS 262/COM 262...3
SOCIAL MEDIA

COM 212 3
TELEVISION PRODUCTION

GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN

PSCI 111 4
INTRODUCTION TO AMERICAN GOVERNMENT

PSCI 205 3
CONTEMPORARY ISSUES

PSCI 290CI...3
CAMPAIGN COOPERATIVE INTERNSHIP

Choose One (1) Course From: 3
CIS 287   PERSONAL COMPUTER
            DIGITAL VIDEO EDITING
COM 102   MASS MEDIA

Choose Three (3) Courses From:...3
CIS 101EW   INTRO TO ELECTRONIC SPREADSHEETS
CIS 102EW   INTERM ELECTRONIC SPREADSHEETS
CIS 153AW   INTRO TO DATABASE MANAGEMENT
CIS 177DW   INTRODUCTION TO HTML EDITORS
GRD 100ID   INTRODUCTION TO INDESIGN
GRD 100IL   INTRODUCTION TO ILLUSTRATOR
GRD 100PS   INTRODUCTION TO PHOTOSHOP

                                         TOTAL 62

* BUS 105 Business Statistics and MATH 115 Probability and Statistics are __identical__ in content and material.

** BUS 220 E-Business and CIS 220 E-Business are __identical__ in content and material.

Allied Health Programs

(Degrees, Certificates, & Diplomas)

Admission to the College does not guarantee admission to all programs within the College. Students wishing to enter the Nursing or Respiratory Therapy programs must submit an additional application. These may be obtained in the Counseling & Advising Center, Room 101.

EMT

- EMT Basic Certificate

Respiratory Therapy

- AAS Respiratory Therapy

Nursing

- Practical Nurse Diploma
- AAS Nursing Degree
- ASA Nursing Degree

Business Technology Programs

- AAS Administrative Assistant - Medical
- AAS Medical Office Management
- Medical Records & Billing Certificate

Nursing

Accreditation

Muskegon Community College is accredited by:

The North Central Association's
Higher Learning Commission,
30 N. LaSalle St.,
Chicago, IL, 60602-2504,
(800) 621-7440.
www.ncahlc.org

The Muskegon Community College Nursing Program is accredited by:

Accreditation Commission for
Education in Nursing,
3343 Peachtree Road NE, Suite 850,
Atlanta, GA, 30326,
phone: (404) 975-5000,
fax: (404) 975-5020.
acenursing.org

Mission Statement

Approved 31 January 2013

The Muskegon Community College Nursing Program is a ladder Associate Degree Nursing Program providing a foundation for lifelong Nursing Education.

To fulfill its mission, the Muskegon Community College Nursing Program is committed to

- partnerships with local community healthcare agencies and university partners to meet the intellectual, technical, and professional needs of a 21st century nursing workforce,
- supporting student success,
- encouraging diversity,
- stimulating intellectual curiosity, critical thinking, and evidence based practice, and
- professional ethics and accountability necessary for persons to function as professional nurses.

MUSKEGON COMMUNITY COLLEGE NURSING PROGRAM
CAREER LADDER FOR STUDENTS BEGINNING IN 2014

LEVEL II	**TERM 7**	**ASSOCIATE IN SCIENCE AND ARTS DEGREE (ASA)**			**Total 82 Credits (Transfer Degree)**
		At the time of printing the MCC catalog, all Associate in Science and Arts degrees were being revised in keeping with a recent State of Michigan mandate. The intention of the mandate is to ensure more efficient transfer between Michigan post-secondary institutions. For information as to the Foundational Skills and General Education requirements for the ASA please check with the MCC Counseling and Advising Center or the MCC web site.			
	TERM 6	**ASSOCIATE IN APPLIED SCIENCE DEGREE (AAS)**			**Total 67 Credits (17 NUR /10 non-NUR)**
		NUR	222A	Managing the Care of the Family	5 Cr.
		NUR	211A	Care of the Family in Psychological Crisis	4 Cr.
		PEA/DNC		PE Activity or Dance Elective	1 Cr.
	TERM 5	NUR	212B	Care of the Family in Physiological Crisis	8 Cr.
		BIOL	207 LEC	Microbiology Lecture	3 Cr.
		BIOL	207A	Microbiology Lab	1 Cr.
				Prereq: BIOL 105 L&L	
		PEA	101A	Fitness, Wellness, & Nutrition	1 Cr.
LEVEL I	**TERM 4**	**PRACTICAL NURSE DIPLOMA**			**Total 40 Credits (25 NUR /15 non-NUR)**
		NUR	141B	Care of the Maturing Family	8 Cr.
				*** Meet Chemistry Requirement ***	
		*CHEM 109 LEC/109A		Chemistry for Health Sciences/Lab	5 Cr.
				OR	
		*CHEM 100 LEC/100A		Fundamentals of Chemistry/Lab	5 Cr.
				OR	
				Official proof of 1 year of High School Chemistry with a "C" or better	
				OR	
				Toledo Competency Exam Score of 70% or better	
	TERM 3	NUR	131B	Care of the Childrearing Family	8 Cr.
		*BIOL	106 L&L	Anatomy & Physiology II	4 Cr.
				Prereq: BIOL 105 L&L	
	TERM 2	NUR	126	Family Health & Nursing Care	7 Cr.
		NUR	121	Environmental Stressors and Pharmacotherapeutics	1 Cr.
	TERM 1	NUR	100	Overview of the Nursing Profession	1 Cr.
		AH	111	Environmental Stressors and Nutrition	1 Cr.
		BIOL	105 L&L	Anatomy & Physiology I	4 Cr.
		ANTH	103	Cultural Diversity in Contemporary Society	3 Cr.
		PSYC	201	General Psychology	4 Cr.
		ENG	101	English Composition	3 Cr.

* Indicates course is optional for individuals exiting upon completion of Level I; must be completed prior to Term 5 if pursuing AAS or ASA Degree. Chemistry competency must be met prior to Term 5.

Students must make an appointment with the MCC Counseling and Advising Center (231) 777-0362 to review requirements, to develop a course plan, and to receive a Nursing Program application.
See Requirement Checklist for Ready List Requirements.

If testing/coursework is over eight years old, competency must be validated on established examinations or by repeating the course.

Courses in the Nursing Curriculum (NUR or AH) must be completed in sequence with a "C+" (2.3) or above in order to progress in the Nursing Program. Non-nursing courses may be completed with a "C "(2.0) or above prior to entry into the Nursing Program sequence.

A student readmitted to the Nursing Program after withdrawal from a Nursing course or failure to achieve a minimum grade of a C+ (2.3) in a Nursing course may repeat the (same) course one time. If a passing grade is not attained when the course is repeated, the student will be ineligible for readmission.

A student who withdraws or is dismissed from the Nursing Program may apply for readmission. Readmission requirements must be met. When the readmission requirements are met, the student will be readmitted according to the date of the application for readmission and the availability of space in the Program. Students must demonstrate continued competency in previous courses upon readmission. A student who exits the Program during the first level and has not met readmission requirements within two years is ineligible to return with advanced placement.   R 9/9/13

Nursing Program Approval

The Muskegon Community College Nursing Program is approved by the Michigan Board of Nursing to provide a program of nursing education leading to the diploma in Practical Nursing and an Associate Degree in Nursing.

The Nursing Program meets bi-annually with its Advisory Committee; a group of representatives from the Clinical Affiliate Agencies, Nursing-at-Large, Consumer Representatives, and Student Representatives. The Director of the Nursing Program and the Vice President for Academic Affairs and Finance are ex-officio members of the Advisory Committee.

Practical Nursing Diploma

The Muskegon Community College Nursing Program offers a career ladder nursing curriculum with three educational tracks. Students who choose to exit from the Program after completion of the first four terms of the curriculum will receive a Practical Nurse Diploma and will be eligible to write the National Council Licensure Examination for Practical Nurses (NCLEX-PN) to practice as a Licensed Practical Nurse (LPN). Students who choose to exit from the Program after completion of the first six terms of the curriculum will receive an Associate in Applied Science (AAS) Degree. The AAS Degree is primarily an occupationally-oriented degree. Students who choose to exit from the Program after completion of all seven terms of the curriculum will receive an Associate in Science and Arts (ASA) Degree. The ASA Degree is primarily a transfer degree which enables students to transfer to baccalaureate degree granting institutions with advanced standing. Students who receive the AAS or ASA Degree will be eligible to write the National Council Licensure Examination (NCLEX-RN) for licensure to practice as a Registered Nurse (RN).

The curriculum in each of the educational tracks includes courses in the natural, behavioral and social sciences, and nursing. The nursing courses provide for concurrent theory presentation and clinical practice. Clinical practice takes place in community hospitals and other selected health care settings.

Licensed Practical Nurses and other individuals with prior nursing education are afforded the opportunity to enter into the curriculum with advanced placement. Students seeking an Associate Degree in Nursing (ADN) who have previously obtained LPN or LVN licensure must possess an unencumbered Michigan license and evidence of a minimum of 6 months full-time (or equivalent) current work experience in the LPN role.

See www.muskegoncc.edu/nursing.

Nursing Diploma

How much will this program cost me?*

Tuition and fees: $6,989
Books and supplies: $1,710
On-campus room & board: not offered

> **The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.*

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: $5,689
Private education loans: $0
Institutional financing plan: $0

> *The school has elected to provide the following additional information: 50% of program graduates used loans to help finance their costs for this program.*

How long will it take me to complete this program?

The program is designed to take 15 months to complete. Of those that completed the program in 2012-2013, 80% finished in 15 months.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

> ** MCC is not currently required to calculate a job placement rate for program graduates.*

> *www.muskegoncc.edu/Include/GE/ Nursing-Diploma.html*

Admission

General Information

To better enable individuals to validate the course competencies required for admission into the Muskegon Community College Nursing Program, and to enhance their chance for success, the following high school educational preparation is recommended:

- 1 year of Biology
- 1 year of Chemistry
- 1 year of General Math
- Intermediate and Advanced Algebra
- 3-4 years of English
- 1 year of Computer

Counseling services are available to assist students in career and educational planning. Prospective students are strongly advised to make an appointment in the Counseling and Advising Center, Room 101, (231) 777-0362.

Individuals interested in pursuing admission are advised to make early application as spaces are limited. When applicants complete the entry level requirements they are placed on a ready list and admitted on a first come, first served basis.

One hundred (100) spaces will be available for generic admission applicants each year. Students who are notified of admission may defer admission twice without losing their placement on the ready list. However, the student must enter on the third notification or be removed from the ready list and complete a new Nursing Program application.

Spaces vacated by generic students exiting from the Program upon completion of Level I will be available for NUR 212B advanced placement applicants each Fall and Winter.

Spaces vacated through attrition will be available for applicants eligible for advanced placement into any nursing course. Students must demonstrate continued competency in previously learned nursing courses for readmission. A student who exits the Program during the first level must meet readmission requirements within two years.

If the number of ready applicants exceeds the number of spaces available, the applicants with the earliest ready dates will be admitted. Any applicants remaining, after the spaces available are filled, will be placed on the ready list for the next available admission date. Applicants on the "Ready List" are encouraged to take the required general education courses.

Up to half of all Nursing Admissions to each class will be selected from the applicants who have completed all general education courses for the AAS Nursing Degree.

Requirement Checklist

Program admission is based on a first come, first served basis; once the Ready List requirements have been met and a nursing application completed, the applicant will be placed on the "Ready List" or "Advanced Placement Ready List."

Ready List Requirements

- Active Muskegon Community College student status.
- If you have attended other colleges, request official transcripts be sent from their Records Office to Muskegon Community College, Attn: Transfer Evaluation. Transfer credit will be given only for equivalent courses in which a "C" (2.0) or above was achieved.
- Provide proof of high school completion or GED to the Enrollment Services Office, Room 108.
- MCC cumulative GPA must be at least a C (2.0).

If testing/course work is over eight years old, competency must be validated on established examinations or by repeating the course. Courses in the Nursing Curriculum must be completed in sequence.

Students with questions regarding the requirement checklist are directed to the Counseling & Advising Center (231) 777-0362. Schedule an appointment with a counselor to complete the Nursing Program application.

Ready List Communication

It is the responsibility of each student to notify the Student Welcome Center of an address, name, and/or phone number change(s). (Please see www.muskegoncc.edu/residency for procedures to update your information.) The College will not be responsible for any incident arising from the student's failure to update this information.

The MCC Nursing Program's primary method of communication is the MCC email system. Potential nursing students will be notified of admission opportunities through their MCC email account.

Once the nursing applicant has completed all general education requirements the student may complete an Accelerated Application by making an appointment with a counselor in the Counseling and Advising Center (231) 777-0362. The Accelerated Application is not available during walk-in counseling.

Reading Skills Competency

Complete **one** of the following:
- Score 22 or above on ACT (composite score).
- Score 81 or higher on the COMPASS Reading Rest.

Writing Skills Competency

Complete **one** of the following:
- Score 1 or 2 in both Reading and Writing on MEAP or MME.
- Score 22 or above on ACT (composite score).
- Score 80 or higher on COMPASS Writing Test.
- Complete ENG 091 Introduction to English Composition, or ENG 101 English Composition, with a "C" (2.0) or above.
- Transfer a course in from another college that is equivalent to ENG 091 Introduction to English Composition, or ENG 101 English Composition, with a "C" (2.0) or above.

Math Skills Competency

Complete **one** of the following:
- Complete MATH 036A, Basic Math, and MATH 038, Pre-Algebra with a "C" (2.0) or above.
- Score 40-49 on the COMPASS Pre-Algebra test AND MATH 038, Pre-Algebra with a "C" (2.0) or above AND pass the Math 035F, Metric Test Module F.
- Score 50 or better on the COMPASS Pre-Algebra test AND pass the Math 035F, Metric Test Module F.

Computer Literacy Skills Competency

Complete **one** of the following:
- Pass the Computer Literacy Test with an 80% or better.
- Complete CIS 100 or CIS 100L&L Introduction to Personal Computers, or CIS 110 Computer Concepts, or CIS 120A Introduction to Computer Information Systems with a "C" (2.0) or above.
- Transfer a course from another college that is equivalent to CIS 100 Introduction to Personal Computers or CIS 100L&L Introduction to Personal Computers with lab; CIS 110 Computer Concepts; or CIS 120A Introduction to Computer Information Systems, with a "C" (2.0) or above.

College Success Skills Competency

Complete **one** of the following:
- Complete CSS 100A, College Success Seminar with a "C" (2.0) or above.
- Obtain a waiver from a counselor if at least 30 college credits of 100-level courses or higher have been completed with a cumulative "C" (2.0) or higher.

Required For Application Into Level 2
- Submit evidence of current, unencumbered Michigan LPN license.
- Evidence of a minimum of 6 months full-time (or equivalent) current work experience in the LPN role.

Health Requirements

Students in the Muskegon Community College Nursing Program are required to complete a physical examination prior to beginning the first clinical nursing course. Students must be able to meet essential functions of the occupation of nursing. Students are required to maintain health requirements throughout the Program. See www.muskegoncc.edu/pages/569.asp for health requirements, essential functions of the occupation, and occupational risks.

Criminal Background Check

Federal and State laws require a criminal background check of those assigned to a clinical agency; Michigan licensure will require an FBI fingerprint check. Felonies and some misdemeanors convictions may prevent you from completing the Nursing Program requirements and taking licensure examinations, thus affecting your employment options. Students must have a clear criminal background check to begin the Nursing Program. Any student who has not resided in Michigan for at least three or more years preceding their participation in the Nursing Program is required to obtain a criminal background check based on a national database; the student is responsible for any additional charge. Any student who becomes subject to criminal prosecution while participating in the Nursing Program is **required to report** such allegations immediately to the Nursing Program Director.

Please see the "State Information on Criminal Background Checks" on the MCC Nursing Department website:
www.muskegoncc.edu/nursing.

Nursing Program Application

◆ Schedule an appointment with a MCC counselor, Room 101 or call (231) 777-0362 to verify the above information and complete the application process.

Orientation for the Nursing Program

Orientation information will be emailed to students once they are admitted into the Nursing Program. New (NUR 100) and advanced placement students will be required to complete an online orientation and quiz in order to (re)familiarize themselves with Program policies.

Once they have been placed on the appropriate ready list, transfer students will meet with the Program Director in order to familiarize them with the MCC Nursing Program and answer any questions.

Acceptance of Course Credit

Credits for courses completed at Muskegon Community College or other post-secondary educational institutions will be accepted toward fulfillment of the nursing (PN and AAS) curriculum requirements provided that all of the following criteria are met:
◆ The courses are deemed equivalent to the courses required in the MCC nursing curriculum.
◆ Nursing courses must be completed with a minimum of a "C+" (2.3).
◆ The general education courses must be completed with a minimum grade of a "C" (2.0).
◆ The courses were completed within eight years prior to ready date.

Official transcripts from institutions other than Muskegon Community College should be sent to the Records Auditor for credit evaluation

Progression

To progress, students in the Muskegon Community College Nursing Program must attain a minimum grade of "C+" (2.3) in each nursing course and a "C" (2.0) or better in each general education course in each term of the nursing curriculum. All courses must be completed in sequence (see Nursing Program Career Ladder). Students failing to meet this progression requirement will be dismissed.

Readmission

A student who withdraws or is dismissed from the Nursing Program may apply for readmission. When the readmission requirements are met, the student will be readmitted according to the date of the application for readmission and the availability of space in the Program. Students must demonstrate continued competency in previous courses upon readmission. A student who exits the Program during the first level must meet readmission requirements within two years.

Three Course Repeats

A student who repeats any 3 different NUR or AH courses will be required to write a remediation plan that delineates a clear plan for future success and that is acceptable to the Nursing Faculty Admissions and Progressions Committee prior to readmission. The student must complete this plan within one semester or the student will be ineligible to reapply. When an acceptable plan is received, the student will be readmitted according to the date of application for readmission and the availability of space in the Program. A student with 3 or more different NUR or AH course repeats who is not successful during the implementation of a faculty approved probationary remediation plan will be ineligible for readmission.

Repetition of a Nursing Course

A student readmitted to the Nursing Program after withdrawal from a Nursing course or failure to achieve a minimum grade of "C+" (2.3) in a Nursing course may repeat the (same) course one time. If a passing grade is not attained when the course is repeated, the student will be ineligible for readmission.

Graduation

To be eligible for graduation from the Nursing Program, students must meet all of the following requirements:

1. Complete the nursing curriculum requirements for the diploma/degree desired with a minimum grade of "C+" (2.3) in each nursing course and a "C" (2.0) or better in each general education course.
2. Complete not less than 30 credit hours or the last 15 credit hours required in the nursing curriculum at Muskegon Community College.
3. File an application for graduation in the Office of the Registrar, Room 100J or at the Student Welcome Center no later than 90 days prior to the end of the term of anticipated graduation.

Associate in Applied Science
Respiratory Therapy

(2 1/2 Year Program)

Muskegon Community College currently offers students the Therapist level of instruction. The therapist student, after successfully completing more than two years of instruction, receives the Associate in Applied Science Degree (AAS).

Applicants must show proficiency in the following: score 1 or 2 in both Reading and Writing on the Michigan Merit Exam (MME), score 22 or above on the ACT (composite score), score 80 or above on the COMPASS Writing Test, complete ENG 091 Introduction to English Composition or ENG 101 English Composition with a "C" (2.0) or above, or transfer a course in from another college that is equivalent to ENG 091 Introduction to English Composition or ENG 101 English Composition with a "C" (2.0) or above; and score 46 or better on the COMPASS Algebra Test or transfer a course from another college that is equivalent to MATH 040 Beginning Algebra or above unless the student proves high school chemistry competency or equivalent. Students must have the ability to meet the Program Technical Standards (www.muskegoncc.edu/pages/2283.asp) and pass a criminal background check.

POTENTIAL RT STUDENTS MUST CONTACT THE RESPIRATORY THERAPY DEPARTMENT, EVEN IF YOU HAVE APPLIED TO THE COLLEGE.
Room 231-1 or call (231) 777-0223

YEAR 1

Semester 1 (Fall: August - December)   CR. HRS.

AH 102 3
BASIC PATIENT CARE SKILLS

BIOL 105L&L..4
ANATOMY & PHYSIOLOGY I

MATH 100A *(Formerly MATH 050)* 4
INTERMEDIATE ALGEBRA

OR

MATH 041 1
MATHEMATICS FOR ALLIED HEALTH SCIENCES

RT 101 1
RESPIRATORY THERAPY PHYSICS

Semester 2 (Winter: January - February)   CR. HRS.

CHEM 100LEC & CHEM 100A..................5
FUNDAMENTALS OF CHEMISTRY, L&L

OR

CHEM 109LEC & CHEM 109A..................5
CHEMISTRY FOR HEALTH SCIENCE, L&L

RT 110L&L...3
EQUIPMENT & PROCEDURES I

RT 111L&L..3
INTRODUCTION TO RESPIRATORY THERAPY

Semester 2 (Winter: March - May)   CR. HRS.

CHEM 100LEC & CHEM 100A ....*(continued)*
FUNDAMENTALS OF CHEMISTRY, L&L

OR

CHEM 109LEC & CHEM 109A ....*(continued)*
CHEMISTRY FOR HEALTH SCIENCE, L&L

RT 120L&L...3
EQUIPMENT & PROCEDURES II

RT 121...2
PHARMACOLOGY

RT 122...2
CLINICAL I

Semester 3 (Summer: May - August)   CR. HRS.

RT 130L&L...3
EQUIPMENT & PROCEDURES III

RT 131...3
PHYSIOLOGY

RT 132...3
CLINICAL II

RT 134...1
INTRO TO MECHANICAL VENTILATION

NOTE: AH 101 Medical Terminology is not required, but is highly recommended prior to entry into the Respiratory Therapy Program.

YEAR 2

Semester 4 (Fall: August - October)   CR. HRS.

RT 141...2
PULMONARY PATHOPHYSIOLOGY

RT 144...3
ADULT MECHANICAL VENTILATION

RT 152 CLI 5
CLINICAL IV

Semester 4 (Fall: October - December)   CR. HRS.

RT 162 CLI 7
CLINICAL V

Semester 5 (Winter: January - May)   CR. HRS.

BIOL 106L&L..4
ANATOMY & PHYSIOLOGY II

ENG 101 3
ENGLISH COMPOSITION

PEA/DNC 2
ONE CREDIT HOUR FROM PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT OF CHOICE

RT 210...4
CARDIOVASCULAR & RENAL PHYSIOLOGY

RT 220C 4
PEDIATRIC-NEONATAL CRITICAL CARE

Semester 6 (Summer: May - August)   CR. HRS.

BUS 122 3
PRINCIPLES OF MANAGEMENT

PSYC 201..4
GENERAL PSYCHOLOGY

RT 212A..7
ADVANCED CLINICAL PRACTICUM I

Choose One (1) Course From: 3-4
PSCI 111   INTRODUCTION TO
               AMERICAN GOVERNMENT
HIST 201   UNITED STATES TO 1877
HIST 202   UNITED STATES FROM
               RECONSTRUCTION TO PRESENT

Semester 7 (Fall: August - December)   CR. HRS.

BIOL 207LEC & BIOL 207A...........................4
MICROBIOLOGY, L&L

PHIL 204 3
BIOMEDICAL ETHICS

RT 222A..3
CLINICAL ROTATION VII

RT 230B 2
PULMONARY DIAGNOSTICS & REHABILITATION

RT 240...1
THE HEALTH CARE ENVIRONMENT

TOTAL 106-110

Respiratory Therapy

Respiratory Therapists work as part of the health care team in hospitals, cardiopulmonary diagnostic laboratories, rehabilitation centers, and home care agencies. They work with physicians and other health professionals in health care planning, evaluation, and treatment of patients with cardiac and pulmonary disorders.

As clinicians they perform therapeutic and life support procedures including the administration of oxygen and aerosolized medications, breathing treatments, chest physical therapy and mechanical ventilator support. In addition, they perform diagnostic tests that assess cardiac and lung function and operate physiologic monitoring equipment and life support systems in the critical care setting.

The Respiratory Therapy program is a 28 month associate degree program which began January, 1980. It is fully accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). The curriculum design offers the student the Associate in Applied Science Degree (AAS). The AAS Degree is an occupationally oriented degree. By taking additional coursework, the student may obtain an ASA Degree. The ASA Degree is a transfer degree which enables students to transfer to baccalaureate degree-granting institutions with advanced standing. Students who receive the AAS or ASA Degree will be eligible to write the National Board for Respiratory Care Entry-Level CRT Examination for licensure to practice as a Certified Respiratory Therapist (CRT). Upon successful completion of the CRT Examination, the graduate will be eligible to write the National Board for Respiratory Care Advanced Practitioner Examination to practice as a Registered Respiratory Therapist (RRT).

The curriculum for the program includes courses in the natural, behavioral, and social sciences, as well as respiratory care. Didactic and clinical instruction is integrated in a planned process that allows for concurrent presentation of respiratory care theory with associated clinical practice. For local students clinical practice takes place in most of the hospitals in West Michigan including the Grand Rapids hospitals.

Additionally, in response to the need for health professionals in Northern Michigan, the Respiratory Therapy program is providing distance education through a collaborative effort with Munson Medical Center and Northwestern Michigan College. Each member is responsible for providing a piece of the distance learning component; Muskegon Community College is the degree granting institution and provides the professional courses for the program – Munson Medical Center provides the "hands-on" clinical education required by the students and Northwestern Michigan College provides the non-professional degree requirements.

Admission
General Information

To better enable individuals to validate the course competencies required for admission into the Muskegon Community College Respiratory Therapy program, and to enhance their chance for success, the following high school educational preparation is recommended:
- Biology: 1 unit
- Chemistry: 1 unit
- General Math: 1 unit
- Algebra: 2 units
- English: 3-4 units

Counseling services are available to assist students in career and educational planning (Room 101, or call (231) 777-0362). Prospective students are strongly advised to make an appointment with the Respiratory Therapy Department (Room 231-1, or call (231) 777-0223).

Individuals interested in pursuing admission are advised to make early application as spaces are limited. Thirty (30) spaces will be available for generic admission applicants each year. When applicants complete the entry level requirements they are placed on a ready list and admitted on a first-come, first-served basis. If the number of ready applicants exceeds the number of spaces available, the applicants with the earliest ready dates will be admitted. Any applicants remaining, after the available spaces are filled, will be placed on the ready list for the next admission date.

Students who are notified of admission may defer admission twice without losing their placement on the ready list. However, the student must enter on the third notification or be removed from the ready list and complete a new application.

Spaces vacated through attrition will be available for applicants eligible for advanced placement into any Respiratory Therapy course. Students must demonstrate continued competency in previously learned Respiratory Therapy courses for readmission.

Applicants on the ready list are encouraged to take the required non-respiratory therapy courses.

Entry Level Requirements
- Submit a completed Muskegon Community College Admission Application.
  (Online at www.muskegoncc.edu)
- Submit a completed Muskegon Community College Respiratory Therapy Program Admission Application.
  (Room 231-1 or call (231) 777-0223)
- Submit official evidence of high school graduation or successful completion of the General Education Development (GED) tests. (Room 231-1 or call (231) 777-0223)
- Score 1 or 2 in both Reading and Writing on the MME or score 22 or above on the ACT (composite score) or score 80 or better on the COMPASS Writing Test* or complete ENG 091 Introduction to English Composition, or ENG 101 English Composition, with a "C" (2.0) or above or transfer a course in from another college that is equivalent to ENG 091 Introduction to English Composition, or ENG 101 English Composition, with a "C" (2.0) or above.
- Score 46 or better on the COMPASS Algebra Test* or transfer a course in from another college that is equivalent to MATH 040 Beginning Algebra or above (Not required for students who can prove high school chemistry competency or equivalent).
- NOTE: AH 101 Medical Terminology is not required, but is highly recommended prior to entry into the Respiratory Therapy program.
- Maintain a minimum cumulative grade point average of "C" (2.0) or better.

Testing Center, Room 134, (231) 777-0394.

Advanced Placement Applicants
Applicants with prior post-secondary respiratory education are candidates for advanced placement admission into the Muskegon Community College Respiratory Therapy Program. Admission requirements:
- Submit a completed Muskegon Community College Admission Application. (Online at www.muskegoncc.edu)
- Submit a completed Muskegon Community College Respiratory Therapy Program Admission Application.
  (Room 231-1 or call (231) 777-0223)
- Meet with the Director of Respiratory Therapy. (Room 231-1 or call (231) 777-0223)
- Meet all of the generic admission entry level requirements.
- Submit official evidence of prior post-secondary Respiratory Therapy education.
- Validate competency in the required Respiratory Therapy and non-Respiratory Therapy courses, up to point of placement, on established competency examinations.

Acceptance of Course Credit
Credits for courses completed at Muskegon Community College or other post-secondary educational institutions will be accepted toward fulfillment of the Respiratory Therapy curriculum requirements provided all of the following criteria are met:
- The courses are deemed equivalent to the courses required in the Respiratory Therapy curriculum.
- The courses were completed with a minimum grade of "C" (2.0).

Official transcripts from institutions other than Muskegon Community College should be sent to the Records Auditor for credit evaluation. (Room 100-H, or call (231) 777-0204)

Progression and Retention
To progress, students in the Muskegon Community College Respiratory Therapy Program must attain a minimum grade of "C" (2.0) in each science and Respiratory Therapy course in each semester of the Respiratory Therapy curriculum. Students failing to meet this requirement will be dismissed. Students are strongly advised to complete all non-RT courses during, or prior to, the semester required. Failure to do so could extend the student's expected completion date.

Readmission

Students may apply for readmission providing they meet all general education and course competency requirements and have not repeated a Respiratory Therapy course more than once. When readmission requirements have been met, the student will be readmitted according to availability of space in the program. Failure to attain a passing grade in a repeated Respiratory Therapy course will render students ineligible for readmission.

Graduation

To be eligible for graduation from the Respiratory Therapy program, students must meet all of the following requirements:
1. Complete the Respiratory Therapy curriculum requirements for the degree with a minimum grade point of 2.0.
2. Complete not fewer than the last 15 credit hours required in the Respiratory Therapy curriculum at Muskegon Community College.
3. File an application for graduation in the Records Office no later than 90 days prior to the end of the term of anticipated graduation.

Health Status Evaluation

Students in the Muskegon Community College Respiratory Therapy Program are required to have a health status evaluation done prior to beginning the first clinical Respiratory Therapy course. Each newly admitted student will be scheduled for the health status evaluation, including drug screens, TB, immunization status, and latex sensitivity screening. A health status evaluation fee will be assessed upon registration for selected respiratory courses. Students are required to maintain health requirements throughout the program.

Criminal Background Check

Students are required by Michigan law to pass a criminal background check ensuring no felony history for the past 15 years and no history of misdemeanors including domestic violence, abuse, neglect, fraud, theft, or assault and battery within the past 10 years. Any student with a history of substance abuse or criminal conviction related to illegal drugs may be ineligible for Respiratory Therapy licensure. Any student who has not resided in Michigan for at least three or more years preceding application for admission to the Respiratory Therapy Program is required to obtain an FBI fingerprint check. The student is responsible for the cost of the FBI check.

Business Programs

(Degrees and Certificates)

Business Degrees

- Bookkeeping Services Entrepreneur
- Management
- Marketing
- Office Management

Technical & Computer-Related Degrees

- Computer Applications
- Computer Networking Entrepreneur
- Computer Networking Technology
- Computer Programming
- Personal Computer Maintenance Entrepreneur
- Web Design
- Web Game Development Entrepreneur
- Website Development Entrepreneur

Certificates

- C/Java Programming Certificate
- Computer Networking Certificate
- Customer Service Specialist Certificate
- .NET Programming Certificate
- Midrange Programming Certificate
- Web Design Certificate

Associate in Applied Science
Bookkeeping Services Entrepreneur

This degree provides the foundation skills needed to create and maintain the records required to support the operation of a small business as part of an independent bookkeeping services business. The student will learn the accounting cycle used by small businesses to prepare financial statements and tax returns. Courses will cover managing a small business as well as offering advice to small business owners. Other courses will cover the important business topics of ethics in business, payroll tax return preparation, computer information systems, business communications as well as popular small business accounting software. Students completing this program will understand the challenges in managing a small business.

GENERAL EDUCATION REQUIREMENTS 20 CR. HRS.

BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 126 3
BUSINESS MATH

CIS 120A 3
INTRO TO COMPUTER INFORMATION SYSTEMS

PHIL 205 3
BUSINESS ETHICS

Choose One (1) Course From: 3
BUS 127 HUMAN RELATIONS
COM 101 ORAL COMMUNICATIONS

PEA/DNC 2
ONE CREDIT HOUR FROM: PEA 101A, PEA 103,
PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT HOUR OF CHOICE

ENTREPRENEUR CORE REQUIREMENTS 13 CR. HRS.

BUS 104 3
ACCOUNTING FOR BUSINESS OWNERS

BUS 131 1
INTRODUCTION TO ENTREPRENEURSHIP

BUS 230 3
ENTREPRENEURIAL PLANNING

BUS 240 3
ENTREPRENEURSHIP CAPSTONE

Choose One (1) Course From: 3
BUS 161A EFFECTIVE SELLING
**BUS 220 E-BUSINESS
**CIS 220 E-BUSINESS

DEGREE REQUIREMENTS 28 CR. HRS.

ACC 201 4
PRINCIPLES OF ACCOUNTING I

ACC 202 4
PRINCIPLES OF ACCOUNTING II

ACC 206 3
QUICKBOOKS COMPUTERIZED ACCOUNTING

BUS 180D 3
WORD PROCESSING PART I

BUS 181C 3
OFFICE PROCEDURES I: DOCUMENT FORMATTING

BUS 182C 3
OFFICE PROCEDURES II: DOCUMENT PRODUCTION

BUS 185B 2
ELECTRONIC CALCULATOR

BUS 290CI..3
COOPERATIVE INTERNSHIP PROGRAM

CIS 101EW 1
INTRODUCTION TO ELECTRONIC SPREADSHEETS

CIS 102EW 1
INTERMEDIATE ELECTRONIC SPREADSHEETS

CIS 153AW 1
INTRODUCTION TO DATABASE MANAGEMENT

TOTAL 61

** BUS 220 E-Business and CIS 220 E-Business are <u>identical</u> in content and material.

Associate in Applied Science
Computer Applications

The following program is for AAS Degree students interested in careers which require extensive knowledge of microcomputer operations and personal productivity software. Students receiving an AAS Degree in Computer Applications are expert users of word processing, electronic spreadsheet, and database software that operate on popular microcomputers. They learn to work within local-area networks and can develop new microcomputer-based applications using fourth-generation languages. This degree is not designed for students wishing to transfer to four-year institutions. Transfer-oriented students interested in working with computers should consult with a counselor.

GENERAL EDUCATION
REQUIREMENTS **20-22 CR. HRS.**
BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS
BCOM 102...3
ADVANCED BUS AND TECH COMMUNICATIONS
CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS
Choose One (1) Course From: 3-4
*BUS 105   *BUSINESS STATISTICS*
BUS 126   *BUSINESS MATH*
MATH 109   *COLLEGE ALGEBRA WITH APPLICATIONS*
*MATH 115   *PROBABILITY AND STATISTICS*
Choose One (1) Course From: 3
BUS 127   *HUMAN RELATIONS*
COM 101   ORAL COMMUNICATIONS *(RECOMMENDED)*
Choose One (1) Course From: 3-4
GEOG 104   *CULTURAL GEOGRAPHY*
PHIL 205   BUSINESS ETHICS *(RECOMMENDED)*
PSCI 111   *INTRO TO AMERICAN GOVERNMENT*
PSCI 211   *COMPARATIVE GOVERNMENTS*
PSYC 102   *APPLIED PSYCHOLOGY*
PSYC 201   *GENERAL PSYCHOLOGY*
PEA/DNC 2
ONE CREDIT HOUR FROM: PEA 101A, PEA 103,
PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT HOUR OF CHOICE

BUSINESS CORE REQUIREMENTS **10 CR. HRS.**
ACC 201 4
PRINCIPLES OF ACCOUNTING I
BUS 121...3
INTRODUCTION TO BUSINESS
BUS 262...3
SOCIAL MEDIA

CAREER PROGRAM REQUIREMENTS **30 CR. HRS.**
BUS 179...1
KEYBOARDING
BUS 167...1
PROFESSIONALISM IN YOUR CAREER
BUS 220/CIS 220 3
E-BUSINESS
BUS 290CI...2
COOPERATIVE INTERNSHIP PROGRAM
CIS 101EW 1
INTRODUCTION TO ELECTRONIC SPREADSHEETS

CAREER PROGRAM REQUIREMENTS
(Continued) **CR. HRS.**
CIS 102EW 1
INTERMEDIATE ELECTRONIC SPREADSHEETS
CIS 109/ELTR 109..2
PERSONAL COMPUTER MAINTENANCE
CIS 115WW 1
INTRODUCTION TO WORD PROCESSING
CIS 119PP 1
INTRODUCTION TO PRESENTATION GRAPHICS
CIS 143 3
INTRODUCTION TO LOCAL AREA NETWORKS
CIS 153AW 1
INTRODUCTION TO DATABASE MANAGEMENT
CIS 167A...1
INTRODUCTION TO INTERNET ANIMATION
CIS 177DW 1
INTRODUCTION TO HTML EDITORS
CIS 193A...1
INTRODUCTION TO OPERATING SYSTEMS
CIS 199 1
INTRODUCTION TO CONTENT MANAGEMENT SYSTEMS
CIS 253A...3
DATABASE DESIGN AND IMPLEMENTATION
CIS 257A...3
HTML FOR INTERNET WEB PAGE DESIGN
GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN

RECOMMENDED ELECTIVES **2-3 CR. HRS.**
Strongly recommended
CIS 183 3
NETWORKING TECHNOLOGIES
CIS 210 3
OPERATING SYSTEMS CONCEPTS
Other recommendations:
PHIL 104..3
SYMBOLIC LOGIC
CIS 258 3
ADVANCED HTML
ACC 206 3
QUICKBOOKS

TOTAL 62

* *BUS 105 Business Statistics and MATH 115 Probability and Statistics are* **_identical_** *in content and material.*

Associate in Applied Science
Computer Networking Entrepreneur

This program provides students with fundamental skills to own and operate a Computer Networking Services business. Students acquire the ability to diagnose and solve hardware and operating systems problems as well as learn how to perform operating system installations and configurations. They can describe file system organizations, evaluate system policies and optimize those policies. In addition, students utilize Directory Services, implement security accounts and permissions along with learning how to improve server performance. By completing this program students can identify the layers of the Open Systems Interconnect model and other critical communication models. They can describe the principles of wired and wireless network communications and explain native Ethernet and advanced Ethernet systems. Students have an understanding of the principles employed in telecommunications and wide-area networks and write error-free computer programs. As part of their coursework students design and engineer a corporate level network while preparing to avoid malware and unwanted intrusions of computers and networks. This program introduces students to the challenges involved with setting up and troubleshooting networks for other organizations and the issues faced by a new business.

GENERAL EDUCATION REQUIREMENTS   20-21 CR. HRS.

BCOM 101..3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102..3
ADVANCED BUS AND TECH COMMUNICATIONS

CIS 120A..3
INTRO TO COMPUTER INFORMATION SYSTEMS

PHIL 205..3
BUSINESS ETHICS

Choose One (1) Course From: 3-4
BUS 126   BUSINESS MATH
MATH 109   COLLEGE ALGEBRA WITH APPLICATIONS
MATH 115   PROBABILITY AND STATISTICS
           OR HIGHER LEVEL MATH COURSE

Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

Choose One (1) Course From: 1
HE 110   INDUSTRIAL SAFETY AND
          WORKPLACE TRAINING
PEA/DNC   ANY PHYSICAL EDUCATION
          OR DANCE COURSE

ENTREPRENEUR CORE REQUIREMENTS   13 CR. HRS.

BUS 104..3
ACCOUNTING FOR BUSINESS OWNERS

BUS 131..1
INTRODUCTION TO ENTREPRENEURSHIP

BUS 230..3
ENTREPRENEURIAL PLANNING

BUS 240..3
ENTREPRENEURSHIP CAPSTONE

Choose One (1) Course From: 3
BUS 161A   EFFECTIVE SELLING
**BUS 220   E-BUSINESS
**CIS220   E-BUSINESS

DEGREE REQUIREMENTS   31 CR. HRS.

BUS 290CI..2
COOPERATIVE INTERNSHIP PROGRAM

CIS 109/ELTR 109...2
PERSONAL COMPUTER MAINTENANCE

CIS 143 3
INTRODUCTION TO LOCAL AREA NETWORKS

CIS 183 3
NETWORKING TECHNOLOGIES

CIS 209/ELTR 209...3
PERSONAL COMPUTER MAINTENANCE II
(A+ CERTIFICATION)

CIS 210 3
OPERATING SYSTEMS CONCEPTS

CIS 243 3
TELECOMMUNICATIONS

CIS 275 3
LINUX OPERATING SYSTEM

CIS 283 3
ADVANCED LOCAL AREA NETWORKING

CIS 293 3
NETWORK SECURITY

Choose One (1) Course From: 3
CIS 162   VISUAL C# PROGRAMMING
CIS 185   C PROGRAMMING

TOTAL 64-65

*** BUS 220 E-Business and CIS 220 E-Business are __identical__ in content and material.*

Associate in Applied Science
Computer Networking Technology

The following program is for AAS Degree students interested in careers which require extensive knowledge of the local and wide area networks. Students receiving an AAS Degree in Computer Networking Technology can create, install and maintain local area networks and are knowledgeable about the protocols and hardware used to transfer data across wide area networks. They learn to work within different network environments and use the latest networking technologies. This degree is not designed for students wishing to transfer to four-year institutions. Transfer-oriented students interested in working with computers should consult with a counselor.

GENERAL EDUCATION
REQUIREMENTS   **20-22 CR. HRS.**
BCOM 101..3
BUSINESS AND TECHNICAL COMMUNICATIONS
BCOM 102..3
ADVANCED BUS AND TECH COMMUNICATIONS
CIS 120A..3
INTRO TO COMPUTER INFORMATION SYSTEMS
Choose One (1) Course From: 3-4
BUS 105   *BUSINESS STATISTICS*
BUS 126   *BUSINESS MATH*
MATH 109   *COLLEGE ALGEBRA WITH APPLICATIONS*
MATH 115   *PROBABILITY AND STATISTICS*
Choose One (1) Course From: 3
BUS 127   *HUMAN RELATIONS*
COM 101   *ORAL COMMUNICATIONS*
Choose One (1) Course From: 3-4
GEOG 104   *CULTURAL GEOGRAPHY*
PHIL 205   *BUSINESS ETHICS*
PSCI 111   *INTRO TO AMERICAN GOVERNMENT*
PSCI 211   *COMPARATIVE GOVERNMENTS*
PSYC 102   *APPLIED PSYCHOLOGY*
PSYC 201   *GENERAL PSYCHOLOGY*
PEA/DNC 2
ONE CREDIT HOUR FROM: PEA 101A, PEA 103,
PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT HOUR OF CHOICE

BUSINESS CORE REQUIREMENTS   **10 CR. HRS.**
ACC 201 4
PRINCIPLES OF ACCOUNTING I
BUS 121..3
INTRODUCTION TO BUSINESS
BUS 200..3
INTERNATIONAL BUSINESS

CAREER PROGRAM REQUIREMENTS   **29 CR. HRS.**
BUS 290CI..3
COOPERATIVE INTERNSHIP PROGRAM
CIS 109/ELTR 109..2
PERSONAL COMPUTER MAINTENANCE
CIS 143 3
INTRODUCTION TO LOCAL AREA NETWORKS
CIS 183 3
NETWORKING TECHNOLOGIES
CIS 209/ELTR 209..3
PC MAINTENANCE II (A+ CERTIFICATION)
CIS 210 3
OPERATING SYSTEMS CONCEPTS
CIS 243 3
TELECOMMUNICATIONS
CIS 275 3
LINUX OPERATING SYSTEM
CIS 283 3
ADVANCED LOCAL AREA NETWORKS
CIS 293 3
NETWORK SECURITY

RECOMMENDED ELECTIVES   **1-3 CR. HRS.**
CIS 200+ 1-3
ANY CIS COURSE 200-LEVEL OR HIGHER
CIS 253A..3
DATABASE DESIGN AND IMPLEMENTATION
PHIL 104..3
SYMBOLIC LOGIC

TOTAL 62

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* BUS 105 Business Statistics and MATH 115 Probability and Statistics are __identical__ in content and material.

Associate in Applied Science
Computer Programming

The following program is for AAS Degree students interested in computer programming career opportunities. Students receiving an AAS Degree in Computer Programming become familiar with several programming languages and develop procedural and object-oriented applications, concentrating in traditional application, web, mobile, or game development. The Computer Programming AAS degree is not designed for students wishing to transfer to four-year institutions. Transfer-oriented students interested in working with computers should consult with a counselor.

GENERAL EDUCATION REQUIREMENTS **20-22 CR. HRS.**

BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102...3
ADVANCED BUS AND TECH COMMUNICATIONS

CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS

Choose One (1) Course From:......................... 3-4
BUS 126   BUSINESS MATH
MATH 109   COLLEGE ALGEBRA WITH APPLICATIONS
           OR HIGHER LEVEL MATH COURSE

Choose One (1) Course From:.............................3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

Choose One (1) Course From:......................... 3-4
GEOG 104   CULTURAL GEOGRAPHY
PHIL 205   BUSINESS ETHICS
PSCI 111   INTRO TO AMERICAN GOVERNMENT
PSCI 211   COMPARATIVE GOVERNMENTS
PSYC 102   APPLIED PSYCHOLOGY
PSYC 201   GENERAL PSYCHOLOGY

PEA/DNC 2
ONE CREDIT HOUR FROM: PEA 101A, PEA 103,
PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT HOUR OF CHOICE

BUSINESS CORE REQUIREMENTS **6 CR. HRS.**

BUS 121...3
INTRODUCTION TO BUSINESS

BUS 220/CIS 220 3
E-BUSINESS

PROGRAMMING CORE REQUIREMENTS **17 CR. HRS.**

CIS 153AW 1
INTRODUCTION TO DATABASE MANAGEMENT

CIS 162 3
VISUAL C# PROGRAMMING

CIS 185 3
C PROGRAMMING

CIS 217 1
INTRODUCTION TO JAVASCRIPT PROGRAMMING

CIS 250 3
DEVELOPING INFORMATION SYSTEMS

CIS 253A..3
DATABASE DESIGN AND IMPLEMENTATION

CIS 257A..3
HTML FOR INTERNET WEB PAGE DESIGN

CAREER PROGRAM REQUIREMENTS
In addition to the preceding courses, choose ONE career track from the following page to determine your career program course requirements.

CAREER PROGRAM REQUIREMENTS

Choose ONE of the following tracks:

APPLICATION DEVELOPER TRACK	19 CR. HRS.

CIS 121 1
FILE DESIGN AND UTILITIES
FOR MIDRANGE COMPUTERS
CIS 170 3
RPG PROGRAMMING
CIS 210 3
OPERATING SYSTEMS CONCEPTS
CIS 275 3
LINUX OPERATING SYSTEM
CIS 291 3
IMPLEMENTING SECURITY INTO APPLICATIONS
Choose Two (2) Courses From: 6
CIS 260A   VISUAL BASIC PROGRAMMING
CIS 270A   ADVANCED RPG PROGRAMMING
CIS 280   JAVA PROGRAMMING

MOBILE DEVELOPER TRACK	19 CR. HRS.

BUS 262/COM 262.......................................3
SOCIAL MEDIA
CIS 199 1
CONTENT MANAGEMENT SYSTEMS
CIS 227 3
ADVANCED JAVASCRIPT
CIS 258 3
ADVANCED HTML WEB DEVELOPMENT
CIS 280 3
JAVA PROGRAMMING
CIS 286 3
PROGRAMMING FOR MOBILE APPLICATIONS
CIS 291 3
IMPLEMENTING SECURITY INTO APPLICATIONS

WEB DEVELOPER TRACK	19 CR. HRS.

BUS 262/COM 262.......................................3
SOCIAL MEDIA
CIS 167A/GRD 167A 1
INTRODUCTION TO INTERNET ANIMATION
CIS 177 DW 1
INTRODUCTION TO HTML EDITORS
CIS 199 1
CONTENT MANAGEMENT SYSTEMS
CIS 227 3
ADVANCED JAVASCRIPT
CIS 258 3
ADVANCED HTML WEB DEVELOPMENT
CIS 280 3
JAVA PROGRAMMING
CIS Elective 1
Choose One (1) Course From: 3
CIS 267ASP   SERVER-SIDE WEB PROGRAMMING
*   USING ASP*
CIS 267PHP   SERVER-SIDE WEB PROGRAMMING
*   USING PHP*

GAME DEVELOPER TRACK	19 CR. HRS.

CIS 124 3
INTRODUCTION TO GAME DEVELOPMENT
CIS 167A/GRD 167A 1
INTRODUCTION TO INTERNET ANIMATION
CIS 227 3
ADVANCED JAVASCRIPT
CIS 244 3
GAME SCRIPTING
CIS 267PHP 3
SERVER-SIDE WEB PROGRAMMING USING PHP
CIS 284 3
INTERACTIVE MEDIA AND GAME DESIGN
Choose One (1) Course From: 3
**BUS 262   SOCIAL MEDIA
**COM 262   SOCIAL MEDIA
CIS 258   ADVANCED HTML WEB DEVELOPMENT

TOTAL 62-64

** BUS 262 Social Media and COM 262 Social Media are __identical__ in content and material.

Associate in Applied Science
Management

The following program is not designed for the student wishing to transfer to a four-year institution. Any student desiring to pursue a transfer program in business should consult with a counselor. The Management Program focuses on Management Development and Supervision. The program is designed to develop knowledge, attitudes, experience, and leadership skills, which will enable graduates to function in positions as supervisors or managers in business and industry.

GENERAL EDUCATION REQUIREMENTS   **20-22 CR. HRS.**

BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102...3
ADVANCED BUS AND TECH COMMUNICATIONS

Choose One (1) Course From: 3-4
BUS 105   BUSINESS STATISTICS
BUS 126   BUSINESS MATH
MATH 109   COLLEGE ALGEBRA WITH APPLICATIONS
MATH 115   PROBABILITY AND STATISTICS

Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

Choose One (1) Course From: 3
CIS 110   COMPUTER CONCEPTS
CIS 120A   INTRO TO COMPUTER
    INFORMATION SYSTEMS

Choose One (1) Course From: 3-4
GEOG 104   CULTURAL GEOGRAPHY
PHIL 205   BUSINESS ETHICS
PSCI 111   INTRO TO AMERICAN GOVERNMENT
PSCI 211   COMPARATIVE GOVERNMENTS
PSYC 102   APPLIED PSYCHOLOGY
PSYC 201   GENERAL PSYCHOLOGY

PEA/DNC 2
ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE

BUSINESS CORE REQUIREMENTS   **10 CR. HRS.**

ACC 201 4
PRINCIPLES OF ACCOUNTING I

BUS 121...3
INTRODUCTION TO BUSINESS

BUS 200...3
INTERNATIONAL BUSINESS

CAREER PROGRAM REQUIREMENTS   **21 CR. HRS.**

BUS 122...3
PRINCIPLES OF MANAGEMENT

BUS 123...3
BUSINESS LAW I

BUS 125...3
SUPERVISION

BUS 127...3
HUMAN RELATIONS
(IF NOT TAKEN AS A GEN. ED. COURSE)

BUS 222...3
FUNDAMENTALS OF ORGANIZATIONAL BEHAVIOR

BUS 260...3
PRINCIPLES OF MARKETING

BUS 273A...3
HUMAN RESOURCE MANAGEMENT

SUGGESTED ELECTIVES   **9-11 CR. HRS.**

ACC 202 4
PRINCIPLES OF ACCOUNTING II

BUS 105...3
BUSINESS STATISTICS

BUS 114...3
PERSONAL FINANCE

BUS 124...3
BUSINESS LAW II

BUS 166...3
QUALITY CUSTOMER SERVICE

BUS 161A...3
EFFECTIVE SELLING

BUS 220/CIS 220 3
E-BUSINESS

BUS 262/ COM 262...3
SOCIAL MEDIA

BUS 274...1
INTERNATIONAL STUDIES IN HUMAN RESOURCES

BUS 290CI...3
COOPERATIVE INTERNSHIP PROGRAM

CIS 101EW 1
INTRODUCTION TO ELECTRONIC SPREADSHEETS

CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS

QC 105...3
QUALITY AND PRODUCTIVITY USING SPC-STATISTICAL PROCESS CONTROL

TOTAL 62

** BUS 105 Business Statistics and MATH 115 Probability and Statistics are **identical** in content and material.*

Associate in Applied Science
Marketing

The following program is not designed for the student wishing to transfer to a four-year institution. Any student desiring to pursue a transfer program in business should consult with a counselor. The Marketing Program focusing on marketing applications and supervision. The Marketing program is a two-year curriculum designed to develop knowledge, attitudes, experience, and leadership skills, which will enable graduates to function in marketing positions.

GENERAL EDUCATION REQUIREMENTS   **20-22 CR. HRS.**

BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS

Choose One (1) Course From: 3-4
| | |
BUS 105   BUSINESS STATISTICS
BUS 126   BUSINESS MATH
MATH 109   COLLEGE ALGEBRA WITH APPLICATIONS
MATH 115   PROBABILITY AND STATISTICS

Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

Choose One (1) Course From: 3
CIS 110   COMPUTER CONCEPTS
CIS 120A   INTRO TO COMPUTER INFORMATION SYSTEMS

Choose One (1) Course From: 3-4
GEOG 104   CULTURAL GEOGRAPHY
PHIL 205   BUSINESS ETHICS
PSCI 111   INTRO TO AMERICAN GOVERNMENT
PSCI 211   COMPARATIVE GOVERNMENTS
PSYC 102   APPLIED PSYCHOLOGY
PSYC 201   GENERAL PSYCHOLOGY

PEA/DNC 2
ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE

BUSINESS CORE REQUIREMENTS   **10 CR. HRS.**

ACC 201 4
PRINCIPLES OF ACCOUNTING I

BUS 121 3
INTRODUCTION TO BUSINESS

BUS 200 3
INTERNATIONAL BUSINESS

CAREER PROGRAM REQUIREMENTS   **24 CR. HRS.**

BUS 123 3
BUSINESS LAW I

BUS 127 3
HUMAN RELATIONS (IF NOT TAKEN AS A GEN. ED.)

BUS 161A 3
EFFECTIVE SELLING

BUS 162 3
PRINCIPLES OF RETAILING

BUS 166 3
QUALITY CUSTOMER SERVICE

BUS 260 3
PRINCIPLES OF MARKETING

BUS 263 3
ADVERTISING DYNAMICS

Choose One (1) Course From: 3
BUS 122   PRINCIPLES OF MANAGEMENT
BUS 125   SUPERVISION

SUGGESTED ELECTIVES   **6-8 CR. HRS.**

ACC 202 4
PRINCIPLES OF ACCOUNTING II

BUS 114 3
PERSONAL FINANCE

BUS 124 3
BUSINESS LAW II

BUS 220/CIS 220 3
E-BUSINESS

BUS 222 3
FUNDAMENTALS OF ORGANIZATIONAL BEHAVIOR

BUS 262/COM 262 3
SOCIAL MEDIA

BUS 266 3
QUALITY CUSTOMER SERVICE II

BUS 290CI 3
COOPERATIVE INTERNSHIP PROGRAM

CIS 120A 3
INTRO TO COMPUTER INFORMATION SYSTEMS

GR 104 3
JOB PLANNING LAYOUT AND DESIGN

Choose One (1) Course From: 3
BUS 105   BUSINESS STATISTICS
MATH 115   PROBABILITY AND STATISTICS

TOTAL 62

** BUS 105 Business Statistics and MATH 115 Probability and Statistics are **identical** in content and material.*

Associate in Applied Science

Office Management

The following program is not designed for students wishing to transfer to a four-year institution. Any student desiring to pursue a transfer program in business should consult a counselor.

GENERAL EDUCATION REQUIREMENTS — 21-22 CR. HRS.

BCOM 101..3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102..3
ADVANCED BUS AND TECH COMMUNICATIONS

Choose One (1) Course From:.............................4
MATH 109   COLLEGE ALGEBRA WITH APPLICATIONS
MATH 111   ALGEBRA WITH
              COORDINATE GEOMETRY

Choose One (1) Course From:.............................3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

Choose One (1) Course From:.............................3
CIS 110   COMPUTER CONCEPTS
CIS 120A   INTRO TO COMPUTER
          INFORMATION SYSTEMS

Choose One (1) Course From:.........................3-4
GEOG 104   CULTURAL GEOGRAPHY
PHIL 205   BUSINESS ETHICS
PSCI 111   INTRO TO AMERICAN GOVERNMENT
PSCI 211   COMPARATIVE GOVERNMENTS
PSYC 102   APPLIED PSYCHOLOGY
PSYC 201   GENERAL PSYCHOLOGY

PEA/DNC 2
ONE CREDIT HOUR FROM: PEA 101A, PEA 103,
PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT HOUR OF CHOICE

BUSINESS CORE REQUIREMENTS — 10 CR. HRS.

ACC 201 4
PRINCIPLES OF ACCOUNTING I

BUS 121...3
INTRODUCTION TO BUSINESS

BUS 200...3
INTERNATIONAL BUSINESS

CAREER PROGRAM REQUIREMENTS — 28 CR. HRS.

ACC 202 4
PRINCIPLES OF ACCOUNTING II

ACC 206 3
QUICKBOOKS COMPUTERIZED ACCOUNTING

BUS 123...3
BUSINESS LAW I

BUS 180D...3
WORD PROCESSING PART I

*BUS 181C..3
OFFICE PROCEDURES I: DOCUMENT FORMATTING

*BUS 182C..3
OFFICE PROCEDURES II: DOCUMENT PRODUCTION

*BUS 280C...3
WORD PROCESSING PART II

CIS 101EW 1
INTRODUCTION TO ELECTRONIC SPREADSHEETS

CIS 102EW 1
INTERMEDIATE ELECTRONIC SPREADSHEETS

ECON 101...4
PRINCIPLES OF ECONOMICS

RECOMMENDED ELECTIVES — 2-4 CR. HRS.

BUS 179...1
KEYBOARDING

BUS 273A...3
HUMAN RESOURCE MANAGEMENT

BUS 281D...3
OFFICE PROCEDURES III: ADVANCED APPLICATIONS

BUS 290CI...2-4
COOPERATIVE INTERNSHIP PROGRAM

CIS 119PP..1
INTRODUCTION TO PRESENTATION GRAPHICS

TOTAL 62

Students must obtain a grade of "C" or better in each of these three classes.

Associate in Applied Science
Personal Computer Maintenance Entrepreneur

This degree program will provide students with foundation skills and knowledge to own and operate a computer repair and maintenance business. Students will gain the skills to analyze, repair and maintain computer and computer networked systems. They do this by understanding basic electronic circuit principles, analyzing the fundamentals of semi conductor circuit devices and by being able to examine circuits used in digital and analog communication systems. This knowledge is brought together by utilizing market evaluation techniques to understand trends in the marketplace to keep the business competitive. Students also learn the procedures and techniques to run the day to day operation of the business. In addition, they employ database management, accounting procedures and business communication to analyze profit and loss statements and trend analysis. As a result, students apply business ethics to implement and execute a successful plan.

GENERAL EDUCATION
REQUIREMENTS   **22 CR. HRS.**
AMT 129...3
INTRO TO TECHNOLOGY
BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS
BCOM 102...3
ADVANCED BUS AND TECH COMMUNICATIONS
ELTR 111...5
ELECTRONICS MATHEMATICS
HE 110...1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING
PHIL 205...3
BUSINESS ETHICS
Choose One (1) Course From:.................................3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS
Choose One (1) Course From:.................................1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

ENTREPRENEUR CORE
REQUIREMENTS   **13 CR. HRS.**
BUS 104...3
ACCOUNTING FOR BUSINESS OWNERS
BUS 131...1
INTRODUCTION TO ENTREPRENEURSHIP
BUS 230...3
ENTREPRENEURIAL PLANNING
BUS 240...3
ENTREPRENEURSHIP CAPSTONE
Choose One (1) Course From:.................................3
BUS 161A   EFFECTIVE SELLING
***BUS 220   E-BUSINESS*
***CIS 220   E-BUSINESS*

DEGREE REQUIREMENTS   **29 CR. HRS.**
CIS 143..3
INTRODUCTION TO LOCAL AREA NETWORKS
CIS 183..3
NETWORKING TECHNOLOGIES
ELTR 101...4
ELECTRONICS-BASIC
ELTR 102A...4
ACTIVE DEVICES AND CIRCUIT ANALYSIS
ELTR 109/CIS 109..2
PERSONAL COMPUTER MAINTENANCE
ELTR 112...3
DIGITAL ELECTRONICS
ELTR 201A...4
COMMUNICATIONS (PRINCIPLES AND SERVICING)
ELTR 209/CIS 209..3
PERSONAL COMPUTER MAINTENANCE II
(A+ CERTIFICATION)
TECH 290CI...3
COOPERATIVE INTERNSHIP

TOTAL 64

** *BUS 220 E-Business and CIS 220 E-Business are **_identical_** in content and material.*

Associate in Applied Science

Web Design

The following program is for AAS Degree students interested in careers which require extensive knowledge of the Internet. Students receiving an AAS Degree in Web Design can create Web pages, install and maintain Web servers and are knowledgeable about the protocols and hardware used to transfer data across the Internet. They learn to work within wide-area networks and can develop new Web sites using HTML coding. This degree is not designed for students wishing to transfer to four-year institutions. Transfer-oriented students interested in working with computers should consult with a counselor.

GENERAL EDUCATION REQUIREMENTS 20-22 CR. HRS.

BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102...3
ADVANCED BUS AND TECH COMMUNICATIONS

CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS

Choose One (1) Course From: 3-4
BUS 126   BUSINESS MATH
MATH 109   COLLEGE ALGEBRA WITH APPLICATIONS
                OR HIGHER LEVEL MATH COURSE

Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

Choose One (1) Course From: 3-4
GEOG 104   CULTURAL GEOGRAPHY
PHIL 205   BUSINESS ETHICS
PSCI 111   INTRO TO AMERICAN GOVERNMENT
PSCI 211   COMPARATIVE GOVERNMENTS
PSYC 102   APPLIED PSYCHOLOGY
PSYC 201   GENERAL PSYCHOLOGY

PEA/DNC 2
*ONE CREDIT HOUR FROM: PEA 101A, PEA 103,
PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT HOUR OF CHOICE*

BUSINESS CORE REQUIREMENTS 10 CR. HRS.

ACC 201 4
PRINCIPLES OF ACCOUNTING I

BUS 121...3
INTRODUCTION TO BUSINESS

BUS 220/CIS 220 3
E-BUSINESS

CAREER PROGRAM REQUIREMENTS 29 CR. HRS.

BUS 167...1
PROFESSIONALISM IN YOUR CAREER

BUS 262/COM 262...3
SOCIAL MEDIA

CIS 153AW..1
INTRODUCTION TO DATABASE MANAGEMENT

CIS 199 1
INTERNET CONTENT MANAGEMENT SYSTEMS CMS

CIS 167A/GRD 167A..1
INTRODUCTION TO INTERNET ANIMATION

CIS 177DW..1
INTRODUCTION TO HTML EDITORS

CIS 217 1
INTRODUCTION TO JAVASCRIPT PROGRAMMING

CIS 257A...3
HTML FOR INTERNET WEB PAGE DESIGN

CIS 258 3
ADVANCED HTML WEB DEVELOPMENT

GRD 100IL...1
INTRODUCTION TO ILLUSTRATOR

GRD 100PS..1
INTRODUCTION TO PHOTOSHOP

GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN

GRD 210 3
GRAPHIC DESIGN II

Choose One (1) Course From: 3
CIS 187   MULTIMEDIA DIGITIZING
CIS 287   PC DIGITAL VIDEO EDITING
GR 160   DIGITAL IMAGING

Choose One (1) Course From: 3
CIS 267ASP SERVER-SIDE WEB PROGRAMMING
                 USING ASP
CIS 267PHP SERVER-SIDE WEB PROGRAMMING
                 USING PHP

ELECTIVES 3 CR. HRS.
*ANY **3** CREDITS OF
CIS AND/OR **GRD** COURSEWORK*

TOTAL 62-64

PROGRAMS

Associate in Applied Science
Web Game Development Entrepreneur

This degree program provides students with the foundation skills to own and operate a web-based game development business. Students acquire the skills to create web-based entertainment offerings, to effectively utilize programming and game scripting skills, to design and normalize databases, to implement server-side scripts, to employ graphic design in the creation of the user interface, and to apply principles of game development. Students learn how to utilize market analysis techniques to understand the various trends in the marketplace in order to create a successful offering. In addition, they learn how to run the day-to-day operation of the business by employing database management procedures, using accounting procedures, professional business communication, analyzing profit and loss statements, applying business ethics, and creating and executing a business plan.

GENERAL EDUCATION
REQUIREMENTS   **20-21 CR. HRS.**

BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS

CIS 120A 3
INTRO TO COMPUTER INFORMATION SYSTEMS

PHIL 205 3
BUSINESS ETHICS

Choose One (1) Course From: 3
*BUS 105   BUSINESS STATISTICS
*MATH 115   PROBABILITY AND STATISTICS
*   OR HIGHER LEVEL MATH COURSE*

Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

Choose One (1) Course From: 1
HE 110   INDUSTRIAL SAFETY AND
*   WORKPLACE TRAINING*
PEA/DNC   ANY PHYSICAL EDUCATION
*   OR DANCE COURSE*

ENTREPRENEUR CORE REQUIREMENTS   **13 CR. HRS.**

BUS 131 1
INTRODUCTION TO ENTREPRENEURSHIP

BUS 104 3
ACCOUNTING FOR BUSINESS OWNERS

BUS 230 3
ENTREPRENEURIAL PLANNING

BUS 240 3
ENTREPRENEURSHIP CAPSTONE

Choose One (1) Course From: 3
BUS 161A   EFFECTIVE SELLING
**BUS 220   E-BUSINESS
**CIS 220   E-BUSINESS

DEGREE REQUIREMENTS   **29 CR. HRS.**

CIS 124 3
INTRODUCTION TO GAME DEVELOPMENT

CIS 153AW 1
INTRODUCTION TO DATABASE MANAGEMENT

CIS 244 3
GAME SCRIPTING

CIS 253A 3
DATABASE DESIGN AND IMPLEMENTATION

CIS 257A 3
HTML FOR INTERNET WEB PAGE DESIGN

CIS 284 3
INTERACTIVE MEDIA AND GAME DESIGN

GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN

GRD 167A/CIS 167A 1
INTRODUCTION TO INTERNET ANIMATION

Choose One (1) Course From: 3
CIS 162   VISUAL C# PROGRAMMING
CIS 185   C PROGRAMMING

Choose One (1) Course From: 3
CIS 267ASP   SERVER-SIDE WEB PROGRAMMING
*   USING ASP*
CIS 267PHP   SERVER-SIDE WEB PROGRAMMING
*   USING PHP*

Choose One (1) Course From: 3
ART 198   ART HISTORY I
BUS 290CI   COOPERATIVE INTERNSHIP PROGRAM
COM 102   MASS MEDIA
TH 102   INTRO TO ACTING I

TOTAL 62-63

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* BUS 105 Business Statistics and MATH 115 Probability and Statistics are __identical__ in content and material.

** BUS 220 E-Business and CIS 220 E-Business are __identical__ in content and material.

Associate in Applied Science
Website Development Entrepreneur

This program provides students with foundational skills required to own and operate a Website development business. This includes understanding the features and opportunities of doing business on the Internet and by examining how e-business strategies differ from those of traditional businesses. Students will employ professional design principles in the development of effective and user-friendly websites using XHTML and cascading style sheets. Students acquire the skills required to write error-free computer programs and server-side scripts, to design and normalize databases, as well as create and integrate multi-media applications using sound, video and animation. The degree is wrapped around learning fundamental day-to-day business skills including implementing a business plan, client management, professional business communication, accounting and finance functions. Students completing this program understand the challenges involved with establishing a new business, keeping it financially sound and solving issues faced by new businesses.

GENERAL EDUCATION REQUIREMENTS — 20 CR. HRS.

BCOM 101..3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102..3
ADVANCED BUS AND TECH COMMUNICATIONS

CIS 120A..3
INTRO TO COMPUTER INFORMATION SYSTEMS

PHIL 205..3
BUSINESS ETHICS

Choose One (1) Course From: 3
BUS 105   BUSINESS STATISTICS
BUS 126   BUSINESS MATH
MATH 115   PROBABILITY AND STATISTICS

Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

Choose One (1) Course From: 1
HE 110   INDUSTRIAL SAFETY AND
*   WORKPLACE TRAINING*
PEA/DNC   ANY PHYSICAL EDUCATION
*   OR DANCE COURSE*

ENTREPRENEUR CORE REQUIREMENTS — 13 CR. HRS.

BUS 104..3
ACCOUNTING FOR BUSINESS OWNERS

BUS 131..1
INTRODUCTION TO ENTREPRENEURSHIP

BUS 220/CIS 220 3
E-BUSINESS

BUS 230..3
ENTREPRENEURIAL PLANNING

BUS 240..3
ENTREPRENEURSHIP CAPSTONE

DEGREE REQUIREMENTS — 29 CR. HRS.

BUS 290CI...1
COOPERATIVE INTERNSHIP PROGRAM

CIS 153AW...1
INTRODUCTION TO DATABASE MANAGEMENT

CIS 177 1
INTRODUCTION TO HTML EDITORS

CIS 187 3
MULTIMEDIA DIGITIZING

CIS 217 1
INTRODUCTION TO JAVASCRIPT PROGRAMMING

CIS 253A...3
DATABASE DESIGN AND IMPLEMENTATION

CIS 257A...3
HTML FOR INTERNET WEB PAGE DESIGN

CIS 287 3
PERSONAL COMPUTER DIGITAL VIDEO EDITING

GR 160..3
DIGITAL IMAGING

GRD 120...3
INTRODUCTION TO GRAPHIC DESIGN

GRD 167A/CIS 167A 1
INTRODUCTION TO INTERNET ANIMATION

Choose One (1) Course From: 3
CIS 162   VISUAL C# PROGRAMMING
CIS 185   C PROGRAMMING

Choose One (1) Course From: 3
CIS 267ASP   SERVER-SIDE WEB PROGRAMMING
*   USING ASP*
CIS 267PHP   SERVER-SIDE WEB PROGRAMMING
*   USING PHP*

TOTAL 62

** BUS 105 Business Statistics and MATH 115 Probability and Statistics are **_identical_** in content and material.*

C/Java Programming Certificate

CERTIFICATE REQUIREMENTS   **22 CR. HRS.**

CIS 120A..3
INTRO TO COMPUTER INFORMATION SYSTEMS

CIS 153AW 1
INTRODUCTION TO DATABASE MANAGEMENT

CIS 185 3
C PROGRAMMING

CIS 210 3
OPERATING SYSTEMS CONCEPTS

CIS 250 3
DEVELOPING INFORMATION SYSTEMS

CIS 253A..3
DATABASE DESIGN AND IMPLEMENTATION

CIS 275 3
LINUX OPERATING SYSTEM

CIS 280 3
JAVA PROGRAMMING

TOTAL 22

Computer Networking Certificate

How much will this program cost me?*

Tuition and fees: $3,436
Books and supplies: $1,937
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 9 months to complete. Of those that completed the program in 2012-2013, *% finished in 9 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

www.muskegoncc.edu/Include/GE/ Computer_Networking_Certificate.html

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CERTIFICATE REQUIREMENTS   **37 CR. HRS.**

BUS 290CI..2
COOPERATIVE INTERNSHIP PROGRAM

CIS 109/ELTR 109..2
PERSONAL COMPUTER MAINTENANCE

CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS

CIS 143 3
INTRODUCTION TO LOCAL AREA NETWORKS

CIS 183 3
NETWORKING TECHNOLOGIES

CIS 209/ELTR 209..3
PERSONAL COMPUTER MAINTENANCE II
(A+ CERTIFICATION)

CIS 210 3
OPERATING SYSTEMS CONCEPTS

CIS 243 3
TELECOMMUNICATIONS

CIS 275 3
LINUX OPERATING SYSTEM

CIS 283 3
ADVANCED LOCAL AREA NETWORKING

CIS 293 3
NETWORK SECURITY

Choose One (1) Course From: 3
CIS 162   *VISUAL C# PROGRAMMING*
CIS 185   *C PROGRAMMING*

Choose One (1) Course From: 3
CIS 260A   *VISUAL BASIC PROGRAMMING*
CIS 280   *JAVA PROGRAMMING*

TOTAL 37

Customer Service Specialist Certificate

This certificate is part of the program leading to the Associate in Applied Science in Marketing Degree.

CERTIFICATE REQUIREMENTS   **12 CR. HRS.**

BUS 127...3
HUMAN RELATIONS

BUS 161A..3
EFFECTIVE SELLING

BUS 166...3
QUALITY CUSTOMER SERVICE

BUS 266...3
QUALITY CUSTOMER SERVICE II

TOTAL 12

.NET Programming Certificate

CERTIFICATE REQUIREMENTS   **19 CR. HRS.**

CIS 120A..3
INTRO TO COMPUTER INFORMATION SYSTEMS

CIS 153AW 1
INTRODUCTION TO DATABASE MANAGEMENT

CIS 162 3
VISUAL C# PROGRAMMING

CIS 210 3
OPERATING SYSTEMS CONCEPTS

CIS 250 3
DEVELOPING INFORMATION SYSTEMS

CIS 253A..3
DATABASE DESIGN AND IMPLEMENTATION

CIS 260A..3
VISUAL BASIC PROGRAMMING

TOTAL 19

Midrange Programming Certificate

How much will this program cost me?*

Tuition and fees: $1,825
Books and supplies: $967
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 7 months to complete. Of those that completed the program in 2012-2013, *% finished in 7 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

www.muskegoncc.edu/Include/GE/ Midrange_Programming_Certificate.html

CERTIFICATE REQUIREMENTS   20 CR. HRS.

CIS 120A..3
INTRO TO COMPUTER INFORMATION SYSTEMS

CIS 121 1
FILE DESIGN AND UTILITIES FOR MIDRANGE COMPUTERS

CIS 131 1
OPERATIONS AND COMMANDS FOR MIDRANGE COMPUTERS

CIS 170 3
RPG PROGRAMMING

CIS 210 3
OPERATING SYSTEMS CONCEPTS

CIS 250 3
DEVELOPING INFORMATION SYSTEMS

CIS 253A..3
DATABASE DESIGN AND IMPLEMENTATION

CIS 270A..3
ADVANCED RPG PROGRAMMING

TOTAL 20

Web Design Certificate

CERTIFICATE REQUIREMENTS   32 CR. HRS.

CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS

CIS 153AW 1
INTRODUCTION TO DATABASE MANAGEMENT

CIS 177DW...1
INTRODUCTION TO HTML EDITORS

CIS 187 3
MULTIMEDIA DIGITIZING

CIS 199 1
INTRODUCTION TO CONTENT MANAGEMENT SYSTEMS

CIS 217 1
INTRODUCTION TO JAVASCRIPT PROGRAMMING

CIS 220/BUS 220 3
E-BUSINESS

CIS 257A..3
HTML FOR INTERNET WEB PAGE DESIGN

CIS 258 3
ADVANCED HTML

CIS 287 3
PERSONAL COMPUTER DIGITAL VIDEO EDITING

GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN

GRD 167A/CIS 167A 1
INTRODUCTION TO INTERNET ANIMATION

GRD 210 3
GRAPHIC DESIGN II

Choose One (1) Course From: 3
CIS 267ASP   SERVER-SIDE WEB PROGRAMMING
*   USING ASP*
CIS 267PHP   SERVER-SIDE WEB PROGRAMMING
*   USING PHP*

                                  TOTAL 32

Business Technology Programs
(Degrees and Certificates)

Many of the Business Technology courses are taught in the self-paced Business Technology computer lab. Instructors using this system recognize that no two students are exactly alike in background, skills, and learning abilities. Students will find that this learning system can be adapted to their own special talents, needs, and objectives. Please note that all prerequisites, as listed in the course descriptions, must be met prior to enrolling in a Lab course.

This system of individualized instruction combines specialized software and printed materials in a sequence of learning activities. Students PROCEED AT THEIR OWN PACE WITH A DAILY SCHEDULE THAT THEY CREATE within the lab hours of operation and following a weekly schedule of assignments.

Business Technology Lab students design a schedule that allows them to finish comfortably the course or courses in which they enroll. Students can complete the course assignments in the Lab at any time that the Lab is open during the day or at night. Many of the courses can be worked on outside of the lab. For Business Technology Lab courses, students have either 7 or 15 weeks in the Fall and Winter and up to 7 weeks in the Summer to complete their course(s). It is possible to complete Business Technology Lab courses in less than the 15 weeks (or 7 weeks as mentioned above).

Students who enroll in a Business Technology Lab course should check MyMCC for the Business Technology Lab student orientation dates and times. This student orientation is required for all first-time Business Technology Lab students.

AAS Degree Programs

- Administrative Assistant
- Administrative Assistant - Medical
- Medical Office Management

Certificates

- Medical Records and Billing
- Office Assistant

The following courses are currently taught in the Business Technology Lab:

BUS 179
KEYBOARDING

BUS 181C
OFFICE PROCEDURES I: DOCUMENT FORMATTING

BUS 182C
OFFICE PROCEDURES II: DOCUMENT PRODUCTION

BUS 185B
ELECTRONIC CALCULATOR

BUS 187A
ELECTRONIC RECORDS MANAGEMENT

BUS 188A1
VOICE TRANSCRIPTION, ADMINISTRATIVE

BUS 188F
INTRODUCTION TO MEDICAL TRANSCRIPTION

BUS 194
BUSINESS ENGLISH ESSENTIALS

BUS 195
MEDICAL RECORDS MANAGEMENT

BUS 196
ELECTRONIC HEALTH RECORDS

BUS 280C
WORD PROCESSING PART II

BUS 281D
OFFICE PROCEDURES III: ADVANCED APPLICATIONS

CIS 101EW
INTRODUCTION TO ELECTRONIC SPREADSHEETS

CIS 115WW
INTRODUCTION TO WORD PROCESSING

CIS 119PP
INTRODUCTION TO PRESENTATION GRAPHICS

Associate in Applied Science
Administrative Assistant

The following program is for the AAS Degree student. It is not designed for the student wishing to transfer to a four-year institution. Any student desiring to pursue a transfer program in business should consult with a counselor. This program will provide training in office activities and administration in order for the student to attain a high degree of competency and meet entry-level qualifications for an administrative office assistant position. Upon completion of the program, the student will be able to use hardware and software commonly used in the office, successfully communicate through effective writing and speech, demonstrate the ability to keyboard at a speed that meets industry standards, create business documents following standards, and demonstrate critical thinking skills as they relate to the administrative assistant.

GENERAL EDUCATION
REQUIREMENTS   **20 CR. HRS.**
BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS
BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS
BUS 126 3
BUSINESS MATH
CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS
PHIL 205 3
BUSINESS ETHICS
Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS
PEA/DNC 2
ONE CREDIT HOUR FROM: PEA 101A, PEA 103,
PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT HOUR OF CHOICE

BUSINESS CORE REQUIREMENTS   **10 CR. HRS.**
ACC 201 4
PRINCIPLES OF ACCOUNTING I
BUS 121...3
INTRODUCTION TO BUSINESS
BUS 180D...3
WORD PROCESSING PART I

CAREER PROGRAM REQUIREMENTS   **31 CR. HRS.**
ACC 206 3
QUICKBOOKS COMPUTERIZED ACCOUNTING
BUS 167...1
PROFESSIONALISM IN YOUR CAREER
BUS 179...1
KEYBOARDING
BUS 181C...3
OFFICE PROCEDURES I: DOCUMENT FORMATTING
BUS 182C...3
OFFICE PROCEDURES II: DOCUMENT PRODUCTION
BUS 185B...2
ELECTRONIC CALCULATOR
BUS 187A...2
ELECTRONIC RECORDS MANAGEMENT
BUS 188A1...3
VOICE TRANSCRIPTION, ADMINISTRATIVE
BUS 280C...3
WORD PROCESSING PART II
BUS 281D...3
OFFICE PROCEDURES III: ADVANCED APPLICATIONS
BUS 290CI..3
COOPERATIVE INTERNSHIP PROGRAM
CIS 101EW..1
INTRODUCTION TO ELECTRONIC SPREADSHEETS
CIS 102EW..1
INTERMEDIATE ELECTRONIC SPREADSHEETS
CIS 119PP...1
INTRODUCTION TO PRESENTATION GRAPHICS
CIS 153AW...1
INTRODUCTION TO DATABASE MANAGEMENT

*SUGGESTED ELECTIVES   **VARIABLE CR. HRS.**
ACC 202 4
PRINCIPLES OF ACCOUNTING II
BUS 123...3
BUSINESS LAW I
BUS 166...3
QUALITY CUSTOMER SERVICE
BUS 200...3
INTERNATIONAL BUSINESS
   *As needed to meet 62 credit hour minimum.
           TOTAL 62

Please see the Business Department counselor or a Business Technology Lab instructor for the recommended sequence of classes.

Associate in Applied Science

Administrative Assistant - Medical

The following program is for the AAS Degree student. It is not designed for the student planning to transfer to a four-year institution. Any student desiring to pursue a transfer program in business should consult with a counselor. This program will provide training in medical office activities/procedures in order for the student to attain a high degree of competency and meet entry-level qualifications for an administrative office position with specialized medical office skills. Upon completion of the program, the student will be able to successfully communicate through effective writing and speech; recognize the importance of safeguarding confidentiality as it relate to medical/legal, professional and bio-ethical standards and laws; define and use terms related to the administrative medical office; and operate computer systems/software or other types of technology to accomplish office tasks.

GENERAL EDUCATION REQUIREMENTS — 20 CR. HRS.

BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 126 3
BUSINESS MATH

CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS

Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

Choose One (1) Course From: 3
PHIL 204   BIOMEDICAL ETHICS
PHIL 205   BUSINESS ETHICS
PSYC 102   APPLIED PSYCHOLOGY

PEA/DNC 2
ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE

BUSINESS CORE REQUIREMENTS — 10 CR. HRS.

ACC 201 4
PRINCIPLES OF ACCOUNTING I

BUS 121 3
INTRODUCTION TO BUSINESS

BUS 180D..3
WORD PROCESSING PART I

CAREER PROGRAM REQUIREMENTS — 32 CR. HRS.

AH 101...3
MEDICAL TERMINOLOGY

AH 104...2
MEDICAL BILLING

AH 106...3
FUNDAMENTALS OF HEALTH CARE DELIVERY

BIOL 115..4
INTRODUCTION TO ANATOMY AND PHYSIOLOGY

BUS 167...1
PROFESSIONALISM IN YOUR CAREER

BUS 181C 3
OFFICE PROCEDURES I: DOCUMENT FORMATTING

BUS 182C 3
OFFICE PROCEDURES II: DOCUMENT PRODUCTION

BUS 188F...3
INTRODUCTION TO MEDICAL TRANSCRIPTION

BUS 195...3
MEDICAL RECORDS MANAGEMENT

BUS 196...3
ELECTRONIC HEALTH RECORDS

BUS 290CI...3
COOPERATIVE INTERNSHIP PROGRAM

CIS 101EW 1
INTRO TO ELECTRONIC SPREADSHEETS

TOTAL 62

Please see the Business Department counselor or a Business Technology Lab instructor for the recommended sequence of classes.

Associate in Applied Science
Medical Office Management

This program is designed for students planning to seek employment in a medical office or similar health care practice of two to six physicians. The curriculum includes general business principles, quality customer service, medical ethics, electronic records management, human resource management, and managed care. The student will develop skills to manage employees, patients, and the business practice in general. A cooperative internship in a medical, dental, or similar health care office is a requirement for the Associates Degree. The program also provides opportunities to upgrade present knowledge and skills or to retrain in the area of medical office management.

GENERAL EDUCATION REQUIREMENTS   20-22 CR. HRS.

BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS

CIS 120A 3
INTRO TO COMPUTER INFORMATION SYSTEMS

Choose One (1) Course From: 3-4
*BUS 105   BUSINESS STATISTICS
BUS 126   BUSINESS MATH
MATH 109   COLLEGE ALGEBRA WITH APPLICATIONS
MATH 115   PROBABILITY AND STATISTICS

Choose One (1) Course From: 3
*BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS*

Choose One (1) Course From: 3-4
*GEOG 104   CULTURAL GEOGRAPHY
PHIL 205   BUSINESS ETHICS
PSCI 111   INTRO TO AMERICAN GOVERNMENT
PSCI 211   COMPARATIVE GOVERNMENTS
PSYC 102   APPLIED PSYCHOLOGY
PSYC 201   GENERAL PSYCHOLOGY*

PEA/DNC 2
*ONE CREDIT HOUR FROM: PEA 101A, PEA 103,
PEA 104A, PEA 118, OR PEA 201 AND
ONE PEA/DNC CREDIT HOUR OF CHOICE*

BUSINESS CORE REQUIREMENTS   10 CR. HRS.

ACC 201 4
PRINCIPLES OF ACCOUNTING I

BUS 121 3
INTRODUCTION TO BUSINESS

BUS 180D 3
WORD PROCESSING PART I

CAREER PROGRAM REQUIREMENTS   32-33 CR. HRS.

ACC 206 3
QUICKBOOKS COMPUTERIZED ACCOUNTING

AH 101 3
MEDICAL TERMINOLOGY

AH 104 2
MEDICAL INSURANCE BILLING

AH 106 3
FUNDAMENTALS OF HEALTH CARE DELIVERY

BUS 123 3
BUSINESS LAW I

BUS 125 3
SUPERVISION

BUS 166 3
QUALITY CUSTOMER SERVICE

BUS 167 1
PROFESSIONALISM IN YOUR CAREER

BUS 195 3
MEDICAL RECORDS MANAGEMENT

BUS 196 3
ELECTRONIC HEALTH RECORDS

BUS 273A 3
HUMAN RESOURCE MANAGEMENT

BUS 290CI 2-3
COOPERATIVE INTERNSHIP PROGRAM

TOTAL 62-64

OTHER CLASSES TO CONSIDER   CR. HRS.

BUS179 1
KEYBOARDING

CIS 101EW 1
INTRODUCTION TO ELECTRONIC SPREADSHEETS

CIS 153AW 1
INTRODUCTION TO DATABASE MANAGEMENT

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* BUS 105 Business Statistics and MATH 115 Probability and Statistics are **_identical_** in content and material.

Medical Records and Billing Certificate

This certificate is designed to provide training and practice in medical office assistant skills. This certificate will flow directly into the Administrative Assistant-Medical, AAS.

CERTIFICATE REQUIREMENTS   35 CR. HRS.

	CR. HRS.
AH 101 ....3 *MEDICAL TERMINOLOGY*	
AH 104 ....2 *MEDICAL BILLING*	
AH 106 ....3 *FUNDAMENTALS OF HEALTH CARE DELIVERY*	
BCOM 101 ....3 *BUSINESS AND TECHNICAL COMMUNICATIONS*	
BIOL 115...4 *INTRODUCTION TO ANATOMY AND PHYSIOLOGY*	
BUS 167 ....1 *PROFESSIONALISM IN YOUR CAREER*	
BUS 179 ....1 *KEYBOARDING*	

BUS 180D..3
WORD PROCESSING PART I

BUS 181C 3
OFFICE PROCEDURES I: DOCUMENT FORMATTING

BUS 182C 3
OFFICE PROCEDURES II: DOCUMENT PRODUCTION

BUS 195 3
MEDICAL RECORDS MANAGEMENT

BUS 196 3
ELECTRONIC HEALTH RECORDS

CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS

TOTAL 35

> *Please see the Business Department counselor or a Business Technology Lab instructor for the recommended sequence of classes.*

Office Assistant Certificate

This certificate is designed to provide training and practice in basic office skills. This certificate will flow directly into the Administrative Assistant, AAS.

CERTIFICATE REQUIREMENTS   32 CR. HRS.

BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 167 1
PROFESSIONALISM IN YOUR CAREER

BUS 179 1
KEYBOARDING

BUS 180D..3
WORD PROCESSING PART I

BUS 181C 3
OFFICE PROCEDURES I: DOCUMENT FORMATTING

BUS 182C 3
OFFICE PROCEDURES II: DOCUMENT PRODUCTION

BUS 185B 2
ELECTRONIC CALCULATOR

BUS 280C 3
WORD PROCESSING PART II

BUS 281D 3
OFFICE PROCEDURES III: ADVANCED APPLICATIONS

CIS 101EW 1
INTRODUCTION TO ELECTRONIC SPREADSHEETS

CIS 102EW 1
INTERMEDIATE ELECTRONIC SPREADSHEETS

CIS 119PP 1
INTRODUCTION TO PRESENTATION GRAPHICS

CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS

CIS 153AW 1
INTRODUCTION TO DATABASE MANAGEMENT

TOTAL 32

> *Please see the Business Department counselor or a Business Technology Lab instructor for the recommended sequence of classes.*

Education Programs
(Degrees and Certificates)

AAS Degree Programs

- Child Development Associate
- Family Child Care Entrepreneur
- Instructional Assistant, Special Education
- Teacher Aide

Certificates

- Child Development Associate
- Infant-Toddler Development Associate
- Family Child Care
- Instructional Assistant, Autism

Criminal Background Check

State laws require a criminal background check of students interested in the field of Education, and students have to pass a criminal background check before starting fieldwork.

Felonies and some misdemeanor convictions may prevent you from completing fieldwork for the Education Program and getting a State of Michigan Home Care License. Students must have a clear criminal background check to begin the Education Program. Some school districts require classroom volunteers to obtain an FBI fingerprint check; the student is responsible for the cost of that FBI check. Any student who becomes subject to criminal prosecution while participating in the Education Program is required to report such allegations immediately to the Education Program Director. Discovery of such may result in immediate dismissal from the class(es) and the program.

Professional Education Certificates

The national Child Development Associate (CDA) and Muskegon Community College's certificates provide competency-based professional preparation for individuals interested in becoming preschool teachers. The national CDA credential is recognized throughout the country.

Associate in Applied Science
Child Development Associate

Muskegon Community College currently offers a program in Child Development. The purpose of the program is to enhance the quality of child care by defining, evaluating, and recognizing the competence of child care providers. The CDA student, after successfully completing the program may apply to The Council for Professional Recognition in Washington, DC for assessment of the competency standards and earn a CDA Credential.

The Education Department is pleased to announce that students who complete two years of instruction can now receive the Associate in Applied Science Degree (AAS). This level of graduate can function as lead teacher for 3-to-5-year-old children in a center-based preschool. Students desiring to transfer to a four-year institution should consult with a counselor. This curriculum is not designed as a transfer program.

GENERAL EDUCATION REQUIREMENTS — 20-22 CR. HRS.

BCOM 101..................3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102..................3
ADVANCED BUS AND TECH COMMUNICATIONS

Choose One (1) Course From: 3-4
BUS 126 — BUSINESS MATH
MATH 105 — MATH FOR ELEMENTARY TEACHERS

Choose One (1) Course From: 3
BUS 127 — HUMAN RELATIONS
COM 101 — ORAL COMMUNICATIONS

Choose One (1) Course From: 3
CIS 110 — COMPUTER CONCEPTS
CIS 120A — INTRO TO COMPUTER INFORMATION SYSTEMS

Choose One (1) Course From: 3-4
GEOG 104 — CULTURAL GEOGRAPHY
PHIL 205 — BUSINESS ETHICS
PSCI 111 — INTRO TO AMERICAN GOVERNMENT
PSCI 211 — COMPARATIVE GOVERNMENTS
PSYC 102 — APPLIED PSYCHOLOGY
PSYC 201 — GENERAL PSYCHOLOGY

PEA/DNC 2
ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE

CAREER PROGRAM REQUIREMENTS — 29 CR. HRS.

ED 109 3
THE PARENT-CHILD CONNECTION

ED 111..................3
INTRO TO THE EDUCATION OF YOUNG CHILDREN

ED 120B..................3
EARLY CHILDHOOD EDUCATION

ED 210 3
CHILD CARE AND GUIDANCE

ED 211 3
BEHAVIOR MANAGEMENT

ED 214 3
INFANTS AND TODDLERS

ED 220A..................2
EARLY CHILDHOOD ASSESSMENT

ED 230 3
CHILDREN'S LITERATURE

CAREER PROGRAM REQUIREMENTS (CONTINUED)

ED 252A..................3
CHILD DEVELOPMENT PRACTICUM

Choose One (1) Course From: 3
ED 225 — CHILD DEVELOPMENT
ED 250 — HUMAN GROWTH AND LEARNING

SUGGESTED ELECTIVES — 11-13 CR. HRS.

ART 211 3
ART EDUCATION WORKSHOP

CSS 100A 2
COLLEGE SUCCESS SEMINAR

ED 118 3
CREATIVE CURRICULUM FOR CHILDREN

ED 200 3
LITERACY BIRTH TO FIVE

ED 202 3
TEACHING OF READING IN THE ELEMENTARY SCHOOL

ED 207 3
PRINCIPLES OF ELEMENTARY EDUCATION

ED 216 3
EDUCATING THE EXCEPTIONAL CHILD AND YOUNG ADULT

ED 219 3
SCIENCE IN THE ELEMENTARY CLASSROOM

ED 223 3
CHILD CARE CENTER ADMINISTRATION

ED 251 3
HEALTH NEEDS OF THE YOUNG CHILD

MATH 100A (Formerly MATH 050)..................4
INTERMEDIATE ALGEBRA

MU 192 4
MUSIC FOR THE CLASSROOM TEACHER

PSYC 202..................3
EDUCATIONAL PSYCHOLOGY

SOC 101..................3
PRINCIPLES OF SOCIOLOGY

TH 108 3
THEATER FOR CHILDREN

Choose One (1) Course From: 3
ED 106 — INTRODUCTION TO OUTDOOR EDUCATION
ED 107 — CHILD CARE: OPERATING A SUCCESSFUL BUSINESS

TOTAL 62

Total Fieldwork Hours: 480

Child Development Associate Certificate

(Center-Based Preschool)

CERTIFICATE REQUIREMENTS	29 CR. HRS.
ED 109	3

THE PARENT-CHILD CONNECTION

ED 111	3

INTRO TO THE EDUCATION OF YOUNG CHILDREN

ED 120B	3

EARLY CHILDHOOD EDUCATION

ED 210	3

CHILD CARE AND GUIDANCE

ED 211	3

BEHAVIOR MANAGEMENT

ED 214	3

INFANTS AND TODDLERS

ED 220A	2

EARLY CHILDHOOD ASSESSMENT

ED 230	3

CHILDREN'S LITERATURE

ED 252A	3

CHILD DEVELOPMENT PRACTICUM

Choose One (1) Course From: 3
ED 225   CHILD DEVELOPMENT
ED 250   HUMAN GROWTH AND LEARNING

TOTAL 29

*ADMINISTRATIVE ELECTIVES	9 CR. HRS.
ED 118	3

CREATIVE CURRICULUM FOR CHILDREN

ED 251	3

HEALTH NEEDS OF THE YOUNG CHILD

Choose One (1) Course From: 3
ED 107   CHILD CARE: OPERATING
                A SUCCESSFUL BUSINESS
ED 223   CHILD CARE CENTER ADMINISTRATION

For those pursuing a Director's position

TOTAL 38

Total Fieldwork Hours: 480

Infant-Toddler Development Associate Certificate

CERTIFICATE REQUIREMENTS   26 CR. HRS.

ED 111..3
INTRO TO EDUCATION OF YOUNG CHILDREN

ED 120B..3
EARLY CHILDHOOD EDUCATION

ED 210..3
CHILD CARE AND GUIDANCE

ED 214..3
INFANTS AND TODDLERS

ED 216..3
*EDUCATING THE EXCEPTIONAL CHILD
AND YOUNG ADULT*

ED 220A..2
EARLY CHILDHOOD ASSESSMENT

ED 230..3
CHILDREN'S LITERATURE

ED 252A..3
CHILD DEVELOPMENT PRACTICUM

Choose One (1) Course From:.............................3
*ED 225   CHILD DEVELOPMENT
ED 250   HUMAN GROWTH AND LEARNING*

TOTAL 26

*Students are required to successfully complete
HE 100A Community First Aid and Safety or present
a valid CPR and First Aid card.*

Total Fieldwork Hours: 480

How much will this program cost me?*

*Tuition and fees: $2,720
Books and supplies: $1,292
On-campus room & board: not offered*

**The amounts shown above include costs for
the entire program, assuming normal time to
completion. Note that this information is subject
to change.*

What financing options are available to help me pay for this program?

*Financing for this program may be available through
grants, scholarships, loans (federal and private) and
institutional financing plans. The median amount of debt
for program graduates is shown below:*

*Federal loans: *
Private education loans: *
Institutional financing plan: **

** Fewer than 10 graduates received loans.
Median amounts are withheld to preserve the
confidentiality of the loan recipients.*

How long will it take me to complete this program?

*The program is designed to take 6 months to complete.
Of those that completed the program in 2012-2013, *%
finished in 6 months.*

**Fewer than 10 students completed this program
in 2012-13. The number who finished within the
normal time has been withheld to preserve the
confidentiality of the students.*

What are my chances of getting a job when I graduate?

*The job placement rate for students who completed this
program in 2012-2013 is *%.*

** MCC is not currently required to calculate a job
placement rate for program graduates.*

*www.muskegoncc.edu/Include/GE/
Infant_Toddler_Development_Associate_Certificate.html*

Associate in Applied Science
Family Child Care Entrepreneur

This degree program provides students with the foundation skills necessary to own and operate a Family Child Care business. As part of this program students develop knowledge of administrative tasks, business responsibilities, record keeping and curriculum development along with an understanding of the personnel, parent involvement and developmental growth needs of children in a care setting. Also included is a comprehensive review of the theory and practice of behavior management in applied settings. This program addresses the challenges and procedures of building a new center, classroom design, and problems faced by a new business.

**GENERAL EDUCATION
REQUIREMENTS   21 CR. HRS.**
BCOM 101..3
BUSINESS AND TECHNICAL COMMUNICATIONS
BCOM 102..3
ADVANCED BUS AND TECH COMMUNICATIONS
CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS
HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING
MATH 105 4
MATHEMATICS FOR ELEMENTARY TEACHERS
PHIL 205 3
BUSINESS ETHICS
Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS
Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

ENTREPRENEUR CORE REQUIREMENTS   13 CR. HRS.
BUS 104...3
ACCOUNTING FOR BUSINESS OWNERS
BUS 131...1
INTRODUCTION TO ENTREPRENEURSHIP
BUS 230...3
ENTREPRENEURIAL PLANNING
BUS 240...3
ENTREPRENEURSHIP CAPSTONE
Choose One (1) Course From: 3
BUS 161A   EFFECTIVE SELLING
**BUS 220   E-BUSINESS
**CIS220   E-BUSINESS

DEGREE REQUIREMENTS   29 CR. HRS.
ED 111...3
INTRO TO EDUCATION OF YOUNG CHILDREN
ED 120B...3
EARLY CHILDHOOD EDUCATION
ED 210 3
CHILD CARE AND GUIDANCE
ED 211 3
BEHAVIOR MANAGEMENT
ED 214 3
INFANTS AND TODDLERS
ED 220A...2
EARLY CHILDHOOD ASSESSMENT
ED 223 3
CHILD CARE CENTER ADMINISTRATION
ED 230 3
CHILDREN'S LITERATURE
ED 252A...3
CHILD DEVELOPMENT PRACTICUM
Choose One (1) Course From: 3
ED 225   CHILD DEVELOPMENT
ED 250   HUMAN GROWTH AND LEARNING

TOTAL 63

Family Child Care (FCC) Certificate

CERTIFICATE REQUIREMENTS	29 CR. HRS.
ED 111	3
INTRO TO THE EDUCATION OF YOUNG CHILDREN	
ED 120B	3
EARLY CHILDHOOD EDUCATION	
ED 210	3
CHILD CARE AND GUIDANCE	
ED 211	3
BEHAVIOR MANAGEMENT	
ED 214	3
INFANTS AND TODDLERS	
ED 220A	2
EARLY CHILDHOOD ASSESSMENT	
ED 223	3
CHILD CARE CENTER ADMINISTRATION	
ED 230	3
CHILDREN'S LITERATURE	
ED 252A	3
CHILD DEVELOPMENT PRACTICUM	
Choose One (1) Course From:	3

ED 225   CHILD DEVELOPMENT
ED 250   HUMAN GROWTH AND LEARNING

TOTAL 29

Students are required to successfully complete HE 100A Community First Aid and Safety or present a valid CPR and First Aid card.

Total Fieldwork Hours: 480

How much will this program cost me?*

Tuition and fees: $2,989
Books and supplies: $1,293
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 11 months to complete. Of those that completed the program in 2012-2013, *% finished in 11 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

www.muskegoncc.edu/Include/GE/ Early_Child_Care_Certificate.html

Associate in Applied Science

Instructional Assistant, Special Education

**GENERAL EDUCATION
REQUIREMENTS**   **20-22 CR. HRS.**

BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS

Choose One (1) Course From: 3-4
BUS 126   *BUSINESS MATH*
MATH 105   *MATH FOR ELEMENTARY TEACHERS*

Choose One (1) Course From: 3
BUS 127   *HUMAN RELATIONS*
COM 101   *ORAL COMMUNICATIONS*

Choose One (1) Course From: 3
CIS 110   *COMPUTER CONCEPTS*
CIS 120A   *INTRO TO COMPUTER
                 INFORMATION SYSTEMS*

Choose One (1) Course From: 3-4
GEOG 104   *CULTURAL GEOGRAPHY*
PHIL 205   *BUSINESS ETHICS*
PSCI 111   *INTRO TO AMERICAN GOVERNMENT*
PSCI 211   *COMPARATIVE GOVERNMENTS*
PSYC 102   *APPLIED PSYCHOLOGY*
PSYC 201   *GENERAL PSYCHOLOGY*

PEA/DNC 2
*ONE CREDIT HOUR FROM: PEA 101A, PEA 103,
PEA 104A, PEA 118 OR PEA 201 AND
ONE PEA/DNC CREDIT HOUR OF CHOICE*

CAREER PROGRAM REQUIREMENTS   **30 CR. HRS.**

ED 101A..3
INTRODUCTION TO EDUCATION

ED 109 3
THE PARENT-CHILD CONNECTION

ED 202 3
*TEACHING OF READING IN THE
ELEMENTARY SCHOOL*

ED 211 3
BEHAVIOR MANAGEMENT

ED 216 3
*EDUCATING THE EXCEPTIONAL CHILD AND
YOUNG ADULT*

ED 221 3
*TEACHING STUDENTS WITH LEARNING AND
BEHAVIORAL PROBLEMS*

ED 230 3
CHILDREN'S LITERATURE

ED 272 3
EDUCATION PRACTICUM

PSYC 202..3
EDUCATIONAL PSYCHOLOGY

Choose One (1) Course From: 3
ED 225   *CHILD DEVELOPMENT*
ED 250   *HUMAN GROWTH AND LEARNING*

SUGGESTED ELECTIVES   **10-12 CR. HRS.**

ART 211 3
ART EDUCATION WORKSHOP

CSS 100A...2
COLLEGE SUCCESS SEMINAR

ED 106 2
INTRODUCTION TO OUTDOOR EDUCATION

ED 118 3
CREATIVE CURRICULUM FOR CHILDREN

ED 207 3
PRINCIPLES OF ELEMENTARY EDUCATION

ED 219 3
SCIENCE IN THE ELEMENTARY CLASSROOM

ED 220A...3
EARLY CHILDHOOD ASSESSMENT

ED 226 3
*INTERDISCIPLINARY APPROACHES
TO EARLY INTERVENTIONS*

ED 251 3
HEALTH NEEDS OF THE YOUNG CHILD

HE 100A...2
COMMUNITY FIRST AID AND SAFETY

MATH 100A (Fromerly MATH 050)..................................4
INTERMEDIATE ALGEBRA

MU 192 4
MUSIC FOR THE CLASSROOM TEACHER

SOC 101 3
PRINCIPLES OF SOCIOLOGY

TH 108 3
THEATER FOR CHILDREN

                                                TOTAL 62

Total Fieldwork Hours: 480

Individualized Educational Planning Committee (IEPC) programs are:*

- Moderate cognitive impairments (CIMo)
- Severe cognitive impairments (CIS)
- Severe multiple impairments (SXI)
- Autistic Impairment (AI)

88 hours each

The CIS and SXI programs operate year-round, while CIMo and AI are on a regular year calendar.

Past work experience and former academic coursework may be considered when programs are planned. More than one certificate may be obtained through individually designed programs. A certificate may be obtained as entry into the workforce, or the student may continue with the Associate in Science and Arts Degree or Associate in Applied Science Degree.

Please contact the Education Department office (231) 777-0277 for more information concerning these certificate programs, and the Early Childhood Education sequence leading to the ASA degree or the AAS degree.

Entry into any certificate program includes:
- Completion of an MCC application for admission
- Completion of a professional certificate program application
- MCC assessments in English, reading, and mathematics
- Interview with the Education Coordinator

In order to earn an Education Certificate, a student must maintain at least a "C" (2.0) grade in every course and have a 2.5 cumulative GPA prior to enrolling for an independent study course.

NOTE: *25 fieldwork hours for every 3 credit hour of course work is required for all students.* ***To avoid updating coursework, all courses in a certificate must be completed within five years.***

Instructional Assistant, Autism Certificate

CERTIFICATE REQUIREMENTS   **34 CR. HRS.**

ED 101A...3
INTRODUCTION TO EDUCATION

ED 109 3
THE PARENT-CHILD CONNECTION

ED 211 3
BEHAVIOR MANAGEMENT

ED 225 3
CHILD DEVELOPMENT

ED 227 3
EDUCATIONAL AND ASSISTIVE TECHNOLOGY

ED 229 3
FUNDAMENTAL CONCEPTS OF AUTISM SPECTRUM

ED 231 3
*INTRO TO AUTISM SPECTRUM DISORDERS (ASD)
THERAPIES I*

ED 232 3
*ADVANCED AUTISM SPECTRUM DISORDERS (ASD)
THERAPIES II*

ED 272 3
EDUCATION PRACTICUM

PSYC 201 4
GENERAL PSYCHOLOGY

PSYC 202...3
EDUCATIONAL PSYCHOLOGY

    TOTAL 34

Individualized Educational Planning Committee
(IEPC) programs are:*

- Moderate cognitive impairments (CIMo)
- Severe cognitive impairments (CIS)
- Severe multiple impairments (SXI)
- Autistic Impairment (AI)

*88 hours each

**The CIS and SXI programs operate year-
round, while CIMo and AI are on a regular
year calendar.**

How much will this program cost me?*

Tuition and fees: $3,347
Books and supplies: $1,328
On-campus room & board: not offered

> **The amounts shown above include costs for
> the entire program, assuming normal time to
> completion. Note that this information is subject
> to change.*

What financing options are available to help me pay for this program?

*Financing for this program may be available through
grants, scholarships, loans (federal and private) and
institutional financing plans. The median amount of debt
for program graduates is shown below:*

Federal loans: *
Private education loans: *
Institutional financing plan: *

> ** Fewer than 10 graduates received loans.
> Median amounts are withheld to preserve the
> confidentiality of the loan recipients.*

How long will it take me to complete this program?

*The program is designed to take 15 months to
complete. Of those that completed the program in
2012-2013, *% finished in 15 months.*

> **Fewer than 10 students completed this program
> in 2012-13. The number who finished within the
> normal time has been withheld to preserve the
> confidentiality of the students.*

What are my chances of getting a job when I graduate?

*The job placement rate for students who completed this
program in 2012-2013 is *%.*

> ** MCC is not currently required to calculate a job
> placement rate for program graduates.*

> *www.muskegoncc.edu/Include/GE/
> Instructional_Assistant_Autism_Certificate.html*

Past work experience and former academic coursework may be considered when programs are planned.
More than one certificate may be obtained through individually designed programs. A certificate may
be obtained as entry into the workforce, or the student may continue with the Associate in Science and
Arts or Associate in Applied Science Degrees.

Associate in Applied Science
Teacher Aide

Muskegon Community College currently offers a program preparing paraprofessional workers to work in various grades/classrooms, latchkey programs, and child care centers. It is an opportunity for students to gain professional recognition for demonstrating competence in their profession. The Education Department is pleased to announce that students who complete two years of instruction can now receive the Associate in Applied Science Degree (AAS). Students desiring to transfer to a four-year institution should consult with a counselor. This curriculum is not designed as a transfer program.

GENERAL EDUCATION REQUIREMENTS — 20-22 CR. HRS.

BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS

Choose One (1) Course From: 3-4
BUS 126   BUSINESS MATH
MATH 105   MATH FOR ELEMENTARY TEACHERS

Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

Choose One (1) Course From: 3
CIS 110   COMPUTER CONCEPTS
CIS 120A   INTRO TO COMPUTER
           INFORMATION SYSTEMS

Choose One (1) Course From: 3-4
GEOG 104   CULTURAL GEOGRAPHY
PHIL 205   BUSINESS ETHICS
PSCI 111   INTRO TO AMERICAN GOVERNMENT
PSCI 211   COMPARATIVE GOVERNMENTS
PSYC 102   APPLIED PSYCHOLOGY
PSYC 201   GENERAL PSYCHOLOGY

PEA/DNC 2
*ONE CREDIT HOUR FROM: PEA 101A, PEA 103,
PEA 104A, PEA 118 OR PEA 201 AND
ONE PEA/DNC CREDIT HOUR OF CHOICE*

CAREER PROGRAM REQUIREMENTS — 27 CR. HRS.

ED 101A 3
A INTRODUCTION TO EDUCATION

ED 109 3
THE PARENT-CHILD CONNECTION

ED 202 3
*TEACHING OF READING IN THE
ELEMENTARY SCHOOL*

ED 211 3
BEHAVIOR MANAGEMENT

ED 221 3
*TEACHING STUDENTS WITH LEARNING AND
BEHAVIOR PROBLEMS*

ED 230 3
CHILDREN'S LITERATURE

ED 272 3
EDUCATION PRACTICUM

PSYC 202 3
EDUCATIONAL PSYCHOLOGY

Choose One (1) Course From: 3
ED 225   CHILD DEVELOPMENT
ED 250   HUMAN GROWTH AND LEARNING

SUGGESTED ELECTIVES — 13-15 CR. HRS.

ART 211 3
ART EDUCATION WORKSHOP

CSS 100A 2
COLLEGE SUCCESS SEMINAR

ED 106 2
INTRODUCTION TO OUTDOOR EDUCATION

ED 118 3
CREATIVE CURRICULUM FOR CHILDREN

ED 207 3
PRINCIPLES OF ELEMENTARY EDUCATION

ED 216 3
*EDUCATING THE EXCEPTIONAL CHILD AND YOUNG
ADULT*

ED 219 3
SCIENCE IN THE ELEMENTARY CLASSROOM

ED 251 3
HEALTH NEEDS OF THE YOUNG CHILD

MATH 100A (Formerly MATH 050) 4
INTERMEDIATE ALGEBRA

MU 192 4
MUSIC FOR THE CLASSROOM TEACHER

SOC 101 3
PRINCIPLES OF SOCIOLOGY

TH 108 3
THEATER FOR CHILDREN

TOTAL 62

Total Fieldwork Hours: 480

Applied Technology Programs
(Degrees and Certificates)

STUDENTS MUST WEAR APPROVED SAFETY GLASSES WHERE HAZARDS EXIST.

AAS Degree Programs

- Alternative Fuel Vehicle Entrepreneur
- Automotive Repair Entrepreneur
- Automotive Technology
- Biomedical Electronics Technology
- CAD/CNC
- Computer-Aided Drafting and Design
- Electronics Technology
- Graphic Design
- Graphic Design Display Advertising Entrepreneur
- Industrial Technology
- Machining Technology
- Manufacturing Engineering Technology
- Materials Technology
- Welding Technology

Certificates

- Automotive Technician Certificate
- Automotive Technology Certificate
- CAD/CNC Certificate
- Computer-Aided Drafting and Design Certificate
- Electronics Technology Certificate
- Display Advertising Certificate
- Graphic Design for Multimedia Certificate
- Printing Prepress Certificate
- Graphic Design Video/Audio Certificate
- Industrial Technology Certificate
- Machining Technology Certificate
- Machinist Certificate
- Machine Mechanic Certificate (Industrial Maintenance)
- Welding Technology Certificate

Additional Technology Certificates

- Digital Electronics Technology Certificate
- Industrial Electrical Maintenance Certificate
- Grounds Maintenance Certificate
- Industrial Maintenance Certificate
- Production Supervision Certificate
- Quality Assurance Certificate

Alternative & Renewable Energy Certificates

- Biofuels Technician Certificate
- Wind & Solar Certificate

Associate in Applied Science
Alternative Fuel Vehicle Entrepreneur

This degree program will provide students with the foundation skills and knowledge to own and operate an alternative fuel vehicle repair business. Students completing this degree will have hands-on experience in problem solving and dealing with issues in all eight areas of Automotive Service Excellence (ASE) including hybrid and alternative fueled vehicles. They will learn to repair automobiles in the areas of brakes, steering and suspension, electrical, and engine performance. The students will learn the skills to manage their own business. This includes creating a business plan, accounting and finance, professional business communications and financial functions. Workplace safety and business ethics are also covered. Students are made aware of the many challenges they will face when starting and operating their own business.

GENERAL EDUCATION REQUIREMENTS   20 CR. HRS.

BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102...3
ADVANCED BUS AND TECH COMMUNICATIONS

HE 110...1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

PHIL 205...3
BUSINESS ETHICS

Choose One (1) Course From:..3
| AMT 129 | INTRO TO TECHNOLOGY |
| CIS 120A | INTRO TO COMPUTER INFORMATION SYSTEMS |

Choose One (1) Course From:..3
| *BUS 105 | BUSINESS STATISTICS |
| *MATH 115 | PROBABILITY AND STATISTICS |

Choose One (1) Course From:..3
| BUS 127 | HUMAN RELATIONS |
| COM 101 | ORAL COMMUNICATIONS |

Choose One (1) Course From:..1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

ENTREPRENEUR CORE REQUIREMENTS   13 CR. HRS.

BUS 104...3
ACCOUNTING FOR BUSINESS OWNERS

BUS 131...1
INTRODUCTION TO ENTREPRENEURSHIP

BUS 230...3
ENTREPRENEURIAL PLANNING

BUS 240...3
ENTREPRENEURSHIP CAPSTONE

Choose One (1) Course From:..3
BUS 161A	EFFECTIVE SELLING
**BUS 220	E-BUSINESS
**CIS220	E-BUSINESS

DEGREE REQUIREMENTS   29 CR. HRS.

AT 101...2
INTRODUCTION TO AUTOMOTIVE TECHNOLOGY

AT 114...3
AUTOMOTIVE POWER PLANTS (ENGINE REBUILDING)

AT 120...3
INTRODUCTION TO ELECTRICAL SYSTEMS I

AT 121...3
ELECTRICAL SYSTEMS II

AT 122...3
FUEL SYSTEMS AND EMISSION CONTROLS

AT 123...3
ENGINE TUNE UP (DRIVEABILITY)

AT 140...3
INTRO TO HYBRIDS AND ALTERNATIVE FUELS

AT 150...3
AUTOMOTIVE BRAKES

AT 214...3
SERVICE MANAGEMENT

AT 223...3
ADVANCED ENGINE PERFORMANCE

TOTAL 62

* BUS 105 Business Statistics and MATH 115 Probability and Statistics are __identical__ in content and material.

** BUS 220 E-Business and CIS 220 E-Business are __identical__ in content and material.

Associate in Applied Science
Automotive Repair Entrepreneur

This degree program will provide students with the foundation skills and knowledge to own and operate an automotive repair business. Students completing this degree will have hands-on experience in problem solving and dealing with issues in all eight areas of Automotive Service Excellence (ASE). They will learn to repair automobiles in the areas of brakes, steering and suspension, electrical, and engine performance. The students will learn the skills to manage their own business. This includes creating a business plan, accounting and finance, professional business communications and financial functions. Workplace safety and business ethics are also covered. Students are made aware of the many challenges they will face when starting and operating their own business.

GENERAL EDUCATION REQUIREMENTS   20-21 CR. HRS.
BCOM 101..3
BUSINESS AND TECHNICAL COMMUNICATIONS
BCOM 102..3
ADVANCED BUS AND TECH COMMUNICATIONS
HE 110..1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING
PHIL 205..3
BUSINESS ETHICS
Choose One (1) Course From: 3
AMT 129   INTRO TO TECHNOLOGY
CIS 120A   INTRO TO COMPUTER
*   INFORMATION SYSTEMS*
Choose One (1) Course From: 3-4
*BUS 105   BUSINESS STATISTICS
MATH 109   COLLEGE ALGEBRA WITH APPLICATIONS
*MATH 115   PROBABILITY AND STATISTICS
TMAT 101A   TECHNICAL MATH I
*   OR HIGHER LEVEL MATH COURSE*
Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS
Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

ENTREPRENEUR CORE REQUIREMENTS   13 CR. HRS.
BUS 104..3
ACCOUNTING FOR BUSINESS OWNERS
BUS 131..1
INTRODUCTION TO ENTREPRENEURSHIP
BUS 230..3
ENTREPRENEURIAL PLANNING
BUS 240..3
ENTREPRENEURSHIP CAPSTONE
Choose One (1) Course From: 3
BUS 161A   EFFECTIVE SELLING
**BUS 220   E-BUSINESS
**CIS220   E-BUSINESS

DEGREE REQUIREMENTS   29 CR. HRS.
AT 101..2
INTRODUCTION TO AUTOMOTIVE TECHNOLOGY
AT 114..3
AUTOMOTIVE POWER PLANTS
(ENGINE REBUILDING)
AT 120..3
INTRODUCTION TO ELECTRICAL SYSTEMS I
AT 121..3
ELECTRICAL SYSTEMS II
AT 122..3
FUEL SYSTEMS AND EMISSION CONTROLS
AT 123..3
ENGINE TUNE UP (DRIVEABILITY)
AT 150..3
AUTOMOTIVE BRAKES
AT 214..3
SERVICE MANAGEMENT
Choose one (1) of the following options:

OPTION 1 TRANSMISSIONS

AT 210..3
POWERTRAINS (MANUAL DRIVETRAINS)
AT 211..3
AUTOMATIC TRANSMISSIONS

OPTION 2 GENERAL TECHNICIAN

AT 160..3
AUTOMOTIVE AIR CONDITIONING
AT 212..3
ALIGNMENT AND SUSPENSION

TOTAL 62-63

* BUS 105 Business Statistics and MATH 115 Probability and Statistics are __identical__ in content and material.

** BUS 220 E-Business and CIS 220 E-Business are __identical__ in content and material.

Associate in Applied Science
Automotive Technology

This curriculum is designed to educate and train personnel to fill the mechanical, technical, and supervisory positions in the automotive industry. Successful completion of the program leads to the degree of Associate in Applied Science. (Students may elect only those courses required to develop a particular skill without enrolling in the entire program of study that leads to a degree.) Students who wish to complete a program in two years are advised to use a sequence of courses recommended by their counselor or by the instructor. If a student wishes to attend college on less than a full-time basis, the program may be extended beyond two years.

GENERAL EDUCATION REQUIREMENTS — 20 CR. HRS.

AMT 129...3
INTRODUCTION TO TECHNOLOGY

BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102...3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 127...3
HUMAN RELATIONS

HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

Choose Two (2) Courses From: 6
TMAT 101A   TECHNICAL MATH I
TMAT 102A   TECHNICAL MATH II
TMAT 201   TECHNICAL MATH III

Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

AUTOMOTIVE TECHNOLOGY REQUIREMENTS — 33 CR. HRS.

AT 114...3
AUTOMOTIVE POWER PLANTS (ENGINE REBUILDING)

AT 120...3
INTRODUCTION TO ELECTRICAL SYSTEMS I

AT 121...3
ELECTRICAL SYSTEMS II

AT 122...3
FUEL SYSTEMS AND EMISSION CONTROLS

AT 123...3
ENGINE TUNE UP (DRIVABILITY)

AT 150...3
AUTOMOTIVE BRAKES

AT 160...3
AUTOMOTIVE AIR CONDITIONING

AT 210...3
POWERTRAINS (MANUAL DRIVETRAINS)

AT 211...3
AUTOMATIC TRANSMISSIONS

AT 212...3
ALIGNMENT AND SUSPENSION

AT 214...3
SERVICE MANAGEMENT

NOTE: AT 120/AT 121 must be taken before AT 122/
AT 123.

TECHNICAL-RELATED REQUIREMENTS — 6 CR. HRS.

MT 101A..3
BASIC MACHINING

W 101 3
BASIC WELDING

ELECTIVES — 3 CR. HRS.

Electives must be chosen from the following list or
have departmental approval.

CAD 150...3
BLUEPRINT READING

ELTC 101L&L..3
ELECTRICITY-BASIC

HP 101...3
HYDRAULICS/PNEUMATICS

MET 101..3
INDUSTRIAL MATERIALS

MET 102..3
BASIC CAST METALS

MET 201..3
METALLURGY

TECH 290CI 3
COOPERATIVE INTERNSHIP

Choose One (1) Course From: 3
CAD 100   *INTRODUCTION TO DRAFTING*
CAD 130   *DRAFTING STANDARDS*
               AND CONVENTIONS I
CAD 140   *DRAFTING STANDARDS*
               AND CONVENTIONS II

TOTAL 62

Automotive Technician Certificate

CERTIFICATE REQUIREMENTS   **18 CR. HRS.**

AT 114 3
*AUTOMOTIVE POWER PLANTS
(ENGINE REBUILDING)*

AT 120 3
INTRO TO ELECTRICAL SYSTEMS I

AT 121 3
ELECTRICAL SYSTEMS II

TMAT 101A 3
TECHNICAL MATH

Choose One (1) of the following focus areas:

DRIVEABILITY

AT 122 3
FUEL SYSTEMS AND EMISSION CONTROLS

AT 123 3
ENGINE TUNE UP (DRIVEABILITY)

SYSTEMS

Choose Two (2) Courses From: 6

AT 150	*AUTOMOTIVE BRAKES*
AT 160	*AUTOMOTIVE AIR CONDITIONING*
AT 211	*AUTOMATIC TRANSMISSIONS*
AT 212	*ALIGNMENT AND SUSPENSION*

TOTAL 18

How much will this program cost me?*

Tuition and fees: $4,599
Books and supplies: $851
On-campus room & board: not offered

> **The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.*

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

> ** Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.*

How long will it take me to complete this program?

The program is designed to take 11 months to complete. Of those that completed the program in 2012-2013, *% finished in 11 months.

> **Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.*

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

> ** MCC is not currently required to calculate a job placement rate for program graduates.*

> *www.muskegoncc.edu/Include/GE/
> Automotive_Technician_Certificate.html*

Automotive Technology Certificate

CERTIFICATE REQUIREMENTS   **30 CR. HRS.**

AT 114 3
AUTOMOTIVE POWER PLANTS
(ENGINE REBUILDING)

AT 120 3
INTRO TO ELECTRICAL SYSTEMS I

AT 121 3
ELECTRICAL SYSTEMS II

AT 122 3
FUEL SYSTEMS AND EMISSION CONTROLS

AT 123 3
ENGINE TUNE UP (DRIVEABILITY)

AT 210 3
POWERTRAINS (MANUAL DRIVETRAINS)

AT 211 3
AUTOMATIC TRANSMISSIONS

AT 212 3
ALIGNMENT AND SUSPENSION

TMAT 101A 3
TECHNICAL MATH

Choose One (1) Course From: 3
AT 150   AUTOMOTIVE BRAKES
AT 160   AUTOMOTIVE AIR CONDITIONING

TOTAL 30

Note:
AT 120/AT 121 must be taken before AT 122/AT 123.
BCOM 101 Business and Technical Communications
is recommended.

How much will this program cost me?*

Tuition and fees: $5,137
Books and supplies: $840
On-campus room & board: not offered

> **The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.*

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

> ** Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.*

How long will it take me to complete this program?

The program is designed to take 11 months to complete. Of those that completed the program in 2012-2013, *% finished in 11 months.

> **Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.*

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

> ** MCC is not currently required to calculate a job placement rate for program graduates.*

> *www.muskegoncc.edu/Include/GE/*
> *Automotive_Technology_Certificate.html*

Associate in Applied Science
Biomedical Electronics Technology

The biomedical electronics technician is a person knowledgeable in the theory of operation, the underlying physiological principles, and the safe clinical application of biomedical equipment. Responsibilities may include installation, calibration, inspection, preventive maintenance, and repair of general biomedical and related technical equipment. The technician might be involved in the operation of equipment and in equipment control, safety, and maintenance.

GENERAL EDUCATION
REQUIREMENTS   **19 CR. HRS.**

AMT 129...3
INTRODUCTION TO TECHNOLOGY

BCOM 101..3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102..3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 127..3
HUMAN RELATIONS

ELTR 111 5
ELECTRONICS MATHEMATICS

HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

TECHNICAL-RELATED
REQUIREMENTS   **43 CR. HRS.**

AH 101..3
MEDICAL TERMINOLOGY

BIOL 105L&L...4
ANATOMY & PHYSIOLOGY I

BIOL 106L&L...4
ANATOMY & PHYSIOLOGY II

CIS 109/ELTR 109..2
PERSONAL COMPUTER MAINTENANCE

ELTC 150..3
INDUSTRIAL ELECTRICITY

ELTR 101 4
ELECTRONICS-BASIC

ELTR 102A 4
ACTIVE DEVICES & CIRCUIT ANALYSIS

ELTR 112 3
DIGITAL ELECTRONICS I

ELTR 202A 4
INDUSTRIAL ELECTRONIC SYSTEMS

ELTR 211A 3
MICROCOMPUTER INTERFACING

HP 101..3
HYDRAULICS/PNEUMATICS

ELTR 212 4
MEDICAL INSTRUMENTATION & MEASUREMENT

TECH 290CI 2
COOPERATIVE INTERNSHIP

TOTAL 62

Students are advised that it could be dangerous to wear contact lenses in any area where fumes from chemicals, solvents, gases, and areas where electrical flash may be present. You should plan to wear prescription eyeglasses if you take classes where these hazards exist.

Associate in Applied Science
CAD/CNC

This program is designed to provide basic training in Computer-Aided Design skills (CAD) combined with the application of Computer Numerical Control (CNC) programming and machining skills.

GENERAL EDUCATION
REQUIREMENTS   20 CR. HRS.
AMT 129..3
INTRODUCTION TO TECHNOLOGY
BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS
BCOM 102...3
ADVANCED BUS AND TECH COMMUNICATIONS
BUS 127..3
HUMAN RELATIONS
HE 110...1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING
MT 150...3
MACHINERY HANDBOOK
TMAT 102A..3
TECHNICAL MATH
Choose One (1) Course From:..............................1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

COMPUTER-AIDED DRAFTING & DESIGN
REQUIREMENTS   12 CR. HRS.
CAD 110...3
INTRO TO COMPUTER-AIDED DRAFTING (2D)
CAD 210...3
PARAMETRIC DESIGN I-PART MODELING
CAD 220...3
PARAMETRIC DESIGN II-ASSEMBLIES
CAD 250...3
INTRODUCTION TO SOLIDWORKS 3D

MACHINE TECHNOLOGY
REQUIREMENTS   15 CR. HRS.
MT 101A...3
BASIC MACHINING
MT 102...3
INTERMEDIATE MACHINING
MT 205...3
NC/CNC (COMPUTER NUMERICAL CONTROL)
MT 206...3
2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING
MT 216...3
3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING

TECHNICAL-RELATED
REQUIREMENTS   6 CR. HRS.
AMT 200...3
CAD/CNC CAPSTONE
MET 101...3
INDUSTRIAL MATERIALS

ELECTIVES   9 CR. HRS.
*Electives must be chosen from the following list or
have departmental approval.*
CAD 100...3
INTRODUCTION TO DRAFTING
CAD 135...3
ENGINEERING GRAPHICS
ELTC 101L&L...3
ELECTRICITY-BASIC
HP 101...3
HYDRAULICS/PNEUMATICS
MET 102...3
BASIC CAST METALS
MET 201...3
METALLURGY
MT 103...3
ADVANCED MACHINING
QC 101...3
BASIC QUALITY CONTROL
TECH 290CI...3
COOPERATIVE INTERNSHIP
W 101..3
BASIC WELDING

TOTAL 62

CAD/CNC Certificate

This program is designed to provide Computer Aided Design skills (CAD) combined with the application of Computer Numerical Control (CNC) programming and machining skills.

CERTIFICATE REQUIREMENTS   30 CR. HRS.

AMT 200..3
CAD/CNC CAPSTONE

CAD 110 3
INTRO TO COMPUTER-AIDED DRAFTING (2D)

CAD 210 3
PARAMETRIC DESIGN I-PART MODELING

CAD 250 3
INTRODUCTION TO SOLIDWORKS 3D

MT 101A...3
BASIC MACHINING

MT 150..3
MACHINERY HANDBOOK

MT 205..3
NC/CNC (COMPUTER NUMERICAL CONTROL)

MT 206..3
2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING

MT 216..3
3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING

TMAT 101A...3
TECHNICAL MATH

TOTAL 30

Associate in Applied Science
Computer-Aided Drafting and Design

Computer-Aided Design is a universal language used to communicate ideas of design and construction details through the use of lines, symbols and dimensions. Successful completion of the program leads to the Associate in Applied Science Degree. (Students may elect only those courses required to develop a particular skill without enrolling in the entire program of study that leads to a degree.) Students who wish to complete a program in two years are advised to use a sequence of courses recommended by their counselor or by the instructor. If a student wishes to attend college on less than a full-time basis, the program may be extended beyond two years.

GENERAL EDUCATION REQUIREMENTS   **20 CR. HRS.**

AMT 129...3
INTRODUCTION TO TECHNOLOGY

BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102...3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 127...3
HUMAN RELATIONS

HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

TMAT 102A...3
TECHNICAL MATH II

TMAT 201...3
TECHNICAL MATH III

Choose One (1) Course From: 3-4
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

COMPUTER-AIDED DRAFTING & DESIGN REQUIREMENTS   **24 CR. HRS.**

CAD 110 3
INTRO TO COMPUTER-AIDED DRAFTING (2D)

CAD 120 3
DESCRIPTIVE GEOMETRY

CAD 135 3
ENGINEERING GRAPHICS

CAD 210 3
PARAMETRIC DESIGN I-PART MODELING

CAD 220 3
PARAMETRIC DESIGN II-ASSEMBLIES

CAD 230 3
TOOL DESIGN

CAD 240 3
PRODUCT DESIGN

CAD 250 3
INTRODUCTION TO SOLIDWORKS 3D

    Students with no drafting experience will be required to take CAD 100 Introduction to Drafting.

Students are advised that it could be dangerous to wear contact lenses in any area where fumes from chemicals, solvents, gases, and areas where electrical flash may be present. You should plan to wear prescription eyeglasses if you take classes where these hazards exist.

TECHNICAL-RELATED REQUIREMENTS   **12 CR. HRS.**

HP 101...3
HYDRAULICS/PNEUMATICS

MET 201 3
METALLURGY

MT 101A 3
BASIC MACHINING

MT 205..3
NC/CNC (COMPUTER NUMERICAL CONTROL)

ELECTIVES   **6 CR. HRS.**
    Electives must be chosen from the following list or have departmental approval.

BUS 179...1
KEYBOARDING (OR DEMONSTRATE PROFICIENCY)

CAD 100 3
INTRODUCTION TO DRAFTING

CAD 150 3
BLUEPRINT READING

CAD 151 3
GEOMETRIC DIMENSIONING & TOLERANCING

CAD 152 3
RESIDENTIAL ARCHITECTURE

CAD 153 3
COMMERCIAL ARCHITECTURE

CAD 251 3
DIE DESIGN

COM 101 3
ORAL COMMUNICATIONS

ELTC 101L&L..3
ELECTRICITY-BASIC

MET 101 3
INDUSTRIAL MATERIALS

MET 102 3
BASIC CAST METALS

MT 150..3
MACHINERY HANDBOOK

QC 101 3
BASIC QUALITY CONTROL

TECH 290CI 3
COOPERATIVE INTERNSHIP

W 101 3
BASIC WELDING

TOTAL 62

Computer-Aided Drafting and Design Certificate

CERTIFICATE REQUIREMENTS
(21 CR. HRS.)   **CR. HRS.**

CAD 110 3
INTRO TO COMPUTER-AIDED DRAFTING (2D)

CAD 120 3
DESCRIPTIVE GEOMETRY

CAD 135 3
ENGINEERING GRAPHICS

CAD 210 3
PARAMETRIC DESIGN I-PART MODELING

CAD 250 3
INTRODUCTION TO SOLIDWORKS 3D

TMAT 102A..3
TECHNICAL MATH II

TMAT 201..3
TECHNICAL MATH III

TOTAL 21

BCOM 101 Business and Technical Communications is recommended.

How much will this program cost me?*

Tuition and fees: $3,257
Books and supplies: $1,328
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 7 months to complete. Of those that completed the program in 2012-2013, *% finished in 7 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

www.muskegoncc.edu/Include/GE/CAD_Certificate.html

Associate in Applied Science
Electronics Technology

This curriculum is designed to prepare a student for employment as a technician in the industrial and customer service areas. Successful completion of the program leads to the Associate in Applied Science Degree. *(Students may elect only those courses required to develop a particular skill without enrolling in the entire program of study that leads to a degree.)* Students who wish to complete a program in two years are advised to use a sequence of courses recommended by their counselor or by the instructor. If a student wishes to attend college on less than a full-time basis, the program may be extended beyond two years.

GENERAL EDUCATION REQUIREMENTS   19 CR. HRS.

AMT 129..3
INTRODUCTION TO TECHNOLOGY

BCOM 101..3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102..3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 127..3
HUMAN RELATIONS

ELTR 111 5
ELECTRONICS MATHEMATICS

HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

ELECTRONICS TECHNOLOGY REQUIREMENTS   26 CR. HRS.

CIS 109/ELTR 109...2
PERSONAL COMPUTER MAINTENANCE

ELTC 150..3
INDUSTRIAL ELECTRICITY

ELTC 160L&L..3
PROGRAMMABLE CONTROLLERS

ELTR 101..4
ELECTRONICS-BASIC

ELTR 102A...4
ACTIVE DEVICES & CIRCUIT ANALYSIS

ELTR 112 3
DIGITAL ELECTRONICS I

ELTR 202A...4
INDUSTRIAL ELECTRONIC SYSTEMS

ELTR 211A...3
MICROCOMPUTER INTERFACING

TECHNICAL-RELATED REQUIREMENTS   3 CR. HRS.

Choose One (1) Course From: 3
CAD 100   *INTRODUCTION TO DRAFTING*
CAD 110   *INTRO TO COMPUTER-AIDED*
                 DRAFTING (2D)

ELECTIVES   14 CR. HRS.

Electives must be chosen from the following list or have departmental approval.

BUS 125..3
SUPERVISION

CIS 209/ELTR 209...3
PERSONAL COMPUTER MAINTENANCE II
(A+ CERTIFICATION)

COM 101...3
ORAL COMMUNICATIONS

ELTC 203 3
ADVANCED PROGRAMMABLE CONTROLLERS

ELTR 212 4
MEDICAL INSTRUMENTATION & MEASUREMENT

HP 101..3
HYDRAULICS/PNEUMATICS

MET 101 3
INDUSTRIAL MATERIALS

TECH 200 3
APPLIED ALTERNATIVE AND RENEWABLE ENERGY

TECH 290CI 3
COOPERATIVE INTERNSHIP

TOTAL 62

Students are advised that it could be dangerous to wear contact lenses in any area where fumes from chemicals, solvents, gases, and areas where electrical flash may be present. You should plan to wear prescription eyeglasses if you take classes where these hazards exist.

Electronics Technology Certificate

CERTIFICATE REQUIREMENTS   **39 CR. HRS.**

BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

ELTR 101 4
ELECTRONICS-BASIC

ELTR 102A 4
ACTIVE DEVICES AND CIRCUIT ANALYSIS

ELTR 111 5
ELECTRONICS MATHEMATICS

ELTR 112 3
DIGITAL ELECTRONICS I

ELTR 201A 4
COMMUNICATIONS (PRINCIPLES & SERVICING)

ELTR 202A 4
INDUSTRIAL ELECTRONICS SYSTEMS

ELTR 205 3
ELECTRONIC CIRCUIT DESIGN

ELTR 210 3
INTRODUCTION TO MICROPROCESSORS

ELTR 211A 3
MICROCOMPUTER INTERFACING

Choose One (1) Course From: 3
CAD 100   INTRODUCTION TO DRAFTING
CAD 110   INTRO TO COMPUTER-AIDED
*   DRAFTING (2D)*

                                        TOTAL 39

How much will this program cost me?*

Tuition and fees: $5,045
Books and supplies: $1,200
On-campus room & board: not offered

    *The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

    * Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 11 months to complete. Of those that completed the program in 2012-2013, *% finished in 11 months.

    *Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

    * MCC is not currently required to calculate a job placement rate for program graduates.

    www.muskegoncc.edu/Include/GE/
*   Electronics_Technology_Certificate.html*

Associate in Applied Science

Graphic Design

The Graphic Design curriculum is designed to prepare students for entry into the field of graphic design with a broad background and experience in the creation of a wide variety of media for advertising, displays, sign and computer graphics to fit clients' needs. Though not fine artists, students need to be skilled in drawing and painting. Media creation and distribution is ever changing and so must be the knowledge and skills of the graphic designer. This program is not designed to transfer to a four-year institution. Any student wishing to transfer to a four-year college is urged to consult with a counselor. The certificate programs are intended to provide the student with foundation skills to gain immediate employment in the specialty, or continue in the AAS program.

GENERAL EDUCATION
REQUIREMENTS   **20 CR. HRS.**

AMT 129 3
INTRODUCTION TO TECHNOLOGY

BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 127 3
HUMAN RELATIONS

HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

TMAT 101A 3
TECHNICAL MATH I

TMAT 102A 3
TECHNICAL MATH II

Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201

GRAPHIC DESIGN REQUIREMENTS   **32 CR. HRS.**

CIS 187 3
MULTIMEDIA DIGITIZING

GR 110 3
INTRODUCTION TO GRAPHIC REPRODUCTION

GR 160 3
DIGITAL IMAGING

GR 220 3
ELECTRONIC PUBLISHING

GR 270 3
COMPUTER IMAGING FOR THE PRINTING INDUSTRY

GRD 100ID 1
INTRODUCTION TO INDESIGN

GRD 100PS 1
INTRODUCTION TO PHOTOSHOP

GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN

GRD 130 3
DRAWING FOR GRAPHIC DESIGN

GRD 140 3
INTRODUCTION TO TYPOGRAPHY

GRD 160 3
HISTORY OF GRAPHIC DESIGN

GRD 290CI 3
PRODUCTION PRACTICUM

TECHNICAL-RELATED
REQUIREMENTS   **7 CR. HRS.**

BUS 123 3
BUSINESS LAW

BUS 179 1
KEYBOARDING

GRD 107 2
IMAGE ASSEMBLY

Choose One (1) Course From: 1
CIS 100   *INTRO TO PERSONAL COMPUTERS*
CIS 100L&L   *INTRO TO PERSONAL COMPUTERS*
             WITH LAB

ELECTIVES   **3 CR. HRS.**
  Electives must be chosen from the following list or
  have departmental approval.

CIS 119PP 1
INTRODUCTION TO PRESENTATION GRAPHICS

CIS 257A 3
HTML FOR INTERNET WEB PAGE DESIGN

CIS 287 3
PERSONAL COMPUTER DIGITAL VIDEO EDITING

COM 212 3
TELEVISION PRODUCTION

GRD 100IL 1
INTRODUCTION TO ILLUSTRATOR

            TOTAL 62

Students are advised that it could be dangerous to wear contact lenses in any area where fumes from chemicals, solvents, gases, and areas where electrical flash may be present. You should plan to wear prescription eyeglasses if you take classes where these hazards exist.

Associate in Applied Science
Graphic Design Display Advertising Entrepreneur

Students completing this set of classes will have the foundation skills to run a freelance graphic design business. The skill set includes competency in creating graphic design solutions for either print or web-based advertising. Students will develop proficiencies in contemporary graphic design software, image creation and integrating animation techniques in final design solutions. They apply fundamental design elements and principles using type, image and layout to create professional quality display advertising.

GENERAL EDUCATION REQUIREMENTS   **20 CR. HRS.**

BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102...3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 126...3
BUSINESS MATH

CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS

HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

PHIL 205...3
BUSINESS ETHICS

Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS

Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

ENTREPRENEUR CORE REQUIREMENTS   **13 CR. HRS.**

BUS 104...3
ACCOUNTING FOR BUSINESS OWNERS

BUS 131...1
INTRODUCTION TO ENTREPRENEURSHIP

BUS 230...3
ENTREPRENEURIAL PLANNING

BUS 240...3
ENTREPRENEURSHIP CAPSTONE

Choose One (1) Course From: 3
BUS 161A   EFFECTIVE SELLING
***BUS 220   E-BUSINESS*
***CIS 220   E-BUSINESS*

DEGREE REQUIREMENTS   **32 CR. HRS.**

BUS 263...3
ADVERTISING DYNAMICS

CIS 177DW..1
INTRO TO HTML EDITORS

GR 110 3
INTRODUCTION TO GRAPHIC REPRODUCTION

GR 160 3
DIGITAL IMAGING

GR 200L&L..3
PRINCIPLES OF 35MM PHOTOGRAPHY

GR 270 3
COMPUTER IMAGING FOR THE PRINTING INDUSTRY

GRD 100ID...1
INTRODUCTION TO INDESIGN

GRD 100IL 1
INTRODUCTION TO ILLUSTRATOR

GRD 100PS...1
INTRODUCTION TO PHOTOSHOP

GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN

GRD 130 3
DRAWING FOR GRAPHIC DESIGN

GRD 140 3
INTRODUCTION TO TYPOGRAPHY

GRD 167A/CIS 167A 1
INTRO TO INTERNET ANIMATION

GRD 210 3
GRAPHIC DESIGN II

TOTAL 65

*** BUS 220 E-Business and CIS 220 E-Business are __identical__ in content and material.*

Display Advertising Certificate

CERTIFICATE REQUIREMENTS   **35 CR. HRS.**

BUS 123 3
BUSINESS LAW

BUS 263 3
ADVERTISING DYNAMICS

CIS 120A 3
INTRO TO COMPUTER INFORMATION SYSTEMS

CIS 167A/GRD 167A 1
INTRO TO INTERNET ANIMATION

CIS 177DW 1
INTRO TO HTML EDITORS

GR 110 3
INTRODUCTION TO GRAPHIC REPRODUCTION

GR 160 3
DIGITAL IMAGING

GR 200L&L 3
PRINCIPLES OF 35MM PHOTOGRAPHY

GR 270 3
COMPUTER IMAGING FOR THE PRINTING INDUSTRY

GRD 100ID 1
INTRODUCTION TO INDESIGN

GRD 100IL 1
INTRODUCTION TO ILLUSTRATOR

GRD 100PS 1
INTRODUCTION TO PHOTOSHOP

GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN

GRD 130 3
DRAWING FOR GRAPHIC DESIGN

GRD 140 3
INTRODUCTION TO TYPOGRAPHY

                            TOTAL 35

How much will this program cost me?*

Tuition and fees: $5,316
Books and supplies: $1,395
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 11 months to complete. Of those that completed the program in 2012-2013, *% finished in 11 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

www.muskegoncc.edu/Include/GE/ Graphic_Design_Advertising_Certificate.html

PROGRAMS

Graphic Design for Multimedia Certificate

CERTIFICATE REQUIREMENTS	33 CR. HRS.

BUS 123...3
BUSINESS LAW

CIS 119PP 1
INTRODUCTION TO PRESENTATION GRAPHICS

CIS 120A..3
INTRO TO COMPUTER INFORMATION SYSTEMS

CIS 177DW...1
INTRODUCTION TO HTML EDITORS

CIS 187 3
MULTIMEDIA DIGITIZING

CIS 257A..3
HTML FOR INTERNET WEB PAGE DESIGN

CIS 287 3
PERSONAL COMPUTER DIGITAL VIDEO EDITING

GR 160 3
DIGITAL IMAGING

GR 270 3
COMPUTER IMAGING FOR THE PRINTING INDUSTRY

GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN

GRD 130 3
DRAWING FOR GRAPHIC DESIGN

GRD 140 3
INTRODUCTION TO TYPOGRAPHY

GRD 167A/CIS 167A 1
INTRODUCTION TO INTERNET ANIMATION

TOTAL 33

How much will this program cost me?*

Tuition and fees: $4,331
Books and supplies: $1,443
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 11 months to complete. Of those that completed the program in 2012-2013, *% finished in 11 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

www.muskegoncc.edu/Include/GE/ Graphic_Design_For_Multimedia_Certificate.html

PROGRAMS

Printing Prepress Certificate

CERTIFICATE REQUIREMENTS	25 CR. HRS.
BUS 123	3

BUSINESS LAW

BUS 179 1

KEYBOARDING

GR 110 3

INTRODUCTION TO GRAPHIC REPRODUCTION

GR 160 3

DIGITAL IMAGING

GR 220 3

ELECTRONIC PUBLISHING

GRD 107 2

IMAGE ASSEMBLY

GRD 120 3

INTRODUCTION TO GRAPHIC DESIGN

GRD 130 3

DRAWING FOR GRAPHIC DESIGN

GRD 140 3

INTRODUCTION TO TYPOGRAPHY

Choose One (1) Course From: 1

CIS 100   *INTRO TO PERSONAL COMPUTERS*
CIS 100L&L *INTRO TO PERSONAL COMPUTERS*
               WITH LAB

TOTAL 25

How much will this program cost me?*

Tuition and fees: $4,063
Books and supplies: $1,178
On-campus room & board: not offered

> *The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.*

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

*Federal loans: ***
*Private education loans: ***
*Institutional financing plan: ***

> * *Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.*

How long will it take me to complete this program?

*The program is designed to take 9 months to complete. Of those that completed the program in 2012-2013, *% finished in 9 months.*

> *Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.*

What are my chances of getting a job when I graduate?

*The job placement rate for students who completed this program in 2012-2013 is *%.*

> * *MCC is not currently required to calculate a job placement rate for program graduates.*

> *www.muskegoncc.edu/Include/GE/ Graphic_Design_Prepress_Certificate.html*

Graphic Design Video/Audio Certificate

PROGRAMS

CERTIFICATE REQUIREMENTS   **29 CR. HRS.**

BUS 123..3
BUSINESS LAW

BUS 179..1
KEYBOARDING

CIS 187 3
DIGITIZING FOR MULTIMEDIA

CIS 287 3
PERSONAL COMPUTER DIGITAL VIDEO EDITING

COM 102 3
MASS MEDIA

COM 112..3
AUDIO PRODUCTION

COM 212..3
TELEVISION PRODUCTION

GRD 120 3
INTRODUCTION TO GRAPHIC DESIGN

GRD 130 3
DRAWING FOR GRAPHIC DESIGN

GRD 140 3
INTRODUCTION TO TYPOGRAPHY

Choose One (1) Course From: 1
CIS 100   *INTRO TO PERSONAL COMPUTERS*
CIS 100L&L   *INTRO TO PERSONAL COMPUTERS*
                 WITH LAB

TOTAL 29

How much will this program cost me?*

Tuition and fees: $3,526
Books and supplies: $1,027
On-campus room & board: not offered

     *The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

     * Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 11 months to complete. Of those that completed the program in 2012-2013, *% finished in 11 months.

     *Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

     * MCC is not currently required to calculate a job placement rate for program graduates.

     www.muskegoncc.edu/Include/GE/ Graphic_Design_Video_Audio_Certificate.html

Associate in Applied Science
Industrial Technology

This curriculum is designed to educate and train personnel to fill supervisory and technical positions related to industrial technology. Successful completion of the program leads to the degree of Associate in Applied Science. (Students may elect only those courses required to develop a particular skill without enrolling in the entire program of study that leads to a degree.) This degree is not designed for transfer.

GENERAL EDUCATION REQUIREMENTS   **20 CR. HRS.**

AMT 129...3
INTRODUCTION TO TECHNOLOGY

BCOM 101..3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102..3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 127..3
HUMAN RELATIONS

HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

TMAT 102A...3
TECHNICAL MATH II

TMAT 201...3
TECHNICAL MATH III

Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201

TECHNICAL-RELATED REQUIREMENTS   **27 CR. HRS.**

CAD 110 3
INTRO TO COMPUTER-AIDED DRAFTING (2D)

CAD 250 3
INTRODUCTION TO SOLIDWORKS 3D

ELTC 101L&L..3
ELECTRICITY-BASIC

MET 101 3
INDUSTRIAL MATERIALS

MET 201 3
METALLURGY

MT 101A...3
BASIC MACHINING

MT 206..3
2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING

QC 101 3
BASIC QUALITY CONTROL

W 101 3
BASIC WELDING

ELECTIVES   **16 CR. HRS.**
Electives must be chosen from the following list or have departmental approval.

BUS 125...3
SUPERVISION

BUS 166...3
QUALITY CUSTOMER SERVICE

CAD 100 3
INTRODUCTION TO DRAFTING

CAD 120 3
DESCRIPTIVE GEOMETRY

CIS 101EW 1
INTRODUCTION TO ELECTRONIC SPREADSHEETS

CIS 119PP 1
INTRODUCTION TO PRESENTATION GRAPHICS

COM 101 3
ORAL COMMUNICATIONS

ELTC 150...3
INDUSTRIAL ELECTRICITY

HP 101...3
HYDRAULICS/PNEUMATICS

MT 150...3
MACHINERY HANDBOOK

MT 216...3
3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING

QC 105 3
QUALITY AND PRODUCTIVITY USING SPC-STATISTICAL PROCESS CONTROL

TECH 290CI...3
COOPERATIVE INTERNSHIP

TOTAL 63

Students are advised that it could be dangerous to wear contact lenses in any area where fumes from chemicals, solvents, gases, and areas where electrical flash may be present. You should plan to wear prescription eyeglasses if you take classes where these hazards exist.

Industrial Technology Certificate

CERTIFICATE REQUIREMENTS   **27 CR. HRS.**

AMT 129 3
INTRODUCTION TO TECHNOLOGY

CAD 150 3
BLUEPRINT READING

ELTC 101L&L 3
ELECTRICITY-BASIC

MET 102 3
BASIC CAST METALS

MET 101 3
INDUSTRIAL MATERIALS

MT 101A 3
BASIC MACHINING

QC 101 3
BASIC QUALITY CONTROL

TMAT 102A 3
TECHNICAL MATH II

W 101 3
BASIC WELDING

TOTAL 27

BCOM 101 Business and Technical Communications is recommended.

How much will this program cost me?*

Tuition and fees: $3,526
Books and supplies: $1,398
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 7 months to complete. Of those that completed the program in 2012-2013, *% finished in 7 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

www.muskegoncc.edu/Include/GE/ Industrial_Technology_Certificate.html

PROGRAMS

Associate in Applied Science
Machining Technology

This curriculum is designed to prepare the student for that highly diversified area engaged in the production of machined objects required for the assembly of the products of modern industry. Successful completion of this program leads to the Associate in Applied Science Degree. (Students may elect only those courses required to develop a particular skill without enrolling in the entire program of study that leads to a degree.) Students who wish to complete a program in two years are advised to use a sequence of courses recommended by their counselor or by the instructor. If a student wishes to attend college on fewer than a full-time basis, the program may be extended beyond two years.

GENERAL EDUCATION REQUIREMENTS — **20 CR. HRS.**

AMT 129..3
INTRODUCTION TO TECHNOLOGY

BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102...3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 127..3
HUMAN RELATIONS

HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

Choose Two (2) Courses From: 6
MT 150   MACHINERY HANBOOK
TMAT 101A   TECHNICAL MATH I
TMAT 102A   TECHNICAL MATH II
TMAT 201   TECHNICAL MATH III

Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

MACHINING TECHNOLOGY REQUIREMENTS — **20 CR. HRS.**

MT 101A...3
BASIC MACHINING

MT 102...3
INTERMEDIATE MACHINING

MT 103...3
ADVANCED MACHINING

MT 206...3
2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING

MT 216...3
3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING

MT 225...3
MOLD MAKING

MT 230...3
BASIC DIE MAKING

TECHNICAL-RELATED REQUIREMENTS — **15 CR. HRS.**

CAD 110 3
INTRO TO COMPUTER-AIDED DRAFTING (2D)

CAD 150 3
BLUEPRINT READING

MT 205...3
NC/CNC (COMPUTER NUMERICAL CONTROL)

W 101 3
BASIC WELDING

Choose One (1) Course From: 3
CAD 100   INTRODUCTION TO DRAFTING
CAD 110   INTRO TO COMPUTER-AIDED DRAFTING

ELECTIVES — **6 CR. HRS.**
Electives must be chosen from the following list or have departmental approval.

BUS 125...3
SUPERVISION

HP 101 3
HYDRAULICS/PNEUMATICS

MET 101 3
INDUSTRIAL MATERIALS

MET 102 3
BASIC CAST METALS

MET 201 3
METALLURGY

MT 240...3
BASIC MACHINE REPAIR

MT 245...3
ADVANCED MACHINE REPAIR

QC 101 3
BASIC QUALITY CONTROL

TECH 290CI..3
COOPERATIVE INTERNSHIP

TOTAL 62

STUDENTS MUST WEAR APPROVED SAFETY GLASSES WHERE HAZARDS EXIST.

Machining Technology Certificate

CERTIFICATE REQUIREMENTS   **27 CR. HRS.**

AMT 129 3
INTRODUCTION TO TECHNOLOGY

CAD 150 3
BLUEPRINT READING

MET 101 3
INDUSTRIAL MATERIALS

MT 101A 3
MACHINING-BASIC

MT 102 3
INTERMEDIATE MACHINING

MT 103 3
ADVANCED MACHINING

MT 205 3
NC/CNC (COMPUTER NUMERICAL CONTROL)

QC 101 3
BASIC QUALITY CONTROL

TMAT 102A 3
TECHNICAL MATH II

TOTAL 27

How much will this program cost me?*

Tuition and fees: $3,705
Books and supplies: $1,710
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 7 months to complete. Of those that completed the program in 2012-2013, *% finished in 7 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

www.muskegoncc.edu/Include/GE/ Machining_Technology_Certificate.html

Machinist Certificate

CERTIFICATE REQUIREMENTS	24 CR. HRS.
CAD 150	3
BLUEPRINT READING	
MET 101	3
INDUSTRIAL MATERIALS	
MT 101A	3
BASIC MACHINING	
MT 102	3
INTERMEDIATE MACHINING	
MT 103	3
ADVANCED MACHINING	
MT 206	3
2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING	
TMAT 101A	3
TECHNICAL MATH I	
TMAT 102A	3
TECHNICAL MATH II	
	TOTAL 24

How much will this program cost me?*

Tuition and fees: $3,257
Books and supplies: $1,541
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 11 months to complete. Of those that completed the program in 2012-2013, *% finished in 11 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

www.muskegoncc.edu/Include/GE/ Machinist_Certificate.html

Machine Mechanic Certificate (Industrial Maintenance)

CERTIFICATE REQUIREMENTS   **22 CR. HRS.**

CAD 150 3
BLUEPRINT READING

ELTC 101L&L 3
ELECTRICITY-BASIC

HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

HP 101..3
HYDRAULICS/PNEUMATICS

MT 101A...3
BASIC MACHINING

MT 240..3
BASIC MACHINE REPAIR

TMAT 101A...3
TECHNICAL MATH I

W 101 3
BASIC WELDING

TOTAL 22

How much will this program cost me?*

Tuition and fees: $2,989
Books and supplies: $1,617
On-campus room & board: not offered

> **The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.*

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

> ** Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.*

How long will it take me to complete this program?

The program is designed to take 11 months to complete. Of those that completed the program in 2012-2013, *% finished in 11 months.

> **Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.*

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

> ** MCC is not currently required to calculate a job placement rate for program graduates.*

> *www.muskegoncc.edu/Include/GE/*
> *Machine_Mechanic_Certificate.html*

Associate in Applied Science
Manufacturing Engineering Technology

This program is designed to educate and train students for entry-level engineering and technical positions related to industry and technology. Successful completion of the program leads to the degree of Associate in Applied Science. This degree is designed to prepare graduates for entry-level work in the field of Engineering and to transfer to a 4-year institution for continuing engineering study.

GENERAL EDUCATION
REQUIREMENTS   **22 CR. HRS.**

CIS 120A...3
INTRO TO COMPUTER INFORMATION SYSTEMS

COM 101 3
ORAL COMMUNICATIONS

ENG 101 3
ENGLISH COMPOSITION

ENG 102 3
ENGLISH COMPOSITION

HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

MATH 161 4
CALCULUS I

Choose One (1) Course From: 4
ECON 101   PRINCIPLES OF ECONOMICS
ECON 102   PRINCIPLES OF ECONOMICS
PSYC 201   GENERAL PSYCHOLOGY

Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201

ENGINEERING-RELATED
REQUIREMENTS   **22 CR. HRS.**

CAD 110 3
INTRODUCTION TO COMPUTER-AIDED DRAFTING (2D)

CAD 210 3
PARAMETRIC DESIGN I-PART MODELING

CHEM 101 LEC & CHEM 101A 5
GENERAL AND INORGANIC CHEMISTRY, L&L

CIS 185 3
"C" PROGRAMMING

MATH 215 3
PROBABILITY AND STATISTICS FOR ENGINEERING

PHYS 203L&L 5
ENGINEERING PHYSICS

ENGINEERING TECHNOLOGY
ELECTIVES   **18 CR. HRS.**
  Electives must be chosen from the following list or
  have departmental approval.

CAD 250 3
INTRODUCTION TO SOLID WORKS 3D

ELTC 101L&L...3
ELECTRICITY-BASIC

HP 101..3
HYDRAULICS/PNEUMATICS

MET 101 3
INDUSTRIAL MATERIALS

MET 201 3
METALLURGY

MT 101A 3
BASIC MACHINING

MT 206..2
2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING

QC 101 3
BASIC QUALITY CONTROL

QC 105 3
QUALITY AND PRODUCTIVITY USING
SPC-STATISTICAL PROCESS CONTROL

TOTAL 62

Associate in Applied Science
Materials Technology

Materials Technology is the study of new and modified materials emerging on the technology scene. The activities of the Materials Technologist are directed toward the understanding, testing, development, and applications of materials. These materials include metals, alloys, ceramics, semi-conductors, polymers, and composites. Materials Technology is basic to a wide range of industries, including automotive, electrical, and manufacturing, to name a few.

The mission of the Materials Technologist is to understand the underlying physical and chemical origins of the properties being evaluated. Covering all physical classes of materials, the program investigates the relationship between the structure and properties of materials and then applies the resulting knowledge to issues related to the design, processing, and performance of these materials.

**GENERAL EDUCATION
REQUIREMENTS**   **20 CR. HRS.**
AMT 129..3
INTRODUCTION TO TECHNOLOGY
BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS
BCOM 102...3
ADVANCED BUS AND TECH COMMUNICATIONS
BUS 127...3
HUMAN RELATIONS
HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING
TMAT 102A...3
TECHNICAL MATH II
TMAT 201..3
TECHNICAL MATH III
Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201

**MATERIALS TECHNOLOGY
REQUIREMENTS**   **23 CR. HRS.**
CHEM 100LEC & CHEM 100A......................................5
FUNDAMENTALS OF CHEMISTRY, L&L
MET 101 3
INDUSTRIAL MATERIALS
MET 102 3
BASIC CAST METALS
MET 201 3
METALLURGY
MET 202 3
ADVANCED METALS
MET 203 3
MATERIALS TESTING
MET 212 3
PATTERNMAKING GATING AND RISERING

**TECHNICAL-RELATED
REQUIREMENTS**   **12 CR. HRS.**
CAD 150 3
BLUEPRINT READING
MT 101A..3
BASIC MACHINING
QC 101 3
BASIC QUALITY CONTROL
W 101 3
BASIC WELDING

ELECTIVES   **9 CR. HRS.**
   *Electives must be chosen from the following list or
   have departmental approval.*
BUS 125...3
SUPERVISION
ELTC 101L&L..3
ELECTRICITY- BASIC
HP 101...3
HYDRAULICS/PNEUMATICS
MET 204 3
INTRODUCTION TO PLASTICS
TECH 290CI...3
COOPERATIVE INTERNSHIP

                  TOTAL 64

Associate in Applied Science
Welding Technology

Welding Technology is a diversified program of skills dealing with the fabrication of metal products from rolled, stamped, forged or cast shapes. The type of metal, position of weldments, and use of structural shapes will be handled in a manner similar to that used in industrial processing. Selection of the proper welding methods, materials and procedures required will provide training in solving realistic problems found in the welding field. Students who wish to complete a program in two years are advised to use a sequence of courses recommended by their counselor or by the instructor. If a student wishes to attend college on less than a full-time basis, the program may be extended beyond two years. Students may wish to complete only the certificate program in welding.

GENERAL EDUCATION REQUIREMENTS — 20 CR. HRS.

AMT 129 3
INTRODUCTION TO TECHNOLOGY

BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS

BUS 127 3
HUMAN RELATIONS

HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING

Choose Two (2) Courses From: 6
TMAT 101A   TECHNICAL MATH I
TMAT 102A   TECHNICAL MATH II
TMAT 201   TECHNICAL MATH III

Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201

WELDING TECHNOLOGY REQUIREMENTS — 21 CR. HRS.

W 101 3
BASIC WELDING

W 102 3
WELDING -ADVANCED

W 103 3
MIG/TIG WELDING

W 201 3
STRUCTURAL WELDING

W 202 3
PIPE WELDING

W 203 3
WELDING MAINTENANCE

W 204 3
WELDING SUPERVISION

TECHNICAL-RELATED REQUIREMENTS — 15 CR. HRS.

CAD 150 3
BLUEPRINT READING

ELTC 101L&L 3
ELECTRICITY-BASIC

MET 201 3
METALLURGY

MT 101A 3
BASIC MACHINING

Choose One (1) Course From: 3
CAD 100   INTRO TO DRAFTING
CAD 110   INTRO TO COMPUTER-AIDED DRAFTING

ELECTIVES — 6 CR. HRS.

Electives must be chosen from the following list or have departmental approval.

ACC 201 4
PRINCIPLES OF ACCOUNTING I

BUS 125 3
SUPERVISION

BUS 161A 3
EFFECTIVE SELLING

MET 102 3
BASIC CAST METALS

TECH 290CI 3
COOPERATIVE INTERNSHIP

QC 101 3
BASIC QUALITY CONTROL

TOTAL 62-64

Students are advised that it could be dangerous to wear contact lenses in any area where fumes from chemicals, solvents, gases, and areas where electrical flash may be present. You should plan to wear prescription eyeglasses if you take classes where these hazards exist.

Welding Technology Certificate

CERTIFICATE REQUIREMENTS   **24 CR. HRS.**

CAD 150 3
BLUEPRINT READING

ELTC 101L&L 3
ELECTRICITY-BASIC

MT 101A 3
BASIC MACHINING

TMAT 101A 3
TECHNICAL MATH I

W 101 3
BASIC WELDING

W 102 3
WELDING-ADVANCED

W 103 3
MIG/TIG WELDING

W 201 3
STRUCTURAL WELDING

TOTAL 24

BCOM 101 Business and Technical Communications is recommended.

How much will this program cost me?*

Tuition and fees: $2,989
Books and supplies: $1,598
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 7 months to complete. Of those that completed the program in 2012-2013, *% finished in 7 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

www.muskegoncc.edu/Include/GE/ Welding_Technology_Certificate.html

Additional Technology Certificate Programs

Students are advised that it could be dangerous to wear contact lenses in any area where fumes from chemicals, solvents, gases, and areas where electrical flash may be present. You should plan to wear prescription eyeglasses if you take classes where these hazards exist.

Digital Electronics Technology Certificate

CERTIFICATE REQUIREMENTS   **25 CR. HRS.**

ELTR 101 4
ELECTRONICS-BASIC

ELTR 102A 4
ACTIVE DEVICES AND CIRCUIT ANALYSIS

ELTR 111 5
ELECTRONICS MATHEMATICS

ELTR 112 3
DIGITAL ELECTRONICS I

ELTR 205 3
ELECTRONIC CIRCUIT DESIGN

ELTR 210 3
INTRODUCTION TO MICROPROCESSORS

ELTR 211A 3
MICROCOMPUTER INTERFACING

                                          TOTAL 25

How much will this program cost me?*

Tuition and fees: $5,047
Books and supplies: $1,096
On-campus room & board: not offered

> **The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.*

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

> ** Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.*

How long will it take me to complete this program?

The program is designed to take 11 months to complete. Of those that completed the program in 2012-2013, *% finished in 11 months.

> **Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.*

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

> ** MCC is not currently required to calculate a job placement rate for program graduates.*

> *www.muskegoncc.edu/Include/GE/ Digital_Electronics_Certificate.html*

Industrial Electrical Maintenance Certificate

CERTIFICATE REQUIREMENTS   **34 CR. HRS.**

AMT 129 3
INTRO TO TECHNOLOGY

ELTC 150 3
INDUSTRIAL ELECTRICITY

ELTC 152 3
NATIONAL ELECTRICAL CODE

ELTC 160L&L 3
PROGRAMMABLE CONTROLLERS

ELTC 203 3
ADVANCED PROGRAMMABLE CONTROLLERS

ELTR 101 4
ELECTRONICS-BASIC

ELTR 102A 4
ACTIVE DEVICES AND CIRCUIT ANALYSIS

ELTR 111 5
ELECTRONICS MATHEMATICS

HP 101 3
HYDRAULICS/ PNEUMATICS

W 101 3
BASIC WELDING

TOTAL 34

How much will this program cost me?*

Tuition and fees: $5,047
Books and supplies: $1,561
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 11 months to complete. Of those that completed the program in 2012-2013, *% finished in 11 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

www.muskegoncc.edu/Include/GE/ Industrial_Electrical_Maintenance_Certificate.html

Grounds Maintenance Certificate

CERTIFICATE REQUIREMENTS   **18 CR. HRS.**

AT 114 3
AUTOMOTIVE POWER PLANTS (ENGINE REBUILDING)

ELTC 101L&L 3
ELECTRICITY - BASIC

MT 101A 3
MACHINING-BASIC

TECH 290CI 3
COOPERATIVE INTERNSHIP

TMAT 101A 3
TECHNICAL MATH I

W 101 3
BASIC WELDING

TOTAL 18

How much will this program cost me?*

Tuition and fees: $2,362
Books and supplies: $1,024
On-campus room & board: not offered

> **The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.*

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

> ** Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.*

How long will it take me to complete this program?

The program is designed to take 11 months to complete. Of those that completed the program in 2012-2013, *% finished in 11 months.

> **Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.*

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

> ** MCC is not currently required to calculate a job placement rate for program graduates.*

> *www.muskegoncc.edu/Include/GE/ Grounds_Maintenance_Certificate.html*

Industrial Maintenance Certificate

The Industrial Maintenance Certificate Program was developed in response to requests from local industrial employers. The changing nature of manufacturing processes has contributed to significant advancements in production technology with particular emphasis on quality and continuous improvement, thereby changing the approach to maintenance. This program will enhance maintenance expertise by providing reliable and consistent basic training, as well as performance-tested documentation of acquired skills.

CERTIFICATE REQUIREMENTS	19 CR. HRS.
CAD 150	3
BLUEPRINT READING	
ELTC 101L&L	3
ELECTRICITY-BASIC	
HE 110	1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING	
HP 101	3
HYDRAULICS/PNEUMATICS	
MT 101A	3
BASIC MACHINING	
TMAT 102A	3
TECHNICAL MATH II	
W 101	3
BASIC WELDING	
	TOTAL 19

How much will this program cost me?*

Tuition and fees: $2,452
Books and supplies: $1,617
On-campus room & board: not offered

  *The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

  * Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 7 months to complete. Of those that completed the program in 2012-2013, *% finished in 7 months.

  *Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

  * MCC is not currently required to calculate a job placement rate for program graduates.

  www.muskegoncc.edu/Include/GE/ Industrial_Maintenance_Certificate.html

Production Supervision Certificate

CERTIFICATE REQUIREMENTS	24 CR. HRS.

AMT 129 3
INTRODUCTION TO TECHNOLOGY

BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS

BUS 125 3
SUPERVISION

BUS 127 3
HUMAN RELATIONS

CAD 150 3
BLUEPRINT READING

MET 101 3
INDUSTRIAL MATERIALS

QC 101 3
QUALITY CONTROL

TMAT 101A 3
TECHNICAL MATH I

TOTAL 24

How much will this program cost me?*

Tuition and fees: $2,720
Books and supplies: $1,024
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 7 months to complete. Of those that completed the program in 2012-2013, *% finished in 7 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

www.muskegoncc.edu/Include/GE/ Production_Supervisor_Certificate.html

Quality Assurance Certificate

CERTIFICATE REQUIREMENTS   **21 CR. HRS.**

AMT 129...3
INTRODUCTION TO TECHNOLOGY

BCOM 101...3
BUSINESS AND TECHNICAL COMMUNICATIONS

BUS 127...3
HUMAN RELATIONS

CAD 150 3
BLUEPRINT READING

QC 101 3
BASIC QUALITY CONTROL

QC 105 3
*QUALITY AND PRODUCTIVITY USING
SPC-STATISTICAL PROCESS CONTROL*

TMAT 101A..3
TECHNICAL MATH I

TOTAL 21

How much will this program cost me?*

Tuition and fees: $2,362
Books and supplies: $981
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

*Federal loans: ***
*Private education loans: ***
*Institutional financing plan: ***

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 7 months to complete. Of those that completed the program in 2012-2013, *% finished in 7 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

*www.muskegoncc.edu/Include/GE/
Quality_Assurance_Certificate.html*

Alternative & Renewable Energy Certificates

Muskegon Community College's Alternative and Renewable Energy (ARE) certificate programs are for the student desiring to enter the field at the technician level.

Biofuels Technician Certificate

The Biofuel Technician Certificate is focused on the development of the technician's need to monitor and maintain the technology used to create common biofuels such as ethanol, biodiesel, and methane. This program will be of particular interest to the student who has an interest in the chemistry and biology components of biofuels.

CERTIFICATE REQUIREMENTS   28 CR. HRS.

AT 140..3
INTRO TO HYBRIDS AND ALTERNATIVE FUELS

BIOL 104L&L..4
INTRODUCTORY BIOLOGY II

CHEM 100A..1
FUNDAMENTALS OF CHEMISTRY LABORATORY

CHEM 100LEC..4
FUNDAMENTALS OF CHEMISTRY

CHEM 101A..1
GENERAL AND INORGANIC CHEMISTRY LABORATORY

CHEM 101LEC..4
GENERAL AND INORGANIC CHEMISTRY

MATH 109...4
COLLEGE ALGEBRA WITH APPLICATIONS

TECH 200..3
APPLIED ALTERNATIVE AND RENEWABLE ENERGY

TECH 290CI..4
COOPERATIVE INTERNSHIP

TOTAL 28

How much will this program cost me?*

Tuition and fees: $3,446
Books and supplies: $1,079
On-campus room & board: not offered

*The amounts shown above include costs for the entire program, assuming normal time to completion. Note that this information is subject to change.

What financing options are available to help me pay for this program?

Financing for this program may be available through grants, scholarships, loans (federal and private) and institutional financing plans. The median amount of debt for program graduates is shown below:

Federal loans: *
Private education loans: *
Institutional financing plan: *

* Fewer than 10 graduates received loans. Median amounts are withheld to preserve the confidentiality of the loan recipients.

How long will it take me to complete this program?

The program is designed to take 10 months to complete. Of those that completed the program in 2012-2013, *% finished in 10 months.

*Fewer than 10 students completed this program in 2012-13. The number who finished within the normal time has been withheld to preserve the confidentiality of the students.

What are my chances of getting a job when I graduate?

The job placement rate for students who completed this program in 2012-2013 is *%.

* MCC is not currently required to calculate a job placement rate for program graduates.

*www.muskegoncc.edu/Include/GE/
Bio-Fuel_Certificate.html*

PROGRAMS

Wind & Solar Certificate

The Wind and Solar Certificate focuses on the installation of wind and solar electric generation equipment designed for use in residential and light commercial environments. This segment of the industry has received statewide acceptance by local communities. As the technology advances payback periods are decreasing thus encouraging increased use of these alternative and renewable power generation technologies.

CERTIFICATE REQUIREMENTS	32 CR. HRS.
ARE 115	3
WIND TURBINE AND SOLAR ARRAY INSTALLATION	
ELTC 103	3
RESIDENTIAL WIRING	
ELTC 150	3
INDUSTRIAL ELECTRICITY	
ELTC 152	3
NATIONAL ELECTRIC CODE	
ELTC 160L&L	3
PROGRAMMABLE CONTROLLERS	
ELTR 101	4
ELECTRONICS-BASIC	
ELTR 111	5
ELECTRONICS MATHEMATICS	
KVCC ELT 126	2
POWER GENERATION AND DISTRIBUTION	
TECH 200	3
APPLIED ALTERNATIVE AND RENEWABLE ENERGY	
W 101	3
BASIC WELDING	
	TOTAL 32

Additional Entrepreneurial Study Programs

(Associate in Applied Science Degrees)

These are two-year programs designed to prepare students in a number of study areas to start a business. First semester students evaluate their personal skills, create and analyze business ideas, and determine if they are ready to make the commitment necessary to become a successful entrepreneur. Continuing students study and apply financial, marketing, operational, and human resources concepts to their specific business idea. They finish the program with a comprehensive business plan which may assist them in seeking financing and launching their business.

Students choose from special topic classes to further develop specific business skills. They can also compete in local and national business plan and elevator pitch competitions. Throughout the program, students will meet local entrepreneurs and area leaders as a prelude to joining the local business community.

The college offers AAS Entrepreneurial Degrees where students combine the Entrepreneurial Studies courses with their chosen field of study. It is strongly recommended that students check WebAvisor, their college counselor, www.muskegoncc.edu/startup, or individual departments for the latest offerings.

AAS Entrepreneurial degrees

- Alternative Fuel Vehicle
- Automotive Repair
- Bookkeeping Services
- Computer Networking
- Family Child Care
- Graphic Design Display Advertising
- Music Performance
- Personal Computer Maintenance
- Political Campaigning
- Visual Art
- Web Game Development
- Website Development

Associate in Applied Science
Music Performance Entrepreneur

PROGRAMS

This degree program provides the foundation skills for the performance musician to operate, promote, manage, and stage a musical act in the professional music world. Everyone seeking this degree makes music and participates in ensembles of their own choosing. Students have the option of specializing in one instrument or broadening their instrumental repertoire through the study of multiple instruments. To put their own music performances into proper perspective, students are asked to explore music literature and music theory. They also gain hands-on experience with the technology and software professionals use for business communication, accounting and finance functions associated with money making enterprises. People completing this degree are exposed to music career options and common business practices, along with the challenges and joys of being a musical artist.

GENERAL EDUCATION
REQUIREMENTS   **20 CR. HRS.**
BCOM 101 3
BUSINESS AND TECHNICAL COMMUNICATIONS
BCOM 102 3
ADVANCED BUS AND TECH COMMUNICATIONS
CIS 120A 3
INTRO TO COMPUTER INFORMATION SYSTEMS
PHIL 205 3
BUSINESS ETHICS
Choose One (1) Course From: 3
BUS 105   BUSINESS STATISTICS
BUS 126   BUSINESS MATH
MATH 115   PROBABILITY AND STATISTICS
Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS
Choose One (1) Course From: 1
HE 110   INDUSTRIAL SAFETY AND
           WORKPLACE TRAINING
PEA/DNC   ANY PHYSICAL EDUCATION
           OR DANCE COURSE
Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

ENTREPRENEUR CORE
REQUIREMENTS   **13 CR. HRS.**
BUS 131 1
INTRODUCTION TO ENTREPRENEURSHIP
BUS 104 3
ACCOUNTING FOR BUSINESS OWNERS
BUS 230 3
ENTREPRENEURIAL PLANNING
BUS 240 3
ENTREPRENEURSHIP CAPSTONE
Choose One (1) Course From: 3
BUS 161A   EFFECTIVE SELLING
**BUS 220   E-BUSINESS*
**CIS220   E-BUSINESS*

DEGREE REQUIREMENTS   **30 CR. HRS.**
MU 101 3
MUSIC THEORY
MU 103 3
INTRODUCTION TO MUSIC LITERATURE
MU 194 1
SIGHT-READING AND EAR TRAINING
MU 240 3
PROFESSIONAL PRACTICES IN MUSIC
Performance/Ensemble 4
ANY MU PERFORMANCE/ENSEMBLE COURSES
Choose One (1) Course From: 3
MU 100   INTRODUCTION TO MUSIC THEORY
***MU 102   MUSIC THEORY*
Choose One (1) Course From: 3
MU 190A   CLASS PIANO FOR MUSIC MAJORS
MU 190B   CLASS PIANO (NON-MUSIC MAJORS)

APPLIED MUSIC OPTIONS
Choose One (1) of the following options:............................8

  OPTION 1

ANY TWO-COURSE SEQUENCE WITH A PRIMARY INSTRUMENT FROM MU 148PVT TO MU 189PVT AND ANY TWO-COURSE SEQUENCE WITH AN ADVANCED INSTRUMENT FROM MU 248 TO MU 289

  OPTION 2

ANY TWO-COURSE SEQUENCE WITH A PRIMARY INSTRUMENT FROM MU 148PVT TO MU 189PVT AND ANY 4 COURSES WITH A SECONDARY INSTRUMENT FROM MU 127 TO MU 147

  OPTION 3

ANY EIGHT COURSES WITH A SECONDARY INSTRUMENT FROM MU 127 TO MU 147

EELECTIVES   **3 CR. HRS.**
ANY MU COURSE NOT TAKEN ABOVE

          TOTAL 63

** BUS 105 Business Statistics and MATH 115 Probability and Statistics are **identical** in content and material.*
*** BUS 220 E-Business and CIS 220 E-Business are **identical** in content and material.*
*** If taking MU 102, choose MU 191A and MU 195 as MU electives.

Associate in Applied Science`
Visual Art Entrepreneur

This degree program provides Visual Art students with the basic skills for a variety of entrepreneurial avenues such as self-employed artist, art promoter, gallery representative, or commercial art gallery owner/director. Along with acquiring practical business concepts, the student also develops basic hands-on skills through a variety of two and three-dimensional studio experiences traditionally associated with foundation-level undergraduate art degrees. Study in art from historical and contemporary viewpoints to help gain insights into the cultural significance of art and the interrelationship of art and society is also stressed. The student then concludes the degree with an overview of professional practices in art and further hands-on experience in gallery/museum operations. Students completing this program are made aware of many of the challenges they will face when starting and operating a business.

GENERAL EDUCATION REQUIREMENTS   20 CR. HRS.
BCOM 101..3
BUSINESS AND TECHNICAL COMMUNICATIONS
BCOM 102..3
ADVANCED BUS AND TECH COMMUNICATIONS
BUS 126..3
BUSINESS MATH
CIS 120A..3
INTRO TO COMPUTER INFORMATION SYSTEMS
HE 110 1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING
PHIL 205..3
BUSINESS ETHICS
Choose One (1) Course From: 3
BUS 127   HUMAN RELATIONS
COM 101   ORAL COMMUNICATIONS
Choose One (1) Course From: 1
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201

ENTREPRENEUR CORE REQUIREMENTS   13 CR. HRS.
BUS 104..3
ACCOUNTING FOR BUSINESS OWNERS
BUS 131..1
INTRODUCTION TO ENTREPRENEURSHIP
BUS 230..3
ENTREPRENEURIAL PLANNING
BUS 240..3
ENTREPRENEURSHIP CAPSTONE
Choose One (1) Course From: 3
BUS 161A   EFFECTIVE SELLING
***BUS 220   E-BUSINESS*
***CIS220   E-BUSINESS*

DEGREE REQUIREMENTS   30 CR. HRS.
ART 104..3
DRAWING I
ART 105B 3
TWO-DIMENSIONAL FORM AND SURFACE
ART 198..3
ART HISTORY I
ART 199..3
ART HISTORY II
ART 202..3
CONTEMPORARY ART HISTORY
ART 204B 3
DRAWING II-TRANSFER PORTFOLIO PREPARATION
ART 240..3
PROFESSIONAL PRACTICES IN ART
ART 250..3
GALLERY/COLLECTION PRACTICUM
ART 290CI...3
ART COOPERATIVE INTERNSHIP
Choose One (1) Course From: 3
ART 108   CERAMICS I
ART 109   SCULPTURE I
ART 117   THREE-DIMENSIONAL FORM AND SPACE

TOTAL 63

Higher Education Partnership Programs

In addition to the many traditional transfer opportunities available to MCC students, the college also partners with three universities in unique programs allowing occu¬pational students to transfer to a high quality baccalaureate program. In all transfer programs, be sure to see an MCC counselor for details.

Bay De Noc Community College

Water Resource Management
1 + 1 Program (71 Credits)

This articulated program will allow a student to complete an Associate in Applied Science Degree in Water Resource Management from Bay De Noc Community College and meet the requirements for water and wastewater licensure in the State of Michigan.

Graduation Requirements include:
Minimum: 71 credits
Minimum: 2.0 cumulative GPA

COURSES TAKEN AT MUSKEGON COMMUNITY COLLEGE	CR. HRS.
BIOL 104L&L	4
INTRODUCTORY BIOLOGY II	
CHEM 101LEC & 101A	5
GENERAL AND INORGANIC CHEMISTRY, L&L	
CHEM 102LEC & 102A	5
GENERAL AND INORGANIC CHEMISTRY, L&L	
COM 101	3
ORAL COMMUNICATIONS	
ENG 101	3
ENGLISH COMPOSITION	
MATH 109 or Higher	4
COLLEGE ALGEBRA WITH APPLICATIONS	
PSCI 111	4
INTRODUCTION TO AMERICAN GOVERNMENT	
Choice	3-4
ONE HUMAN EXPERIENCE OR HUMAN CULTURES ELECTIVE	
TOTAL	**31-32**

COURSES TAKEN AT BAY DE NOC COMMUNITY COLLEGE	
SEMESTER 3	**CR. HRS.**
WT110*	4
WASTEWATER OPERATIONS & MANAGEMENT	
WT240	5
ENVIRONMENTAL ANALYSIS	
WT260*	3
CURRENT ISSUES FOR MANAGERS	
WT270*	4
WATER IN MOTION	
TOTAL	**16**

Courses offered online

SEMESTER 4	**CR. HRS.**
WT120*	4
WATER OPERATIONS & MANAGEMENT	
WT220*	3
INDUSTRIAL SOLUTIONS	
WT230*	3
AQUATICS	
WT250	5
WATER ANALYSIS & TECHNIQUES	
WT255	3
MECHANICS & INSTRUMENTATION	
WT272†	3
PROFESSIONAL FIELD EXPERIENCE (WATER)	
WT273†	3
PROFESSIONAL FIELD EXPERIENCE (WASTEWATER)	
TOTAL	**24**

Courses offered online
†Classes taken second eight (8) weeks

Ferris State University
(www.ferris.edu/statewide)

Ferris State University partners with MCC to provide opportunities to complete a bachelor's degree locally and affordably. Our 2+2 and 3+1 degree programs are set up so you can take two or three years of MCC courses and one or two years of Ferris courses. These programs are available to you locally. (Note some classes are online or in Grand Rapids.)

Business Administration-Professional Track

If you have a specialized associate degree, this program will build a solid knowledge of business and management upon your technical expertise.

Computer Information Systems

Step into a position in computer programming/analysis, systems analysis, network administration, and microcomputers.

Computer Information Technology

This curriculum prepares you for several industry certifications such as: CompTIA's: A+, Network+, Linux+, Security+, and Microsoft's Systems Administration Certification (MCSA).

Criminal Justice

Now available entirely on the MCC campus.

This program gives you a general education in criminal justice, preparing you to seek federal, state and/or local criminal justice agency employment or admission to law school or graduate school.

Industrial Technology and Management

If you have technical education, technical training, or military training in your background and you're looking for a career move to an administrative role or an advanced technical position, this degree is for you.

Find out how your MCC courses transfer to Ferris programs, including others on the main campus, at www.ferris.edu/admissions/transfer. For more information or to schedule an appointment with an advisor, call (231) 777-0510 or visit our office in the Stevenson Center for Higher Education on the MCC campus.

Grand Valley State University
(www.gvsu.edu/ce)

MCC has partnered with GVSU for many years to develop programs which enable the student to easily transfer into a baccalaureate degree program. We can help you get started by providing assistance with degree planning, credit transfer, and enrollment procedures. For more information, call (231) 777-0505 or visit our office in the Stevenson Center for Higher Education on the MCC campus.

Muskegon Leadership Degree

This degree program is specially designed for the student who is interested in learning leadership principles applied directly to the business and nonprofit sectors.

Muskegon Community College and Grand Valley State University have collaborated to provide a degree completion program at one convenient location. Both institutions offer courses at the Stevenson Center for Higher Education on the campus of Muskegon Community College.

Western Michigan University
(www.wmich.edu/muskegon)

As a cooperative partnership between MCC and Western Michigan University, WMU offers the following transfer program option:

Bachelor of Arts/Bachelor of Science in University Studies
The University Studies degree provides the flexibility and control needed to complete a bachelor's degree on a student's terms. This degree program integrates prior coursework done through other majors into a generalized degree. The University Studies program offers the opportunity to complete your bachelor's degree from WMU in a manageable and straightforward fashion without the constraints of a specialized curriculum. This degree program can be completed entirely online, as well as face-to-face when courses are available.

MCC Transfer Students Offered One WMU-Muskegon Class at MCC Tuition Rates
WMU-Muskegon, in partnership with Muskegon Community College (MCC), is proud to offer the WMU-Muskegon Advantage tuition program. The WMU-Muskegon Advantage offers each MCC transfer student one WMU-Muskegon course at MCC tuition rates. The WMU-Muskegon Advantage is available for one face-to-face or hybrid course offered at WMU-Muskegon.

For more information regarding programs, visit www.wmich.edu/muskegon/programs.

Other Agreements

Muskegon Community College also has articulation agreements with other colleges offering four-year degrees, including Capella University (Computer Information Systems), Franklin University (Bachelor of Science in 12 majors), and Northwood University (Management). Please schedule an appointment with an MCC counselor to learn about other opportunities. For a full listing of Transfer Guides to various four-year institutions, go to www.muskegoncc.edu/transfer.

Professional Truck Driver Training

CDL Training Services & Consulting

Nearly three million people work as truck drivers, hauling goods locally and across the country on our nation's highways. Many skills are required to be a professional driver and typically they involve being able to work with many people, staying current on transportation laws, understanding trailer load requirements, having mechanical aptitude, following instructions, and safety procedures. Truck drivers often have long hours on the road, but enjoy good salaries and independence. Job prospects for trained, licensed drivers are expected to remain strong through the next decade.

Training Highlights

Complete vehicle training to prepare you for an entry-level position in the trucking industry, plus a lot more. Designed for individuals with little or no commercial driving experience, CDL Training Services & Consulting, Inc.'s Professional Truck Driver Training at MCC provides everything you need to receive a Commercial Driver's License.

- You will receive DOT rules, regulations and log books; training to obtain CDL learner's permit and endorsement preparation; and thorough instruction in map reading, trip planning, and yard and road vehicle handling.
- You will receive a certificate after successfully completing the course.
- Basic (160 hrs), and Advanced (184 hrs) classes available
- CPR Training and Certificate
- Basic First Aid Training
- You will complete the Michigan Secretary of State administered Class A test.

Complete the course in just four or five weeks by attending full-time. Part-time evening classes are also available for those who are unable to attend full-time. We work with many trucking companies that will pre-hire students. Most students receive job offers prior to completion of their training.

Entry Requirements

A high school diploma or GED is not required. Individuals must be able to read and write the English language, be able to meet the Federal Department of Transportation physical requirements, and have a valid driver's license at the time of registration. The course trains individuals 18 and over but has limited job placement assistance for individuals under the age of 21.

Additional Items
(not part of course fee)
- Copy of Motor Vehicle Report from the Secretary of State's Office (Driver's License Bureau)
- DOT drug screen and physical
- CDL learner's permit
- Class A license plus any endorsements

The following may disqualify you from entering the truck driving workforce:
- A driving record inconsistent with industry standards for entry-level driving positions
- Any substance-related violations on your motor vehicle record in the past three years
- Recent felony convictions or criminal background
- History of drug or alcohol abuse
- Permanent disability or physical limitations

Training is scheduled around holidays and interruptions caused by weather or unforeseen circumstances.

For more information, contact:
CDL Coordinator Terri Dykema at
(231) 777-0200, or
toll-free at (1-888) 503-5151

COURSE DESCRIPTIONS

Your Destination for
Higher Education
muskegoncc.edu

Course Numbering System

Courses offered at Muskegon Community College shall be numbered according to the following system:

•

Sequential courses (those that must be taken in specific order), shall be numbered so that the first course in the sequence carries the lowest number. If a course is part of a sequence, prerequisite courses shall be clearly stated in the Course Descriptions section of the catalog, and in the Schedule of Classes.

•

Courses numbered from within the range 000 to 099 can generally be considered as pre-college level skills development or enhancement courses, designed to help prepare students for success in college level work. Students should check with an academic counselor, department chairperson, or program coordinator to determine whether such courses may be counted toward a degree, certification, or transfer requirements.

•

Courses numbered 100 to 199 are introductory courses intended primarily for first-year college students with no significant deficiencies in their academic background.

•

Courses numbered 200 to 299 are courses intended primarily for students who have successfully completed one year of college-level coursework. The number 297 shall be reserved for courses being taught on an experimental or temporary basis, before formal addition to the College catalog. The number 299 shall be reserved for independent study courses.

READY TO SUCCEED

Before enrolling in many courses, you must meet the READY TO SUCCEED reading competency requirement by test scores or course completion.	
COMPASS	Reading score of 76 or higher *(Not valid after 5 years)*
ACT	Reading score of 19 or higher
MME	1 or 2 on both Reading and Writing
College Credits	15 College credits (100-level or higher) with cumulative 2.0 or higher GPA
Reading Course	Earning a "C" grade or better in Reading 040 or Reading 050

D This course is only offered when Demand is great enough.

W This course is typically offered during the Winter semester.

F This course is typically offered during the Fall semester.

S This course is typically offered during the Summer semester.

Accounting

(see Business)

Allied Health

(see also Health Education)

Several Allied Health courses may be taken that do not require a commitment to a program or a special application. Students take these courses to increase their knowledge and skills in special areas or to prepare themselves to enter a health-related position.

AH 101
Medical Terminology
3 Cr. Hrs. – 3 Contact Hrs. ❶❷❸
Prereq: None
Designed to assist the beginning health student to master new medical terms and modes of communication. With an understanding of basic terms, the student can proceed to build a functional vocabulary while pursuing a career specialty. Basic anatomy and physiology will be an integral part of the course.

AH 102
Basic Patient Care Skills
3 Cr. Hrs. – 4 Contact Hrs. ❶
Prereq: None
This course is designed as a general introduction to patient care. The student will master skills including: vital signs, medical asepsis, isolation techniques, proper body mechanics, and introduce the student to medical terminology, medical vocabulary, medical abbreviations and charting procedures. This course is only open to Respiratory Therapy students.

AH 104
Medical Insurance Billing
2 Cr. Hrs. – 2 Contact Hrs. ❶❷
Prereq: None
An introductory course designed to assist the student to quickly identify insurance coverage appropriately and accurately, complete insurance forms and become familiar with billing procedures. The content of this course is relevant to dental and other allied health insurance billing.

AH 105
Introduction to Electrocardiography (EKG)
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: None
This course will provide the student with the necessary knowledge to perform basic cardiac technology skills. This course does not have prerequisites but students are encouraged to enroll in the Medical Terminology course. The course will be helpful to new students interested in a career in the health technologies as electrocardiographic and/or vascular technicians. The course will also provide more in-depth information for RNs, LPNs, EMTs and other health professionals. Offered only upon sufficient demand.

AH 106
Fundamentals of Health Care Delivery
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: None
This course is designed as a general introduction to the health care delivery system. It will prepare the student with the necessary information for (basic) entry into the medical office environment. Topics of discussion will include ethics, law (including the new HIPAA regulatory standards), safety, infection control, patient record keeping, medical transcription, medical reimbursement and managed care.

AH 111
Environmental Stressors and Nutrition
1 Cr. Hr. – 1 Contact Hr. ❶❸
Prereq: None
Notes: This course is only open to nursing students. Prior to enrollment, all entry level requirements must be met and a letter of acceptance into the Nursing Program received.

This course is designed to provide the student with the theoretical foundation for the clinical application of nutrition principles in relation to stress adaptation throughout the nursing curriculum. The focus of the course is on the identification of the role of nutrients in maintaining man's dynamic equilibrium and the use of therapeutic diets for clients.

AH 251
Health Needs of the Young Child
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: None

The emphasis in this course is on identification, treatment, and prevention of common childhood illnesses, and the promotion of good health, safety and nutrition for the young child. Physical and dental health will be emphasized, along with signs and symptoms of illness within varying age groups. Treatment options and procedures for non-professionals will be discussed. Prevention will be focused on how to promote optimum health, how to prevent injuries, and nutritional requirements of young children. *(This course is also listed as ED 251.)*

American Sign Language

ASL 101
American Sign Language I
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: None

Study the various aspects of American Sign Language including finger spelling, interpreting, sign vocabulary, facial expression, body movement, and grammatical structure. This course is designed for students who are considering pursuing certification in interpreting.

ASL 102
American Sign Language II
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: ASL 101

Study the various aspects of American Sign Language including finger spelling, interpreting, sign vocabulary, facial expression, body movement, and grammatical structure. This course is designed for students who would like to pursue certification in interpreting.

ASL 103
Finger Spelling
2 Cr. Hrs. – 2 Contact Hrs. Ⓓ
Prereq: ASL 101

This course is designed for students who would like to pursue certification in interpreting using American Sign Language. Students will develop fluency in receptive and expressive finger spelling and numbering. They will also learn the correct usage of finger spelling and numbering.

Anthropology

ANTH 103 Cultural Diversity in Contemporary Society
3 Cr. Hrs. – 3 Contact Hrs. 🄵🅦🅢
Prereq: Meet Ready to Succeed Requirement
Cultural Diversity in Contemporary Society is an ethnographic analysis of various cultural groups and the regions where they originate. Such groups as African-American, Asian-American, Hispanic-American, and Native-American will be the focus. Emphasis will be placed on their cultural similarities and differences. Students will compare such topics as the cultures' socialization process, education, gender roles, marriage and family living, religion, health, death and dying, etc.

ANTH 105D Introduction to Physical Anthropology/ Archaeology
4 Cr. Hrs. – 4 Contact Hrs. 🄵🅦
Prereq: Meet Ready to Succeed Requirement
The course introduces the student to the fields of physical anthropology and archaeology through a study of the evolution of Homo sapiens. Emphasis will be placed upon modern evolutionary theory, the known fossil record, dating methods, primatology, prehistoric hominids and technology, population genetics, human variation, bio-cultural adaptation, and the origins of culture. Potential topics and areas of further exploration include forensic science, archaeological dig sites, anatomy, and prehistoric tools.

ANTH 110 Introduction to Cultural Anthropology
3 Cr. Hrs. – 3 Contact Hrs. 🄵
Prereq: Meet Ready to Succeed Requirement
Introduces the student to the field of cultural anthropology through a study of language, kinship, technology, political organization, social organization, religion and healing, among other topics. Emphasis will be placed upon an investigation of selected pre-modern groups representative of the world's major cultural regions.

COURSE DESCRIPTIONS

Art

ART 101
Beginning Art
3 Cr. Hrs. – 6 Contact Hrs. 🄕🅦
Prereq: None
Development of artistic skills through a broad range of studio experiences: drawing, printmaking, design, ceramics, sculpture and painting.

ART 104
Drawing I
3 Cr. Hrs. – 6 Contact Hrs. 🄕🅦
Prereq: Meet Ready to Succeed Requirement
Concentrated attention on drawing as a fine arts medium with study in various subject matter.

ART 105B
Two-Dimensional Form and Surface
3 Cr. Hrs. – 6 Contact Hrs. 🄕
Prereq: Meet Ready to Succeed Requirement
Two-Dimensional Form and Surface is a first-year art course that introduces students to basic design concepts with a focus on how to work with two-dimensional compositional arrangements, illusionary space, depth, and texture. It is a foundation-level requirement in art departments at any transfer school- students considering a major in painting/drawing, printmaking, photography, art education, digital arts, graphic design, or video game design should start with this course. Students learn how to develop strong, imaginative compositions based on the creative process: brainstorming, problem-solving, experimentation with traditional and nontraditional materials and techniques, and the effective use of the language of art (visual elements and design principles as they pertain to two-dimensional images and surfaces).

ART 107
Painting I
3 Cr. Hrs. – 6 Contact Hrs. 🄕🅦
Prereq: Meet Ready to Succeed Requirement
The study of oils or acrylics through diverse subject matter.

ART 108
Ceramics I
3 Cr. Hrs. – 6 Contact Hrs. 🄕🅦
Prereq: Meet Ready to Succeed Requirement
A study of the nature of clay through hand building, pottery processes, and glazing, stressing skill development and expressive experimentation.

ART 109
Sculpture I
3 Cr. Hrs. – 6 Contact Hrs. 🄓
Prereq: Meet Ready to Succeed Requirement
An introduction to the basic materials and techniques of sculpture.

ART 117
Three-Dimensional Form and Space
3 Cr. Hrs. – 6 Contact Hrs. 🅦
Prereq: Meet Ready to Succeed Requirement
Three-Dimensional Form and Space is a first-year art course that introduces students to basic design concepts with a focus on how to work with actual space, texture, and mass. It is typically a foundation-level requirement in art departments at any transfer school- students considering a major in sculpture, ceramics, glass, jewelry/metals, fiber arts, art education, theatrical set design, film production, architectural design, industrial design, product design, or video game design should start with this course. Students learn how to develop strong, imaginative compositions based on the creative process: brainstorming, problem-solving, experimentation with traditional and nontraditional materials and techniques, and the effective use of the language of art (visual elements and design principles as they pertain to three-dimensional objects and space).

ART 198
Art History I
3 Cr. Hrs. – 3 Contact Hrs. 🄕🅦🅢*
Prereq: Meet Ready to Succeed Requirement
*Note: *Summer sections are offered only in even numbered years*
Ancient art to renaissance. A historical survey of art from Ancient times to 1400 tracing the development of styles and the influences of major social, religious and political events.

ART 199
Art History II
3 Cr. Hrs.– 3 Contact Hrs. 🅕🅦🅢**
Prereq: Meet Ready to Succeed Requirement
*Note: **Summer sections are offered only in*
odd numbered years
Renaissance to modern. A historical survey tracing the development of art from the Renaissance to the present with an emphasis on painting.

ART 202
Contemporary Art History
3 Cr. Hrs. – 3 Contact Hrs. 🅦
Prereq: Meet Ready to Succeed Requirement
A comprehensive survey of art and art styles of the 20th & 21st centuries. A study of backgrounds and origins of certain current styles, the course draws from examples in painting, sculpture and architecture of America and the world. Changing ideas and trends are analyzed through lecture and discussion.

ART 204B
Drawing II - Transfer Portfolio Preparation
3 Cr. Hrs. – 6 Contact Hrs. 🅦
Prereq: ART 104
A continuation of ART 104, with an emphasis on preparing an art portfolio for the college transfer process, thematic development, concentration on the relationship of form to content and further experimentation in varied media and techniques.

ART 207
Painting II
3 Cr. Hrs. – 6 Contact Hrs. 🅕
Prereqs: ART 107 and
Meet Ready to Succeed Requirement
Concentration in a particular medium of the student's choice with a study of the nature of that medium through a creative approach to painting problems.

ART 208
Ceramics II
3 Cr. Hrs. – 6 Contact Hrs. 🅕🅦
Prereqs: ART 108 and
Meet Ready to Succeed Requirement
A study of traditional pottery processes through concentrated work on the potter's wheel, glazing, and firing experiences.

ART 209
Sculpture II
3 Cr. Hrs. – 6 Contact Hrs. 🅓
Prereqs: ART 109 and
Meet Ready to Succeed Requirement
A continuation of ART 109, with concentration in materials of individual interest.

ART 211
Art Education Workshop
3 Cr. Hrs. – 6 Contact Hrs. 🅓
Prereq: Meet Ready to Succeed Requirement
Experience through studio work with art materials and methods appropriate to grade school use.

ART 220
Figure Drawing
3 Cr. Hrs. – 6 Contact Hrs. 🅕
Prereqs: Meet Ready to Succeed Requirement, and
ART 104 or GRD 130
Students will learn how to draw the human figure from observation using a variety of techniques and a range of drawing media. Portions of the course will include computer applications where students scan and manipulate hand-drawn imagery on the computer and also use Wacom tablets to draw directly onto the computer screen.

ART 240
Professional Practices in Art
3 Cr. Hrs. – 3 Contact Hrs. 🅓
Prereq: Meet Ready to Succeed Requirement
This course will help students develop a professional visual identity by generating business logos, letterhead, a web presence, digital portfolio, and other materials related to the pursuit of an art- or design-based business. This course covers business related issues involved in any artistic or design based profession including professional artist, gallery owner, museum and gallery curator, art critic, historian, graphic designer, interior designer, game designer, illustrator, and photographer.

🅓 By Demand   🅕 Fall   🅦 Winter   🅢 Summer

ART 250
Gallery/Collection Practicum
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereqs: Meet Ready to Succeed Requirement and secure instructor permission
Notes: 12 or more credit hours of "C" work or better completed in art courses required.
Students will gain practical experience in art gallery operations and the proper handling and care of artworks. Emphasis is placed on standard concepts and methods of exhibiting art as practiced in the professional art world. Students assist art faculty in the basic operations of the MCC Overbrook Art Gallery and the MCC Art Collection as a "hands-on" learning laboratory. Priority is given to students enrolled in the Visual Art Entrepreneur Degree program.

ART 290CI
Art Cooperative Internship
1-4 Cr. Hrs. – 1-4 Contact Hrs. ❶
Prereq: Instructor permission
Notes: Priority is given to students enrolled in the Visual Art Entrepreneur degree and/or those who have taken one or more art history courses (ART 198, 199, or 202). Student must have a GPA of 2.5 or better and have completed a minimum of 12 credit hours in art.
The Cooperative Internship Program is a paid or non-paid fieldwork experience within the student's major area of study, typically at an art museum, community art center, or commercial gallery. Variable credit may be earned dependent upon the number of work hours available from the employing organization. A student may sign up for as many internships as desired; however, only 3 credit hours can be applied specifically toward the Visual Art Entrepreneur degree. This course is offered on a pass/no pass basis.

Astronomy

ASTR 101
General Astronomy
4 Cr. Hrs. – 4 Contact Hrs. ❶❖❸
Prereq: Meet Ready to Succeed Requirement
This course is a broad, generally non-mathematical, survey of the science of astronomy. Topics include: historical astronomy, the mechanics and clockwork of the night sky, astronomical instruments, the solar system, stellar evolution, the Milky Way, galaxies and theories about the origin and evolution of the universe. There will be opportunities for observation of astronomical objects with observatory telescopes.

ASTR 105A
Cosmology
4 Cr. Hrs. – 4 Contact Hrs. ❖
Prereq: MATH 100A (Formerly MATH 050)
While Astronomy is concerned with the contents of the Universe, Cosmology is the science of the origin, current state and ultimate fate of the universe. In this course, the foundations of Modern Cosmology are presented from a historical perspective, covering the physical fundamentals, the impact of Einstein's Theories of relativity on modern cosmologies and finally from the perspective of the most recent astronomical discoveries.

Automotive Technology

Students in these courses must have approved safety glasses.

AT 101
Intro to Automotive Technology
2 Cr. Hrs. – 4 Contact Hrs. 🅕🅦🅢
Prereq: None
This class prepares students for situations that automotive technicians will encounter on the job. Students completing this course will have a strong foundation in problem solving and dealing with issues in all eight areas of Automotive Service Excellence (ASE). They will perform inspections of cars in brakes, steering and suspension, electrical, transmission, and engine performance. Students diagnose and determine basic preventive maintenance that needs to be addressed by vehicle owners.

AT 114
Automotive Power Plants (Engine Rebuilding)
3 Cr. Hrs. – 6 Contact Hrs. 🅕🅦
Prereq: None
This course includes the proper procedures and machine operations necessary to service completely, overhaul, repair or rebuild the automotive engine. Theory of engine operation and construction are also dealt with.

AT 120
Intro to Electrical Systems I
3 Cr. Hrs. – 6 Contact Hrs. 🅕
Coreq: AT 121
A study of the fundamentals of electricity, ignition (Electronic Computer Control including DIS), cranking and charging systems. Basic electrical test equipment is also covered.

AT 121
Electrical Systems II
3 Cr. Hrs. – 6 Contact Hrs. 🅕🅦
Coreq: AT 120
Covers testing and servicing of ignition, cranking and charging systems. Includes the use of modern electronic test equipment and industry diagnostic methods.

AT 122
Fuel Systems and Emission Controls
3 Cr. Hrs. – 6 Contact Hrs. 🅦
Prereqs: AT 120 and AT 121
Coreq: AT 123
This course will cover a study of fuel system (including TBI and PFI) and emission controls (including 4 gas analyzer). Diagnosis and service of system components is also covered. The operation of 2-cycle and 4-cycle engine theory is introduced.

AT 123
Engine Tune Up (Driveability)
3 Cr. Hrs. – 6 Contact Hrs. 🅦
Prereqs: AT 120 and AT 121
Coreq: AT 122
A study of the engine accessories included under electrical, ignition and fuel systems. Covers the diagnosis, servicing, and repair of these systems and component parts as related to the entire engine operation in the vehicle.

AT 140
Intro to Hybrids and Alternative Fuels
3 Cr. Hrs. – 6 Contact Hrs. 🅕
Prereq: None
This class will provide an overview of hybrid and alternative fueled vehicles. Practical manufacturing theory and production methods of both biodiesel and ethanol will be explored. Students will engage in small scale production of both biodiesel and ethanol. Exposure to various alternative powered vehicles will occur as available.

AT 150
Automotive Brakes
3 Cr. Hrs. – 6 Contact Hrs. 🅕
Prereq: None
This course covers theory, repair, and adjustment of hydraulic and Antilock Braking Systems (ABS) brake systems and related machining equipment. Students will learn in this class through hands on experience how to diagnose problems with ABS and Electronic Stability Control in addition to rebuild and bleed advanced braking systems. Students have the opportunity to become certified via the State of Michigan test in the area of brakes.

🅓 By Demand   🅕 Fall   🅦 Winter   🅢 Summer

AT 160
Automotive Air Conditioning
3 Cr. Hrs. – 6 Contact Hrs. ❶
Prereq: None

This course covers theory, repair, and service of the automotive air conditioning system. Air conditioning for both R12 and R134A diagnosis testing and service is covered. Students have the opportunity to become certified via the State of Michigan test in the area of air conditioning.

AT 210
Powertrains (Manual Drivetrains)
3 Cr. Hrs. – 6 Contact Hrs. ❶
Prereq: None

This course gives the student experience in theory, diagnosis and repair of automotive drive trains. It includes the study of clutches, drive shafts, universal joints, differentials, axles, and manual FWD & RWD transmissions.

AT 211
Automatic Transmissions
3 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereq: None

A study of the theory of operations, hydraulic circuits, gearing adjustments, and repair of automatic transmissions, both FWD & RWD (including electronic controls).

AT 212
Alignment and Suspension
3 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereq: None

This course covers the theory, repair, and adjustment of steering and suspension systems as well as the operation of modern four-wheel alignment and wheel balancing equipment.

AT 213
Brakes and Air Conditioning
3 Cr. Hrs. – 6 Contact Hrs. Ⓓ
Prereq: None

This course covers the theory, repair and adjustment of hydraulic and ABS brake systems and related machining equipment. Air conditioning diagnosis, testing, and service is covered for both R12 and R134A.

AT 214
Service Management
3 Cr. Hrs. – 3 Contact Hrs. ❺
Prereq: None
Note: Must be second-year automotive student

A course covering the responsibilities of a service manager in large and small service garages. Lectures, tours, and outside speakers emphasize industrial practice in customer, mechanic, and management relationships.

AT 223
Advanced Engine Performance
3 Cr. Hrs. – 6 Contact Hrs. ❺
Prereq: None

This course provides a variety of learning and assessment activities students can use to analyze engine mechanical integrity, induction systems, and exhaust systems. Students will have hands on experience in the repair process of these systems. Theory and operation of electronic engine controls includes: alternative fuels; electronic fuel injection, electronic ignitions, on-board diagnostics and current emission systems. Laboratory practice includes proper set up and use of digital storage oscilloscopes, scan tools, engine analyzer and five-gas emission analyzers.

Biology

BIOL 101BEL
International Cultural Studies and Biological Field Studies in Belize
2 Cr. Hrs. – 2 Contact Hrs. ❺
Prereq: instructor permission
Notes: The student must accept the terms of participation.

This is an interdisciplinary travel-study course providing students an introduction to international culture and biology through cultural and biological field studies. This hybrid course will contain online and on-campus components and includes a seven-day visit to Belize. Emphasis will be placed on Mayan culture and the tropical rain forests of Belize. The student will study Mayan culture and history as well as Mayan past and current interaction with the rain forest ecosystem. This course will cover classification of organisms, basic ecological principles, experimental design, field sampling techniques and scientific communication. Specific biology topics emphasized will vary each year. This course will also involve working with local Belizeans, offering MCC students the opportunity to meet people from diverse backgrounds. It is offered in conjunction with the Sibun Educational and Adventure Lodge in Belize. Students will spend a great portion of each day in the field and should be in good physical condition. Beyond tuition and texts, additional costs include the airfare to Belize, package price for room and board, and spending money while in Belize. *(This course is also listed as ICS 101BEL.)*

BIOL 103L&L
Introductory Biology
4 Cr. Hrs. – 7 Contact Hrs. ❺❻❼
Prereq: Meet Ready to Succeed Requirement
This introductory laboratory course focuses on biological concepts as they relate to the human organism as part of the living world. Basic principles of organization of living matter, including cell structure and function, metabolism, human systems, reproduction, development, heredity, and evolution are examined. This course serves well as a preparatory course for BIOL 105L&L and BIOL 106L&L.

BIOL 104L&L
Introductory Biology II
4 Cr. Hrs. – 7 Contact Hrs. ❺❻
Prereq: Meet Ready to Succeed Requirement
*Note: BIOL 103L&L is **not** a prerequisite but does provide an excellent foundation for all biology courses.*

This introductory laboratory course will provide exploration into the diversity, classification, ecology, and evolution of the natural world and the importance of photosynthesis and other cellular processes. Different types of organisms, such as bacteria, protists, fungi, plants, and animals will be studied to compare structure and function. Several field trips may be taken but hours will most likely not extend beyond weekly contact hours for laboratory. Students may also be required to attend one meeting from a list of designated environmental groups from the Muskegon area.

BIOL 105L&L
Anatomy and Physiology I
4 Cr. Hrs. – 6 Contact Hrs. ❺❻❼
Prereq: Meet Ready to Succeed Requirement
Note: To succeed in this course, it is highly recommended that a student first either successfully complete BIOL 103L&L and AH 101, OR successfully complete a high school advanced placement biology course along with its placement test.

This laboratory course is designed to meet the needs of students in nursing and other health-related fields. The course reviews the normal structure and function of organs and organ systems of the body. Cell biology, histology and introductory anatomy and physiology of the integumentary, skeletal, muscular, nervous, digestive, cardiovascular, respiratory, urinary, lymphatic, endocrine, and reproductive systems are studied.

BIOL 106L&L
Anatomy and Physiology II
4 Cr. Hrs. – 6 Contact Hrs. **Ⓦ Ⓢ**
Prereq: BIOL 105L&L with a grade of "C" or better
Note: Before taking this course, it is highly
*   recommended the student first complete a*
*   chemistry course.*
This laboratory course is a continuation of BIOL 105L&L for students in nursing and other health-related fields that require an intensive study of the anatomy and physiology of the human organism. Emphasis is on the skeletal, muscular, nervous, digestive, cardiovascular, respiratory, urinary, endocrine and reproductive systems.

BIOL 109L&L
Food Technology
4 Cr. Hrs. – 4 Contact Hrs. **Ⓢ**
Prereq: Meet Ready to Succeed Requirement
This laboratory course is a study of chemical, biological, and physical principles as they pertain to food preparation, processing and production. Students apply and study the concepts in a food preparation laboratory.

BIOL 110L&L
Environmental Science
4 Cr. Hrs. – 6 Contact Hrs. **Ⓕ Ⓢ**
Prereq: Meet Ready to Succeed Requirement
This introductory laboratory course is a study of local natural communities and human impacts on the environment. Through service learning, students will apply the scientific process by collecting, analyzing, and then presenting local ecosystem data to interested community members. Ecosystem monitoring at local sites may possibly extend beyond scheduled lab times and field trips may include a boat trip, a brownfield tour, and a renewable energy building tour. A $25 fee includes boat trip cost.

BIOL 115
Introduction to Anatomy and Physiology
4 Cr. Hrs. – 4 Contact Hrs. **Ⓦ**
Prereq: Meet Ready to Succeed Requirement
This course is a structural and functional approach to the human body through the study of cell, tissues, and body systems. Emphasis will be placed on cell biology, tissues, and the structure and function of the integumentary, skeletal, muscular, nervous, circulatory, lymphatic, respiratory, digestive, urinary, endocrine, and reproductive systems. While there is no lab component to this course, students will utilize high quality images to study the spatial relationships between anatomical structures. This course is intended to fulfill the Anatomy & Physiology requirement for students in the Medical Records and Billing certificate and Administrative Assistant - Medical degree programs only, and will not count towards any Allied Health degree or certificate requiring Anatomy & Physiology.

BIOL 120L&L
Flowering Plants of Southwestern Michigan
1 Cr. Hr. – 1 Contact Hr. **Ⓢ**
Prereq: Meet Ready to Succeed Requirement
This laboratory course is a 3 ½ - 4 week study of the identification, ecology and distribution of the flowering plants of southwestern Michigan and includes field trips to a variety of habitats. This is a one-credit /one-contact hour elective course with total contact hours of at least 15 hours during the 3½ to 4 week course. Drive time to various locations may be in addition to the 15 hours. Typically offered during Summer Session.

BIOL 120F L&L
Autumn Flowering Plants of
Southwestern Michigan
1 Cr. Hr. – 1 Contact Hr. **Ⓕ**
Prereq: Meet Ready to Succeed Requirement
This laboratory course is a study of the identification, ecology and distribution of the flowering plants of southwestern Michigan during the autumn season and includes field trips to a variety of habitats. Students will receive at least 15 contact hours of instruction during this 3½ to 4 week course. Drive time to various locations may be in addition to the 15 hours.

BIOL 122L&L
Allied Health Microbiology
2 Cr. Hrs. – 2 Contact Hrs. ❶
Prereq: Meet Ready to Succeed Requirement
This is an introductory laboratory course primarily designed for students in allied health programs. Emphasis is on general characteristics of micro-organisms, the means of disease transmission, immunity to disease, and physical and chemical agents that control micro-organism growth. This course is also recommended for students who plan to take BIOL 207LEC and BIOL 207A.

BIOL 200
Introductory Evolution
1 Cr. Hr. – 1 Contact Hr. ⓦ
Prereqs: Meet Ready to Succeed Requirement and any 100-level or higher Biology course
This course is a preparatory study of the historical development, the evidence, and the mechanisms of the biological evolution theory. Scientific hypotheses on the origin of organic molecules will also be investigated along with the examples of biological evolution in today's community. This course provides a learning experience on a central unifying concept of biology for non-majors and majors interested in exploring the diversity and similarities among living organisms.

BIOL 200L
Introductory Evolution Laboratory
1 Cr. Hr. – 1 Contact Hr. ⓦ
Prereq: Meet Ready to Succeed Requirement
Coreq: BIOL 200
In this optional laboratory course for BIOL 200, students will continue to explore biological evolution and its effects on biodiversity. A day field trip, perhaps to the Field Museum in Chicago, is required for this course and may extend contact time beyond the listed two hours per week. BIOL 200L students must also be registered in BIOL 200, but students taking BIOL 200 are not required to take BIOL 200L. A non-refundable $50 fee will be included in the class fee, which will cover the laboratory supplement, materials, software usage, and a field trip.

BIOL 207LEC
Microbiology Lecture
3 Cr. Hrs. – 3 Contact Hrs. ❶ⓦ
Prereq: BIOL 105L&L; Minimum Grade of "C"
Coreq: BIOL 207A
This is a general microbiology course designed primarily for students in allied health programs. Emphasis is on the general characteristics of micro-organisms and the diseases they cause. Included are ways to control micro-organisms with antimicrobials, the immune system, and physical and chemical agents. Emerging diseases and bioterrorism are also covered.

BIOL 207A
Microbiology Laboratory
1 Cr. Hr. – 3 Contact Hrs. ❶ⓦ
Prereq: BIOL 105C & BIOL 105LEC or BIOL 105L&L; Minimum Grade of "C"
Coreq: BIOL 207LEC
This laboratory course is designed for students in allied health programs. It includes preparing stained smears, culturing micro-organisms, conducting immunology experiments, performing tests to identify bacteria and fungi, and studying microbial growth control methods.

BIOL 290CI
Biology Internship
Contact Life Science chairperson ⓓ

BIOL 299
Independent Study
Variable Credit ⓓ
Prereq: Meet Ready to Succeed Requirement
This course is open to students who have successfully completed four hours of Biology, or with permission of the instructor. The independent study will include field or laboratory study and library research. The instructor will aid the student in the selection and development of the study in keeping with the philosophy, techniques and methods or research. Open enrollment.

Business

(Accounting, Management, Marketing, Business Technology)

ACC 100
Fundamentals of Accounting
(formerly BUS 100)
3 Cr. Hrs. – 3 Contact Hrs. **❶ⓌⓈ**
Prereq: None
This course is an introductory basic bookkeeping and accounting class that emphasizes the accounting cycle. Day-to-day accounting activities are covered, through the preparation of the financial statements and the process of closing the financial records. Upon successful completion of this class, the student will be well prepared to take ACC 201 Principles of Accounting I. (Students having difficulty with ACC 201 may transfer to this class through the end of the add/drop period with no loss of tuition.)

ACC 201
Principles of Accounting I
(formerly BUS 101)
4 Cr. Hrs. – 4 Contact Hrs. **❶ⓌⓈ**
Prereq: Meet Ready to Succeed Requirement
This course introduces principles of accounting including the accounting cycle with emphasis upon theory and financial statements. Other topics covered include cash, receivables, temporary investments, inventories, plant assets, intangible assets, and payroll.

ACC 202
Principles of Accounting II
(formerly BUS 102)
4 Cr. Hrs. – 4 Contact Hrs. **❶Ⓦ**
Prereq: ACC 201; Minimum Grade of "C"
A continuation of ACC 201 covering partnerships, corporations, and manufacturing accounting with emphasis on financial and cost accounting concepts.

ACC 203
Payroll Accounting
(formerly BUS 103)
3 Cr. Hrs. – 3 Contact Hrs. **Ⓓ**
Prereq: ACC 201
This course covers in detail the accounting and filing requirements for federal payroll taxes. ACC 203 is offered only as an independent study course. Contact the Business Department to arrange an independent study.

ACC 206
QuickBooks Computerized Accounting
(formerly BUS 106)
3 Cr. Hrs. – 3 Contact Hrs. **ⓌⓈ**
Prereq: ACC 100 or BUS 100 or BUS 101 or
instructor permission
In this hands-on course, you will learn QuickBooks, the accounting software used by most small- to medium-size businesses and organizations. This course is for everyone who will be entering transactions or using related data for decision making. You will learn to organize QuickBooks' features to suit your company – as well as how to generate customized financial reports and statements. Entering cash disbursements, cash receipts, accounts receivable, accounts payable, billing, purchasing, inventory, payroll and general journal are all covered. This course counts as a business elective.

BUS 104
Accounting for Business Owners
3 Cr. Hrs. – 3 Contact Hrs. **❶Ⓦ**
Prereq: BUS 131 or instructor permission
This hands-on course focuses on the basic accounting skills and financial knowledge students need to start and operate a business. Students will learn accounting fundamentals and how to use QuickBooks (industry leading accounting software). This knowledge will be applied to create the standard financial statements necessary in a business plan and to support start-up loan applications.

BUS 105
Business Statistics
3 Cr. Hrs. – 3 Contact Hrs. **❶ⓌⓈ**
Prereq: MATH 100A (Formerly MATH 050);
Minimum Grade of "C"
Notes: A graphing calculator is required; see www.
muskegoncc.edu/calculatorhelp for details.
Probability and statistics for business, social sciences, mathematics, and biological science majors. Topics include descriptive statistics, probability, probability distributions, hypothesis testing, analysis of variance, regression, and non-parametric statistics. Graphing calculators will be utilized. *(This course is also listed as MATH 115.)*

BUS 114
Personal Finance
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: None
This course is oriented to the practical needs of the citizen-wage-earning-consumer. This course will consider the structure of the American economic system, the impact of government on this system, and prudent economic management of the individual's finances, such as insurance, budgeting and the use of credit. This course is designed for the student's personal needs in today's society.

BUS 121
Introduction to Business
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement
This is a general course in business principles, problems, and practices, which provides an understanding of the operation of the American Business System and its place in the economy. Information concerning more effective use of business services in personal affairs is included as well as preparation for future business courses.

BUS 122
Principles of Management
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement
A study of the managerial functions of planning, organizing, staffing, directing, and controlling with analysis of the on-going process; knowledge which a manager must have in order to achieve coordination for the attainment of company objectives.

BUS 123
Business Law I
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement
This course is a study of the Uniform Commercial Code Text and of the general laws applicable to business covering law and society contracts, agency and employment, commercial paper, personal property, bailments and sales.

BUS 124
Business Law II
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: Meet Ready to Succeed Requirement
Study of the Uniform Commercial Code Text concerning corporations, property sales, negotiable instruments, insurance and bankruptcy.

BUS 125
Supervision
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: None
A review of basic leadership skills needed to effectively supervise people with emphasis on communications, human relations, and the supervisor's role in employee recruitment, selection, training and evaluations. Role-playing and other participation methods will be used.

BUS 126
Business Math
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ❺
Prereq: None
This course covers a review of basic computational skills, percentages, inventories, depreciation, and other financial applications. The course is designed to increase competence in fundamental mathematical skills which apply to business.

BUS 127
Human Relations
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ❺
Prereq: None
A study of the problems of working with people in a business environment. The focus is on dealing positively with employee morale, motivation, leadership, group behavior, personality, productivity, hiring, and training.

BUS 131
Intro to Entrepreneurship
1 Cr. Hr. – 1 Contact Hr. ❶Ⓦ
Prereq: None
This is the first course in the Entrepreneur degree programs' core set of classes. It is open to all students interested in learning about the advantages and challenges of starting a business. Students research the definition of entrepreneur, explore how to identify business ideas, and examine the preparation, time commitments, personal skills, and resources needed for a successful business startup. They will develop and evaluate their own business ideas. Successful entrepreneurs from the community will guest lecture to add their expertise and insights.

❶ By Demand   ❶ Fall   Ⓦ Winter   ❺ Summer

BUS 161A
Effective Selling
3 Cr. Hrs. – 3 Contact Hrs. 🕒🕐
Prereq: None
This course includes an analysis of the sales transaction with classroom sales demonstrations. Attention is given to topics such as: consumer characteristics, buying motives, product performance, sales aids, overcoming customer objections, and closing the sale.

BUS 162
Principles of Retailing
3 Cr. Hrs. –3 Contact Hrs. 🕐
Prereq: None
A survey of past and present retailing practices and procedures. Retail management methods are studied, along with retail store locations and layout, equipment, display advertising, personnel policies, maintenance, inventory and cost control.

BUS 166
Quality Customer Service
3 Cr. Hrs. – 3 Contact Hrs. 🕒
Prereq: None
A course in understanding what customer service is and how to implement it into today's organization.

BUS 167
Professionalism in Your Career
1 Cr. Hr. – 1 Contact Hr. 🕒
Prereqs: BCOM 101 or ENG 101
This course is designed to professionally prepare students for their careers. The course is geared to prepare students to interview, develop a professional attitude, etiquette skills, assess and develop conflict management and collaboration practices, and formulate a plan for lifelong learning so they may maintain their competitive advantage in the workplace.

BUS 179
Keyboarding
1 Cr. Hr. – 1 Contact Hr. 🕒🕐🕑
Prereq: None
This course is designed for the student with no previous formal typing instruction. A student with a typing speed of 20-25 wpm should enroll in BUS 181C. This course develops basic alpha and numeric touch keyboarding skills for persons who will be using computer terminals for processing information.

BUS180D
Word Processing Part I
3 Cr. Hrs. – 3 Contact Hrs. 🕒🕐🕑
Prereqs: CIS 100 or CIS 110 or CIS 120A
Note: Students proficient in Windows may seek instructor permission to waive the prerequisites. This course is designed for the person who types 25-35 words per minute and has basic computer skills.
Introductory and intermediate word processing features and concepts are taught, as well as document formatting. Through extensive hands-on training, students will be given the opportunity to become proficient in Microsoft Word. A grade of "C" or better is required to advance.

BUS 181C
Office Procedures I Document Formatting
3 Cr. Hrs. – 3 Contact Hrs. 🕒🕐🕑
Prereq: Meet Ready to Succeed Requirement
Recommended Coreq: BUS 180D
This course is designed for the person who has had no formal training in formatting business documents, has minimal word processing skills, and types 25-35 words per minute. The purpose of this course is to develop correct techniques and basic keyboarding skills to increase speed and accuracy. The major portion of the course covers correct formatting procedures for business correspondence, reports, and tables using Microsoft Word. Recommended for all persons regardless of major. A grade of "C" or better is required to advance.

BUS 182C
Office Procedures II Document Production
3 Cr. Hrs. – 3 Contact Hrs. 🕒🕐🕑
Prereqs: BUS 180D and BUS 181C;
*   Minimum Grade of "C" in both*
This course has two major objectives: to provide the student with skill-building opportunities through the use of specially designed software and to allow the student to integrate word processing and document formatting skills while improving production speed and accuracy. A grade of "C" or better is required to advance.

BUS 185B
Electronic Calculator
2 Cr. Hrs. – 2 Contact Hrs. 🅕🅦🅢

Prereq: Meet Ready to Succeed Requirement

This is an introductory course in the operation of the electronic printing calculator. The student will learn the basic functions of the calculator with applications in practical business problems.

BUS 187A
Electronic Records Management
2 Cr. Hrs. – 2 Contact Hrs. 🅕🅦🅢

Prereq: BUS 179 or BUS 181B or BUS 181C

This course presents the principles of alphabetic, numeric, geographic, and subject systems of records management, as well as maintenance of records. Database applications, using Access, will be utilized to complete the microcomputer applications simulating records management in a typical office.

BUS 188A1
Voice Transcription, Administrative
3 Cr. Hrs. – 3 Contact Hrs. 🅕🅦🅢

Prereqs: BUS 180D and BUS 182C

Marketable skills are developed in the use of office transcribing machines and transcription techniques using word processing. Language skills (grammar and punctuation usage) are emphasized as necessary prerequisite skills for transcribing proficiency. The practice correspondence in the course provides realistic documents from career sites of some of the fastest-growing employment areas.

BUS 188B
Voice Transcription, Legal
3 Cr. Hrs. – 3 Contact Hrs. 🅓

Prereqs: BUS 180D and BUS 182C

This course helps the student to develop a marketable skill in the use of an office transcribing machine and transcription techniques using word processing, with particular emphasis on legal terminology and transcription of legal documents.

BUS 188D
Voice Transcription, Medical Part I
2 Cr. Hrs. – 2 Contact Hrs. 🅓

Prereqs: BUS 180D, AH 101 and
        BUS 182B or BUS 182C

This course enables the student to develop a marketable skill in the use of specialized transcription software and hardware to produce medical reports using word processing software. Emphasis will be on medical terminology and editing of transcription for the following specialties: dermatology, ophthalmology, otorhinolaryngology, pulmonology, and cardiology. Transcription includes office notes, operative reports, consultation letters, letters of referral, chart summaries, discharge summaries, radiology reports, and history and physical reports.

BUS 188E
Voice Transcription, Medical Part II
2 Cr. Hrs. – 2 Contact Hrs. 🅓

Prereq: BUS 188D; Minimum Grade of "C-"

This course enables the student to develop a marketable skill in the use of specialized transcription software and hardware to produce medical reports using word processing software. Emphasis will be on medical terminology and editing of transcription for the following specialties: gastroenterology, obstetrics and gynecology, urology and nephrology, orthopedics, neurology and psychiatry, hematology-oncology, and immunology. Transcription includes operative reports, consultation letters, letters of referral, chart summaries, discharge summaries, radiology reports, history and physical reports, pathology reports, labor and delivery reports, emergency department reports, and autopsy reports.

BUS 188F
Introduction to Medical Transcription
3 Cr. Hrs. - 3 Contact Hrs. 🅕🅦🅢

Prereqs: AH 101, BUS 180D, and BUS 182C

This BT Lab course enables the student to develop skill in the use of transcribing hardware and software along with transcription techniques. Particular emphasis will be on medical terminology including the transcription of office notes and the following reports: operative, pathology, radiology, labor and delivery, history and physical, emergency department, discharge summary, and autopsy. Transcription will be completed for various medical specialties.

BUS 194
Business English Essentials
1 Cr. Hr. – 1 Contact Hr. **ⒻⓌⓈ**
Prereq: BUS 179 or BUS 181C
Notes: Basic keyboarding competency and basic
knowledge of a word processing software
package are recommended
This course is designed for the student with a desire to improve grammar and punctuation skills to aid in composing business correspondence and business reports. This course will also develop general proofreading skills needed for any printed copy.

BUS 195
Medical Records Management
3 Cr. Hrs. – 3 Contact Hrs. **ⒻⓌⓈ**
Prereq: Meet Ready to Succeed Requirement
This course uses the Medisoft patient accounting software package that is in use in thousands of medical offices across the country. The student will learn how to use the basic features of the software including: inputting patient information, processing patient transactions, producing various reports, printing statements, and scheduling appointments. The course also covers the theory and procedures for the medical billing process.

BUS 196
Electronic Health Records
3 Cr. Hrs. - 3 Contact Hrs. **ⒻⓌⓈ**
Prereq: CIS 120A or CIS 110 or CIS 100, or
instructor permission
This course introduces students to the electronic health record. Topics include background and history of electronic health records, terminology, gathering patient information, scheduling appointments, recording of examination information, processing lab tests, selecting codes, and more. Students will have hands-on experience with electronic health records software including medical documentation skills that are transferable. Students will gain conceptual theory and hands-on practice that they need to work in today's medical office.

BUS 200
International Business
3 Cr. Hrs. – 3 Contact Hrs. **ⒻⓌⓈ**
Prereq: Meet Ready to Succeed Requirement
This is an introductory course designed to help students become familiar with, understand, and appreciate people from different cultures to promote a more effective basis for working together in the business world. Emphasis and application are placed upon business etiquette and business practice as they differ in various cultures. The course will explore reasons companies choose to enter the international market. Students will learn how companies use various strategic marketing approaches and government resources to expand their operations into the international market.

BUS 220
E-Business
3 Cr. Hrs. – 3 Contact Hrs. **Ⓕ**
Prereqs: Meet Ready to Succeed Requirement and
CIS 110 or CIS 120A
This course provides an overview of the aspects and opportunities of doing business on the Internet, by examining how e-business strategies differ from those of a land only based business. Topics include the history of business on the Internet, viability of a business using the Internet, what makes an effective e-business web site, opportunities for e-business in international markets, cultural and technical considerations of international e-business, mobile e-business, technology, marketing, payments, safety, security, customer service, regulation, ethics, intellectual property, and other current issues facing businesses using the Internet. As part of this class students will create a functional e-commerce store front. *(This course is also listed as CIS 220.)*

BUS 222
Fundamentals of Organizational Behavior
3 Cr. Hrs. – 3 Contact Hrs. **Ⓦ**
Prereq: BUS 122
Organizational Behavior will revolve around the seven major competencies essential to managing an organization; managing self, managing communication, managing diversity, managing ethics, managing across cultures, managing teams, and managing change.

BUS 230
Entrepreneurial Planning
3 Cr. Hrs. – 3 Contact Hrs. 🄵Ⓦ
Prereq: BUS 131 or instructor permission
This is the first of a two-course sequence that will help students prepare a business plan based on their idea. Students will begin this process by researching and completing two critical elements of their business plan: marketing and human resources. They will identify customers and create marketing/sales strategies with tactics to reach potential customers. They will also determine the human resource requirements necessary to begin operations. Students will work within small groups to explore different perspectives, identify problems and possible solutions.

BUS 240
Entrepreneurship Capstone
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereqs: BUS 230 and BUS 104
This is the final class of the entrepreneur core requirements. Students will research and create a written operations plan for their new business. They will integrate their marketing, human resources, and financial plans from prior entrepreneurship program courses with their operational plan, into one comprehensive business plan. Students will practice communicating about their business in formal and social media environments. Finalized business plans will be presented to faculty, financial experts, and/or entrepreneurs. Students may compete in local or national business plan competitions.

BUS 260
Principles of Marketing
3 Cr. Hrs. – 3 Contact Hrs. 🄵Ⓦ
Prereq: Meet Ready to Succeed Requirement
Recommended Coreq: BUS 121 or sophomore standing
The study of the task and importance of marketing, the movement of goods from producer to consumer, channels of distribution, marketing functions and institutions, the ultimate consumer, the industrial consumer, and the retailing and wholesaling systems.

BUS 262
Social Media
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereqs: CIS 110 or CIS 120A, and ENG 101 or BCOM 101 or equivalent
Students explore emerging social media technologies and processes and study their application in a variety of contemporary settings. Students will learn how to use and author content for such online tools such as blogs, microblogs, collaboration mechanisms, podcasts, RSS-feeds, video, bookmarking, and other emerging web technologies. The course will also study how to use these technologies to monitor conversations on the Internet, engage online communities, identify influencers, and establish thought leadership. *(This course is also listed as COM 262.)*

BUS 263
Advertising Dynamics
3 Cr. Hrs. – 3 Contact Hrs. 🄵
Prereq: None
This course presents methods and techniques in modern advertising strategy, providing information to prepare an entire advertising campaign including selection of media, copywriting and advertising decision-making.

BUS 266
Quality Customer Service II
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: BUS 166
Measurement, Plan, and Action. This course will take the basic concepts of Customer Service taught in BUS 166 and allow students to measure the outcome that it has on customers. With the results of these surveys, individuals will then be able to formulate a customer service plan and then put this plan into action.

BUS 273A
Human Resource Management
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: None
Overview of personnel relationships in a business institution covering areas of recruiting, selecting, training, evaluating, motivating, and rewarding of employees and the process involved in the accomplishments of such objectives.

BUS 274
International Studies in Human Resources
1 Cr. Hr. – 1 Contact Hr. ❿
Prereq: Meet Ready to Succeed Requirement
This course is taught via the Internet. Approximately one-half of the students will be from MCC and one-half will be from a college located in another country. Through researching and responding to questions related to case problems, students will become familiar with global issues that impact the field of Human Resources, and how various HR practices differ from country to country.

BUS 280C
Word Processing Part II
3 Cr. Hrs. – 3 Contact Hrs. ❺❿❸
Prereqs: BUS 180D and BUS 182C;
*   Minimum Grade of "C" in both*
This course builds on the skills and concepts learned in the introductory course. Advanced word processing features are covered. BUS 280C is a hands-on course and provides students the opportunity to be well prepared for Microsoft Office Word Certification.

BUS 281D
Office Procedures III
Advanced Applications
3 Cr. Hrs. – 3 Contact Hrs. ❺❿❸
Prereqs: BUS 180D, CIS 101EW, CIS 119PP, and
*   CIS 153AW*
This course gives the students the opportunity to integrate several software applications by creating advanced office projects. The focus is on increased productivity, speed, and accuracy. Communication skills, decision-making skills, and working without supervision are reinforced in these realistic applications.

BUS 290CI
Cooperative Internship Program
1–4 Cr. Hrs. ❿
Prereq: BCOM 101 and instructor permission
The Cooperative Internship Program is a paid or non-paid fieldwork experience in business and/or industry within the student's major area of study. Variable credit may be earned dependent upon the number of work hours available from the employing organization. A student may sign up for as many internships as desired; however, the number of credit hours which can be applied toward a degree/certificate depends on the student's course of study and departmental requirements. The maximum number of hours of cooperative internship is 12 credit hours depending upon the program. This course is offered on a pass/no pass basis.

Business and Technical Communications

BCOM 101
Business and Technical Communications
3 Cr. Hrs. – 4 Contact Hrs. **F W S**
Prereqs: Meet Ready to Succeed Requirement and ENG 091

This course is designed for students who choose to specialize in a business or technological field. All phases of the communication process will be covered with major emphasis placed on effective written communication for business and industry, including intercultural communication strategies. Revision and proofreading skills necessary for appropriate business and technical correspondence are emphasized, and students will develop abilities to organize thoughts, which will allow them to write clearly, accurately, and quickly. Business and technical writing styles, formats, and techniques will be covered. Lab hours outside of the scheduled class time will be necessary. A grade of "C" or better required to advance.

BCOM 102
Advanced Business and Technical Communications
3 Cr. Hrs. – 4 Contact Hrs. **F W S**
Prereq: BCOM 101; Minimum Grade of "C"

This course is designed for business and technical students and for people already in the work force who want to become proficient in business and technical communications. Major emphasis is placed on writing effective reports, manuals, instructions, and directions for specific audiences using appropriate style and format. While development of effective writing is the purpose of any English class, no other course concentrates on specific business and technical reporting styles, formats, and techniques. Revision and proofreading skills necessary for appropriate business and technical correspondence are stressed. Lab hours outside of scheduled class time will be necessary.

Business Technology

(See Business)

Chemistry

Students who have not successfully completed Chemistry 100 must take a Chemistry Placement Test before enrolling in Chemistry 101. This test can be taken in the Testing Center. Test results will help place a student correctly into the MCC chemistry sequence.

CHEM 100LEC
Fundamentals of Chemistry
4 Cr. Hrs. – 4 Contact Hrs. **F W S**
Prereq: MATH 100A (Formerly MATH 050); Minimum Grade of "C"
Coreq: CHEM 100A

A course emphasizing fundamentals, symbols, formulae, nomenclature, oxidation states, atomic structure, the periodic law, writing and balancing equations, stoichiometry, solutions, and gas law problems.

CHEM 100A
Fundamentals of Chemistry Laboratory
1 Cr. Hr. – 3 Contact Hrs. **F W S**
Prereq: MATH 100A (Formerly MATH 050)
Coreq: CHEM 100LEC
Laboratory theory and practice of topics included in CHEM 100LEC.

CHEM 101LEC
General and Inorganic Chemistry
4 Cr. Hrs. – 4 Contact Hrs. **F S**
Prereqs: CHEM 100LEC with a minimum grade of "C", and CHEM 100A, and must have earned a "C" or better in MATH 109 or MATH 111
Coreq: CHEM 101A

Course topics are: the physical states of matter, structure of matter, bonding, quantitative relationships involving mass and energy, solutions, ideal and real gases, gas mixtures, oxidation-reduction, and elementary thermodynamics.

CHEM 101A
General and Inorganic Laboratory
1 Cr. Hr. – 3 Contact Hrs. ❶❺
Prereqs: CHEM 100LEC, CHEM 100A and
MATH 109 or MATH 111
Coreq: CHEM 101LEC.
Laboratory theory and practice of topics included in CHEM 101LEC.

CHEM 102LEC
General and Inorganic Chemistry
4 Cr. Hrs. – 4 Contact Hrs. Ⓦ❺
Prereqs: CHEM 101LEC and CHEM 101A
Coreq: CHEM 102A
Topics of the course are kinetics, chemical equilibrium, acid-base chemistry, nuclear chemistry, electrochemistry, some introductory organic chemistry as well as advanced topics from thermodynamics (including entropy, spontaneity and free energy). Successful completion of CHEM 102A is required for transfer credit in CHEM 102.

CHEM 102A
General and Inorganic Laboratory
1 Cr. Hr. – 3 Contact Hrs. Ⓦ❺
Prereqs: CHEM 101LEC and CHEM 101A
Coreq: CHEM 102LEC
Course divided between elementary qualitative analysis and laboratory theory and practice of topics covered in CHEM 102LEC.

CHEM 109LEC
Chemistry for Health Science
4 Cr. Hrs – 4 Contact Hrs. ❶Ⓦ❺
Prereqs: MATH 040 and either MATH 041 or
MATH 100A (formerly MATH 050);
Minimum Grade of "C" required for all
Coreq: CHEM 109A
This is a chemistry course for non-science majors and some students going into specific health programs which do not require general Chemistry 101 and 102. The course is designed to provide students insight into the chemical sciences, technology, and the environment. Conversions, atomic structure, bonding, the periodic table, chemical reactions, energy, organic chemistry, nuclear chemistry, acids and bases, carbohydrates and lipids (biochemistry) are covered. This course is not equivalent to a two semester general, organic, biochemistry course.

CHEM 109A
Chemistry for Health Science Lab
1 Cr. Hr. – 3 Contact Hrs. ❶Ⓦ❺
Prereqs: MATH 040 and either MATH 041 or
MATH 100A (formerly MATH 050)
Coreq: CHEM 109LEC
An introductory, one semester laboratory course in chemistry. This is the lab component of Chemistry 109 for non-science majors and some students going into specific health programs which do not require general Chemistry 101 and 102. The course is designed to provide students insight into the chemical sciences, technology, and the environment. Conversions, atomic structure, bonding, the periodic table, chemical reactions, energy, organic chemistry, nuclear chemistry, acids and bases, carbohydrates and lipids (biochemistry) are covered. This course is not equivalent to a two semester general, organic, biochemistry course.

CHEM 201E
Organic Chemistry Lecture
4 Cr. Hrs. – 4 Contact Hrs. Ⓓ
Prereqs: CHEM 102LEC and CHEM 102A
Coreq: CHEM 201F
Course covers the nomenclature, preparation, properties and reactions of saturated and unsaturated hydrocarbons, aldehydes, ketones, acids and their derivatives. Stereochemistry and IR, ultraviolet spectroscopy are also introduced.

CHEM 201F
Organic Chemistry Laboratory
1 Cr. Hr. – 4 Contact Hrs. Ⓓ
Prereqs: CHEM 102LEC and CHEM 102A
Coreq: CHEM 201E
Laboratory work includes the synthesis of compounds representing typical reactions, together with study of the chemical and physical properties and IR spectra of the substances prepared. Both macro and microscale techniques are employed.

CHEM 202F
Organic Chemistry Lecture
4 Cr. Hrs. – 4 Contact Hrs. Ⓓ
Prereqs: CHEM 201E and CHEM 201F
Coreq: CHEM 202G
A continuation of CHEM 201. Course covers nomenclature, preparation, properties and reactions of aromatic hydrocarbons, phenols, organic nitrogen and sulfur-containing compounds, carbohydrates, proteins and synthetic polymers. Nuclear magnetic resonance spectroscopy are also introduced.

CHEM 202G
Organic Chemistry Laboratory
1 Cr. Hr. – 4 Contact Hrs. Ⓓ
Prereqs: CHEM 201E and CHEM 201F
Coreq: CHEM 202F
Laboratory work includes Diels Alder and ylid reactions, a multi-step synthesis, qualitative analysis of typical organic compounds using spectral evidence as well as simple tests.

Chinese

(See Foreign Languages)

College Success Center

(See English, Mathematics, and Reading)

College Success Seminar

CSS 100A
College Success Seminar
3 Cr. Hrs. – 3 Contact Hrs. ⒻⓌⓈ
Prereq: None
This course helps develop and reinforce the skills, abilities, and behaviors that promote academic and personal success: effective note taking, productive study skills, reading and remembering, critical thinking, library skills, basic computer skills, free career and job resources, stress management, relationships and winning attitudes.

Communications

COM 101
Oral Communications
3 Cr. Hrs. – 3 Contact Hrs. ⒻⓌⓈ
Prereq: None
An introduction to the fundamentals of oral communications. Study and application of intrapersonal, interpersonal, small group, and public speaking. Class presentations are required.

COM 102
Mass Media
3 Cr. Hrs. – 3 Contact Hrs. Ⓕ
Prereq: None
To create an awareness and understanding of the history, structure and effect of mass media systems. (Includes newspapers, film, radio and television.)

COM 107
Introduction to Journalism
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: ENG 101
A basic course stressing the news-gathering techniques and news-writing style utilized by newspapers, radio and television. Includes an orientation to style, copy-reading, editing, headline writing, and page layout.

COM 112
Audio Production
2 Cr. Hrs. – 2 Contact Hrs. ❶
Prereq: None
A basic course in the fundamentals, principles, practices, and techniques of radio production. Laboratory hours by arrangement.

COM 113
Practical Radio
2 Cr. Hrs. – 2 Contact Hrs. Ⓦ
Prereq: COM 112
A continuation of COM 112 designed to give the student the opportunity to develop skill and experience at a local radio station.

COM 201
Public Speaking
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: Meet Ready to Succeed Requirement
A consideration of the principles of public speaking with emphasis on the theories of argumentation and persuasion. Class performances required.

COM 202
Human Communication
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: None
A study of everyday communication and how it affects perceptions, self, and environment. Emphasis is on dyadic and small group interaction.

COM 203
Introduction to Cinema
3 Cr. Hrs. – 3 Contact Hrs. ❶ⓌⓈ
Prereq: ENG 102
An introduction to the art of film; the course will include representative foreign and domestic films, at least one documentary film, and several (2-4) experimental and/or underground films. In addition to thematic study of films, the course explores the various elements of movie-making; script, light, sound, color, acting, directing, and editing. *(This course is also listed as ENG 208.)*

COM 210
Introduction to Debate
3 Cr. Hrs. – 5 Contact Hrs. ❶
Prereq: None
An introduction to the theory and practice of modern debate.

COM 212
Television Production
3 Cr. Hrs. – 4 Contact Hrs. Ⓦ
Prereq: None
A basic course designed to acquaint the student with the principles, practices, and techniques of television production. Within an operating television studio, students gain hands-on experience operating studio cameras, recording devices, a video switcher, lighting, audio mixing, microphone setup, teleprompter, monitors, props, green screens and other accessories. Activities involving scripting, storyboarding, editing, safety and security will also be provided.

COM 262
Social Media
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereqs: CIS 110 or CIS 120A, and ENG 101 or BCOM 101 or equivalent
Students explore emerging social media technologies and processes and study their application in a variety of contemporary settings. Students will learn how to use and author content for such online tools such as blogs, microblogs, collaboration mechanisms, podcasts, RSS-feeds, video, bookmarking, and other emerging web technologies. The course will also study how to use these technologies to monitor conversations on the Internet, engage online communities, identify influencers, and establish thought leadership. *(This course is also listed as BUS 262.)*

COM 290CI
Cooperative Internship Program
1 – 4 Cr. Hrs. – Variable Contact Hrs. ❶
Prereq: instructor permission
Notes: Student must have a GPA of 2.5 or better with at least 21 credit hours successfully completed within the core requirements and 30 credit hours completed toward degree completion, and a recommendation from department faculty.

The Cooperative Internship Program is a paid or non-paid work experience in broadcasting/multi-media within the student's major area of study. Variable credit hours (1-4 Cr. Hrs. per semester) may be earned dependent upon the number of work hours available from the employing organization.

A student may sign up for as many internships as desired; however, the number of credit hours which can be applied toward a degree/certificate depends on the student's course of study and departmental requirements. The internship course starting and ending dates are determined on an individual basis. This course is offered on a pass/no pass basis.

Computer-Aided Drafting and Design

CAD 100
Introduction to Drafting
3 Cr. Hrs. – 6 Contact Hrs. ❶❿❾
Prereq: None
The purpose of this course is to provide an introduction to drafting and CAD for students with no prior CAD/drafting experience. Emphasis will be placed on sketching skills and basic fundamentals of computer-aided drafting.

CAD 110
Introduction to Computer-Aided Drafting (2D)
3 Cr. Hrs. – 6 Contact Hrs. ❶❿
Prereq: CAD 100 with a minimum grade of "C", high school drafting, or instructor permission
This course is an introduction to basic computer-aided drafting using AutoCAD™. Basic 2D CAD drafting skills will be the primary focus of this course.

CAD 120
Descriptive Geometry
3 Cr. Hrs. – 6 Contact Hrs. ❶❿
Prereq: CAD 100 or CAD 110, high school drafting, or instructor permission
Descriptive Geometry is the science of graphical representation and solution of spatial problems. Techniques used to develop solutions to point, line, and surface projections, intersections, and developments will be presented.

CAD 130
Drafting Standards and Conventions I
3 Cr. Hrs. – 6 Contact Hrs. ❶
Prereq: CAD 110
This course is an introduction to working drawings, orthographic projection, multi-view drawings, dimensioning, section views, auxiliary views, screw threads, and fasteners. ASME standards will be stressed throughout this course.

CAD 135
Engineering Graphics
3 Cr. Hrs. – 6 Contact Hrs. ❶❿
Prereq: CAD 110 with a minimum grade of "C"
The essentials of Engineering Graphics include working assembly drawings and geometric dimensioning and tolerancing. Included in this is the utilization of section and auxiliary views to create better illustrations of parts and assemblies.

CAD 140
Drafting Standards and Conventions II
3 Cr. Hrs. – 6 Contact Hrs. **Ⓓ**
Prereq: CAD 130
This course involves advanced topics concerning ASME standards and conventions. Advanced dimensioning, tolerancing, and GD&T will be covered.

CAD 150
Blueprint Reading
3 Cr. Hrs. – 4 Contact Hrs. **ⒻⓌⓈ**
Prereq: MATH 040 or TMAT 101A
This course is designed to teach students how to read and interpret engineering drawings.

CAD 151
Geometric Dimensioning & Tolerancing
3 Cr. Hrs. – 3 Contact Hrs. **Ⓓ**
Prereq: CAD 150 or instructor permission
This course is designed to teach how to read, interpret, and apply geometric dimensioning and tolerancing per ANSI Y14.5M standards.

CAD 152
Residential Architecture
3 Cr. Hrs. – 6 Contact Hrs. **Ⓓ**
Prereq: CAD 110
This course involves the basic construction details for framed residential buildings.

CAD 153
Commercial Architecture
3 Cr. Hrs. – 6 Contact Hrs. **Ⓓ**
Prereq: CAD 110
This course involves the layout of a small commercial building, the basic structure being concrete and steel.

CAD 184
Introduction to Computer Animation
3 Cr. Hrs. – 6 Contact Hrs. **Ⓕ**
Prereq: None
This course will introduce students to 3d modeling, rendering, and animation environments. Those who complete the course will be able to operate the user interface to navigate and import objects from other CAD programs, create complex computer models, use program modifiers for the manipulation of models and animations, apply texture maps and materials, create complex lighting setups, and create photo realistic rendered scenes. *(This course is also listed as GRD 184.)*

CAD 210
Parametric Design I – Part Modeling
3 Cr. Hrs. – 6 Contact Hrs. **ⒻⓌ**
Prereq: CAD 110
This course is an introduction to 3-D modeling and parametric design. Working and presentation drawings will be produced, and rendering fundamentals will be presented.

CAD 220
Parametric Design II – Assemblies
3 Cr. Hrs. – 6 Contact Hrs. **Ⓕ**
Prereq: CAD 210
This course covers advanced part modeling concepts and multiple part assemblies. Rendering and animation fundamentals will be presented.

CAD 230
Tool Design
3 Cr. Hrs. – 6 Contact Hrs. **Ⓦ**
Prereq: CAD 210 or CAD 250
This course covers design of drilling jigs and machining fixtures commonly used in industry.

CAD 240
Product Design
3 Cr. Hrs. – 6 Contact Hrs. **Ⓕ**
Prereq: CAD 210 or CAD 250
Working as a team, students will collaborate to design assigned products. Working and presentation drawings will be created, and manufacturing costs, materials, and tolerancing will be critical requirements. Class presentations will be required.

CAD 250
Introduction to SolidWorks®
3 Cr. Hrs. – 6 Contact Hrs. **ⒻⓌⓈ**
Prereq: CAD 110 or instructor permission
This course is an introduction to 3D modeling and parametric design using SolidWorks®. Working and presentation drawings will be produced, and rendering fundamentals will be presented.

CAD 251
Die Design
3 Cr. Hrs. – 6 Contact Hrs. **Ⓓ**
Prereq: CAD 130
An introductory course in the basic fundamentals of sheet metal stamping dies. A simple blanking die, a compound blank and pierce die, and a progressive die will be designed by the student.

Computer Information Systems

CIS 100
Introduction to Personal Computers
1 Cr. Hr. – 1 Contact Hr. 🅕🅦🅢
Prereq: None

This course introduces students to the proper use and operation of the Intel-compatible microcomputers using the Windows operating system. Students learn to create documents using word processing programs, create line art using graphic programs, send and receive email with attachments, access the Internet using a browser, and use online course management software. Common system activities that include customizing the desktop, formatting disks, using file management procedures, and creating back-ups are a part of the introduction to personal computer operating procedures.

CIS 100L&L
Introduction to Personal Computers with Lab
1 Cr. Hr. – 2 Contact Hrs. 🅕🅦🅢
Prereq: None

This course is designed for students with little to no experience with computers. Students have an extra lab hour with their instructor to meet the same objectives as CIS 100. This course introduces the student to the proper use and operation of the Intel-compatible microcomputers using the Windows operating system. Student learn to create documents using word processing programs, create line art using graphic programs, send and receive email with attachments, access the Internet using a browser, and use online course management software. Common system activities that include customizing the desktop, formatting disks, using file management procedures, and creating back-ups are a part of the introduction to personal computer operating procedures.

CIS 101EW
Introduction to Electronic Spreadsheets
1 Cr. Hr. – 1 Contact Hr. 🅕🅦🅢
Prereq: CIS 100 or CIS 110 or CIS 120A

This is a "hands-on" course designed for people with little or no previous experience with electronic spreadsheets. The student will create and edit worksheets and workbooks. The student will use basic formulas, functions, charting, formatting, and printing options to create functional worksheets. Suffix: EW stands for Excel for Windows.

CIS 102EW
Intermediate Electronic Spreadsheets
1 Cr. Hr. – 1 Contact Hr. 🅦
Prereq: CIS 101EW

The student will use advanced formulas and functions, built-in data and table features, and perform what-if analysis using solver and scenarios. Advanced charting and formatting skills will also be covered. Suffix: EW stands for Excel for Windows.

CIS 109
Personal Computer Maintenance
2 Cr. Hrs. – 2 Contact Hrs. 🅕🅦
Prereq: CIS 110 or CIS 120A

This course provides students with the skills needed in the upgrading and maintenance of personal computers. Students learn how to install integrated circuits for memory into a computer's motherboard, upgrade video displays, upgrade disk controller boards, replace disk drives, and perform diagnostic tests on equipment. Common system problems are also covered as part of hands-on troubleshooting using Intel-based computers. *(This course is also listed as ELTR 109.)*

CIS 110
Computer Concepts
3 Cr. Hrs. – 3 Contact Hrs. 🅕🅦🅢
Prereq: Meet Ready to Succeed Requirement

A survey course on computer concepts and applications associated with the current generation of computer technology. In addition, technological trends and the potential impact computers have on careers and lifestyles are discussed. Computer Concepts also provides hands-on work with computers through the introduction of commonly used application packages—word processing, electronic spreadsheets, presentation graphics, image editing, and Internet browsing software within the Windows operating environment. Students interested in business applications and the introduction to computer programming should enroll in CIS 120A Introduction to Computer Information Systems.

CIS 115WW
Introduction to Word Processing
1 Cr. Hr. – 1 Contact Hr. ❶Ⓦ❸
Prereqs: BUS 179 and one of either
CIS 100, CIS 110, or CIS 120A

This is a hands-on course designed for people with little or no experience with word processing. The student will create, edit and format professional-looking documents. These documents will include templates, themes, styles, tables and graphics. Suffix: WW stands for Word for Windows.

CIS 119PP
Introduction to Presentation Graphics
1 Cr. Hr. – 1 Contact Hr. ❶Ⓦ❸
Prereqs: Meet Ready to Succeed Requirement and
CIS 100 or CIS 110 or CIS 120A

This is a "hands-on" course designed for people with little or no previous experience with slide show management. The student will design professional-looking slide shows using themes, animation, slide transitions, graphics, sound, and video. Suffix: PP stands for PowerPoint for Windows.

CIS 120A
Introduction to Computer
Information Systems
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ❸
Prereq: Meet Ready to Succeed Requirement
Notes: Completion of BUS 179 or
equivalent recommended

A business-oriented introduction to data processing principles and information systems. Course topics include the analysis and design of business computer systems, the components of a computer system, the capabilities and limitations of computer technology, and careers for the information age. Students work with computers by learning to operate Internet browsers, electronic spreadsheets, and database systems within the Windows operating environment along with programming computers using popular programming languages. Students are expected to be able to use word processing software before enrolling in this course. This course was formerly offered as CIS 120A: Introduction to Data Processing.

CIS 121
File Design and Utilities for
Midrange Computers
1 Cr. Hr. – 1 Contact Hr. ❶Ⓦ
Prereq: CIS 120A
Note: With instructor permission, CIS majors may
take CIS 120A concurrently.

This course introduces students to the fundamentals of file design in a midrange computing environment. Students learn a midrange data definition language and use the utilities of a midrange operating system to create and maintain physical and logical files, database relationships, and queries.

CIS 124
Introduction to Game Development
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: CIS 120A

This class will provide an overview of the game industry which includes game history, analyzing the psychological reasons why people play games, understanding the different types of games and their history, how games are developed, how game designs are influenced by their business models, and identifying the salient features of a game and how they relate to human needs and fluidly of play. A full understanding of graphics evolution, game play example, and systems evolutions are explored. Students experience in collaborative groups how to propose game ideas, and work through game concepts and features. Class goals are to impart to the student a fluency in understanding of how games are created, what influences how a game is developed and be able to identify industry specific areas of focus that will align with their personal interests and skills.

CIS 129
Introduction to Technology
3 Cr. Hrs. – 6 Contact Hrs. ❶Ⓦ
Prereq: None.

This course provides an "integrated" introduction to the current computer-based technologies of manufacturing. Students will develop a foundation of understanding through hands-on experience in: basic microcomputer operations, Computer-Aided Design (CAD), Computer-Aided Machining (CAM), Computer Numerical Control (CNC), robotics, Computer Automated Process Control, spreadsheets, and word processing. The course also promotes problem solving, group process decision-making, and communication skills. *(This course is also listed as AMT 129.)*

CIS 130
COBOL Programming
3 Cr. Hrs. – 3 Contact Hrs. ⓓ
Prereq: CIS 120A

This first course in COBOL covers the fundamentals of designing and developing structured programs, sequential and indexed files, input validation techniques, branching, and conditional structures. Output includes detail, summary, and exception reports. Students design, write, test and document COBOL programs within a midrange operating environment.

CIS 131
Operations and Commands for
Mid-range Computers
1 Cr. Hr. – 1 Contact Hr. ⓦ
Prereq: CIS 120A

This course introduces students to a midrange operating system. Students learn fundamental skills necessary to interface with the system, including using control language commands, prompting, and handling job queues, output queues, and messages. Students will also become familiar with the operating system's architecture, and will be briefly introduced to control language programming.

CIS 143
Introduction to Local Area Networks
3 Cr. Hrs. – 3 Contact Hrs. ⓕ
Prereq: CIS 110 or CIS 120A
　　　　Recommended Prereq: CIS 193A or CIS 210

This course provides a comprehensive coverage of the skills necessary for network management. Topics include concepts related to the planning of network file systems, implementation of security, the installation of application software as well as more advanced concepts such as protocol support, server management and performance issues.

CIS 153AW
Introduction to Database Management
1 Cr. Hr. – 1 Contact Hr. ⓕⓦⓢ
Prereq: CIS 100 or CIS 110 or CIS 120A

This is a hands-on course designed for people with little or no experience with database management software. The student will create, manipulate and query relational databases along with developing data entry forms and reports. Suffixes: AW stands for Access for Windows.

CIS 162
Visual C# Programming
3 Cr. Hrs. – 3 Contact Hrs. ⓕ
Prereq: CIS 120A
Note:　With instructor permission, CIS majors may take CIS 120A concurrently.

The C# programming language, from Microsoft, will be introduced to the students from within the .NET framework. Students will study, design and write programs in the object-oriented format while becoming familiar with the fundamentals of C# and of the .NET environment. The C# (C Sharp) programming language, from Microsoft's Visual Studio (VS) development framework, is introduced and then used to present the visual programming environment, the object-oriented programming environment and the .NET environment. Students will learn to work with the VS interface to develop skills in developing projects and managing objects. Programming techniques will focus on decisions, looping, data management, and exception management.

CIS 167A
Introduction to Internet Animation
1 Cr Hr. – 1 Contact Hr. ⓕ
Prereq: CIS 100 or CIS 110 or CIS 120A

This course provides students with hands-on experience creating web-based animation using an animation editor. Topics include working with the various tools and objects available for creating and manipulating multi-layered graphics, an introduction to scripting, working with animation frames and tweening, and publishing the graphics for use on the Internet. *(This course is also listed as GRD 167A.)*

CIS 170
RPG Programming
3 Cr. Hrs. - 3 Contact Hrs. ⓕ
Prereq: CIS 121

This course covers fundamentals of designing and developing computer programs written using the RPG IV programming language. Topics include program logic, arithmetic operations, decision-making structures, external input and output definitions, sequential processing of batch files, and an introduction to interactive programming. Students design, write, test and document RPG IV programs within the IBM i operating environment.

CIS 177DW
Introduction to HTML Editors
1 Cr. Hr. – 1 Contact Hr. Ⓦ
Prereq: CIS 100 or CIS 110 or CIS 120A
This course introduces students to creating and managing web sites and pages through the use of an HTML editor. Students will learn to maintain a site by utilizing an HTML editor to create and edit HTML documents. This includes changing text properties, adding and deleting design elements, creating hyperlinks to other web pages and inserting multimedia objects. Students learn to work with HTML code through class demonstration and completing assignments using Dreamweaver.

CIS 183
Networking Technologies
3 Cr. Hrs. –3 Contact Hrs. Ⓦ
Prereq: CIS 110 or CIS 120A
This course focuses on essential issues related to data communications and networking technologies. Topics include established networking standards and terminology, the OSI model, physical and logical network topologies, the use and function of various networking hardware, media, protocols, and the fundamentals of internetworking.

CIS 185
C Programming
3 Cr. Hrs. – 3 Contact Hrs. ⒻⓌ
Prereq: CIS 120A
Note: With instructor permission, CIS majors may take CIS 120A concurrently.
The major elements of the C programming language are introduced through a series of applications featuring C program structure, variables, integer and floating point arithmetic, looping, conditionals, arrays, functions, strings, pointers, structures and sequential file syntax. Syntactical, structural and procedural differences of C++ object-oriented methodologies are integrated into the course after a firm foundation in standard C is presented.

CIS 187
Multimedia Digitizing
3 Cr. Hrs. – 3 Contact Hrs. Ⓕ
Prereq: CIS 100 or CIS 110 or CIS 120A
This course serves as an introduction to many of the multimedia devices that allow the acquisition, manipulation, and storage of non-text media. Devices and topics include full-color, flatbed scanners, slide and negative scanners, frame-grabbers, digital camera use, audio digitizing, video digitizing, Zip drives, USB Flash drives, and CD-DVD burners. The class uses state of the art devices and software to manipulate the digital data. Additional costs include a pair of stereo headsets, blank CD and DVD disks, a blank VHS videotape, and removable read/write media as dictated by the current syllabus. This course was formerly offered as CIS 297DD: Introduction to Digital Data.

CIS 193A
Introduction to Operating Systems
1 Cr. Hr. – 1 Contact Hr. Ⓦ
Prereq: CIS 110 or CIS 120A
This course surveys disk operating systems for Intel-compatible microcomputers. Students learn to take advantage of a microcomputer's disk operating system by working with common commands and utility programs. In class discussions and demonstrations will focus on terms and basic concepts of memory management, hard disk management and personalizing computer operations.

CIS 198
Computer Forensics
3 Cr. Hrs. – 3 Contact Hrs. Ⓓ
Prereqs: CIS 120A and CJ 101
This course is designed to introduce the student to the world of computer forensics and cyber crime. The student will gain a basic understanding of the application of computer investigations and analysis techniques in the interest of determining potential legal evidence. *(This course is also listed as CJ 198.)*

CIS 199
Internet Content Management Systems - CMS
1 Cr. Hr. – 1 Contact Hr. Ⓦ
Prereqs: CIS 110 or CIS 120A, and CIS 257A or CIS 257

Internet Content Management Systems provide system administrators, web designers and content creators an interface for managing online content. This course provides an introduction to these systems (examples of CMS include: WordPress, Drupal, MovableType and Joomla). Students will determine Content Management System (CMS) feature and system requirements, install a CMS from scratch and configure administrative options on the CMS. Administrative functions will include implementation of security and publishing permissions, extension of basic CMS installations through plugins and customization of the CMS through use of design themes for delivery to both traditional and mobile users. Students will use their CMS installation to create and maintain both static and dynamic content throughout the course.

CIS 209
Personal Computer Maintenance II (A+ Certification)
3 Cr. Hrs. – 5 Contact Hrs. ⒻⓌ
Prereq: CIS 109 or ELTR 109

This course is designed to take the successful PC Maintenance student to the next, more in-depth level of PC maintenance and repair. The Web presentations, text assignments, demonstrations, and related CD-ROM teaching materials will help prepare the student to be competent to pass the A+ Certification written exam. The related labs will provide the needed hands-on experience to develop system understanding and competent analysis and repair procedures. Lab experience will include the building of a complete computer system, with troubleshooting and analysis of the system. It is recommended that CIS 143 be taken to provide more network background before taking the A+ exam. *(This course is also listed as ELTR 209.)*

CIS 210
Operating Systems Concepts
3 Cr. Hrs. – 3 3 Contact Hrs. ⒻⓌ
Prereq: CIS 110 or CIS 120A or CIS 193A

This course takes a functional view of the essential concepts relative to computer operating systems. Topics include principles of memory management, processor management, concurrent processes, device management, file management, and system management. The course incorporates how these essential principles are applied to Personal Computer (PC) operating systems in practice with a hands-on approach. Primary operating systems studied included MS-DOS and Windows operating systems.

CIS 217
Introduction to JavaScript Programming
1 Cr. Hr. – 1 Contact Hr. Ⓕ
Prereq: CIS 257 or CIS 257A

Students will learn how to program by using JavaScript. Students will learn how to write JavaScript programs that use the latest language techniques. Students will also learn how to write programs that are compatible with previous versions of the language and are cross-browser compatible. They will also be required to implement scripts on a web page and publish a web site on the Internet using File Transfer Protocols (FTP).

CIS 220
E-Business
3 Cr. Hrs. – 3 Contact Hrs. Ⓕ
Prereqs: CIS 110 or CIS 120A

This course provides an overview of the aspects and opportunities of doing business on the Internet, by examining how e-business strategies differ from those of a land-only based business. Topics include the history of business on the Internet, viability of a business using the Internet, what makes an effective e-business web site, opportunities for e-business in international markets, cultural and technical considerations of international e-business, mobile e-business, technology, marketing, payments, safety, security, customer service, regulation, ethics, intellectual property, and other current issues facing businesses using the Internet. As part of this class students will create a functional e-commerce store front. *(This course is also listed as BUS 220.)*

COURSE DESCRIPTIONS

CIS 227
Advanced JavaScript
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: CIS 217
Students will learn how to expand their foundational knowledge of HTML, CSS and basic JavaScript to expand their JavaScript skills. Students will evaluate and use JavaScript frameworks to expand application functionality, build efficient user interfaces, create animations and integrate external APIs for deepening data in their Internet applications. Special attention will be focused on how JavaScript can manage and enhance mobile web pages giving them the look and feel of native applications.

CIS 243
Telecommunications
3 Cr. Hrs. – 3 Contact Hrs. Ⓕ
Prereq: CIS 120A or CIS 110
This course provides an introduction to telecommunication concepts and network configurations. Students learn standard procedures and protocols for data transmission over various communication channels and study the components of a telecommunications system. Network architectures and designs are examined through the use of discussion and case studies.

CIS 244
Game Scripting
3 Cr. Hrs. – 3 Contact Hrs. Ⓕ
Prereq: CIS 162 or CIS 185 or CIS 130
The students will work independently and in teams to design, create and code game systems for current games on the market. Focus will be put on how to create scripts that address the logic behind combat systems, implementing expert systems and artificial intelligence, implementing conditional and branching conversations, event triggers, creation of timed events, and how to create dynamic game environments. Further there will be discussion on version control, software configuration management, software development methodologies and how to successfully work in distributed development environments.

CIS 250
Developing Information Systems
3 Cr. Hrs. – 3 Contact Hrs. Ⓕ
Prereq: CIS 162 or CIS 170 or CIS 185 or CIS 267ASP or CIS 267PHP
Note: With instructor permission, either of the prerequisite courses may be taken as a corequisite.
This course reviews and applies traditional systems development methodologies implemented by project teams. Classroom discussion centers on the design and development of user-oriented information systems. Course content includes feasibility studies, systems analysis, design concepts, and implementation strategies.

CIS 253A
Database Design and Implementation
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereqs: CIS 153 or CIS 153AW or CIS 153PW and CIS 130, CIS 162, or CIS 185 or instructor permission
This course provides students with systems development experience within a database environment. Fourth-generation languages using structured query language (SQL), report generators, and other system design tools are used in conjunction with case studies to provide real-life applications of the systems development process.

CIS 257A
HTML for Internet Web Page Design
3 Cr. Hrs. – 3 Contact Hrs. ⒻⓌ
Prereq: CIS 110 or CIS 120A
Note: With instructor permission, either of the prerequisite courses may be taken as a corequisite.
Students will learn the fundamentals of the Hypertext Markup Language (HTML5), CSS and web page design. Students will use Internet browsers, image editors and text editing software to create and edit web pages for traditional computers and mobile devices. They will also learn to create a web page and publish a website on the Internet using File Transfer Protocols (FTP). Students will be expected to critique other web pages and, time permitting, there will be demonstrations of JavaScript and other Internet tools.

CIS 258
Advanced HTML Web Development
3 Cr. Hrs. – 3 Contact Hrs. ❺
Prereq: CIS 257A or CIS 257
HTML provides the foundation of web pages on the Internet. This class assumes a basic understanding of basic HTML and CSS. In this class students will use a project-driven approach to learn advanced techniques that will bring together the student's knowledge of basic HTML, CSS and Web design. Using HTML5 students design, build and launch interactive, multi-media web-based applications for mobile, notebook and desktop audiences.

CIS 260A
Visual Basic Programming
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: CIS 162
The Visual Basic .NET programming language and ADO.NET (ActiveX Data Objects), from Microsoft's Visual Studio (VS) development framework, will be presented to the students from within the .NET framework. Students will study, design and write programs in the object oriented format while becoming familiar with the fundamentals of Visual Basic.NET and will develop more complex, multi-document user interfaces, processing data to and from database engines and other file structures. In addition, students will utilize ADO.NET to select, insert, update, and delete database information that has been bound to the Visual Basic application being developed. Students will be expected to know the Visual Studio Integrated Development Environment (IDE) upon entry to the class through the successful completion of CIS 162 – Visual C# Programming.

CIS 267ASP
Server-Side Web Programming Using ASP
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ**
Prereq: CIS 257A or CIS 257 or CIS 162 or instructor permission
*Note: **This course is offered only in odd numbered years*
This course is an introduction to the server-side scripting language for use in the creation and maintenance of interactive web sites that access online databases. Students design, code, test, debug and navigate interactive web sites using server-side programming. Topics will include broad exposure to language-specific functions and processes, security and file uploads and writes, along with database functionality including reads, writes, selects (searches), inserts and updates. This technology is widely used within Internet applications including blogs, search engines, e-commerce shopping carts, discussion forums, content management systems and social networking platforms. Suffix: CIS 267ASP for .NET applications and CIS 267PHP for open source applications.

CIS 267PHP
Server-Side Web Programming Using PHP
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: CIS 257A or CIS 257
This course is an introduction to the server-side scripting language for use in the creation and maintenance of interactive web sites that access online databases. Students design, code, test, debug and navigate interactive web sites using server-side programming. Topics will include broad exposure to language-specific functions and processes, security and file uploads and writes, along with database functionality including reads, writes, selects (searches), inserts and updates. This technology is widely used within Internet applications including blogs, search engines, e-commerce shopping carts, discussion forums, content management systems and social networking platforms. Suffix: CIS 267ASP for .NET applications and CIS 267PHP for open source applications.

COURSE DESCRIPTIONS

CIS 270A
Advanced RPG Programming
3 Cr. Hrs. - 3 Contact Hrs. Ⓦ
Prereq: CIS 170
This course is a capstone course in midrange programming. Topics include interactive applications, file maintenance, procedures, subprocedures, modular programming, subfiles, embedded SQL, and other emerging IBM technologies used by industry. Students design, write, test and document RPG IV programs in a midrange operating environment.

CIS 275
Linux Operating System
3 Cr. Hrs. – 3 Contact Hr. Ⓦ
Prereq: CIS 210
Notes: Prior completion of CIS 143 recommended
This course provides introductory coverage of the Linux operating system. Students will learn the fundamentals of Linux and its environment, both from a user's and administrator's standpoint. Specific topics include installation, configuration, basic Linux administration; exploring the Desktop environments; understanding the text commands, using the Shell; understanding users and file systems; managing processes; basic Linux networking, using network clients; understanding system initialization, managing software packages and file systems; managing users and groups; configuring networks; understanding system and kernel management. We will also cover a few advanced topics that include network file sharing (NFS) services, security and Samba. We will use the Red Hat's free open-source Linux operating system, known as Fedora, as our primary operating system. This course also serves as a guideline that maps to the CompTIA Linux+ certification exam.

CIS 277 Internet Site Administration
CIS 277LA Linux and Apache
CIS 277MS Microsoft
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereqs: CIS 193A, CIS 257A, and either CIS 110 or CIS 120A
This class is designed to teach students how to setup and administer an Internet Web server using popular operating system and server software. Students will set up their own Web server by installing the operating system software, establishing user accounts and rights, creating designated work spaces, and installing appropriate server software. In addition, students use the server software to establish an Internet domain, support HTML documents, and run server side programs.

CIS 280
Java Programming
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: CIS 185
This course addresses advanced level object-oriented programming techniques using the Java programming language. Coverage includes construction of basic Java programs, use of input/output and other common instance and static methods, unique syntactical constructs, conditions and iteration, differences between the C++ environment and the Java environment, the acquisition and installation of the Java compiler and runtime platform, and the interpretation of common errors and warnings. These concepts are presented through the use of extensive examples and assignments.

CIS 283
Advanced Local Area Network Administration - Server 2008
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: CIS 143, CIS 243, CIS 183 and CIS 209
Note: With instructor permission, CIS 183 and/or CIS 209 may be taken as a corequisite.
This course covers the fundamentals of designing and installing network hardware and software for a small LAN. Topics include network adapters and cabling, disk expansion, common network problems, and troubleshooting. Students are provided with a series of lecture and lab exercises intended to develop the ability to design, implement, troubleshoot and solve network problems.

CIS 284
Interactive Media and Game Design
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: CIS 124

This class is the capstone course for any degree track within the Interactive Media and Game Design curriculum. Students will work in a collaborative team, from initial concept through final release in a single game development cycle to develop a game modification to an existing professionally published work. Students will work on professional grade tools, will face all of the challenges, decision points and experience of creating a published game. This includes initial concept, storyboarding, game scripting, voice acting, art creation, writing, game design, map design, level design, 3D modeling, model rendering, as well as community management, project management and product placement. The course goal is to create a published "Mod" that will become a cornerstone for the students published portfolio as a referenced published work.

CIS 286
Programming for Mobile Applications
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: CIS 162 or CIS 280

CIS 286 is the capstone course for those students completing the Computer Programmer – Mobile Developer Track. With the widespread usage of smart phones, tablets, etc., students are provided with new opportunities in the development of applications for these devices. Students will develop mobile applications using either C#.NET or Java for multiple mobile platforms and mobile operating systems. Specific applications that are to be developed by each student will be determined, with instructor approval, at the beginning of the semester.

CIS 287
Personal Computer Digital Video Editing
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: CIS 110 or CIS 120A

This course serves as an introduction to video editing on the PC. Topics covered include importing still and video images, audio editing, cutting scenes, transitions, basic and advanced titling, compositing, slow and fast motion, color balance, and exporting projects to a variety of industry-standard formats. Additional costs include a pair of stereo headsets and removable read/write storage media as dictated by the current syllabus.

CIS 291
Implementing Security into Applications
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: CIS162 or CIS185

CIS 291 is designed to bring to the attention of students, the need to develop secure applications, whether they be web based or non-web based. While new application development tools provide additional flexibility and productivity, they also create an environment where "small" details are missed. It is these "small" details that allow security vulnerabilities to be introduced into applications. Students will review coding techniques that permit vulnerabilities/attacks as well as coding techniques to prevent said vulnerabilities/attacks. They will research and report (via reports and/or presentations) on current issues within the development environment with regards to applications security. This research will span multiple languages as well as multiple platforms.

CIS 293
Network Security
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereqs: CIS 283 and all other courses in the Networking degree or instructor permission

This course is offered as a topics course relative to computer network security. It is a capstone course where students will apply the summation of their knowledge from all previous networking courses to the study, analysis and understanding of computer network security. The course is designed to include research, lecture and discussion.

Criminal Justice

CJ 101
Introduction to Law Enforcement
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement
A study of the organization and jurisdiction of local, state, and federal law enforcement, judicial, and correctional systems. Also includes the history and philosophy, career opportunities and qualifying requirements, terminology and constitutional limitations of the system.

CJ 102
Police Administration I
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ❺
Prereq: None
A study of the principles of police administration and organization; administration of staff units; function and activities of Criminal Justice Agencies.

CJ 104
Criminology
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement
The study of deviance and society's role in defining behavior. Theories of criminality and the economic, social, and psychological impact of crime, victimization, and relationship between statistics and crime trends.

CJ 109
Crime Prevention and Juvenile Delinquency
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: None
A practical study of the history and development of juvenile justice theories, procedures and institutions. Problems of juvenile delinquency, theories of causation and prevention programs. Police prevention programs, juvenile courts, federal, state and local treatment and prevention.

CJ 110
Defensive Tactics
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: None
The focus of attention in this course will be the use of basic techniques. Each technique demonstrated by the instructor will have a variety of uses. All techniques will be designed to incapacitate the object of focus as quickly and professionally as possible. The importance of documentation followed by court testimony techniques will be strictly emphasized throughout the entire course.

CJ 112
Emergency Vehicle Operations
1 Cr. Hr. – 1 Contact Hr. Ⓓ
Prereq: Valid driver's license and enrolled in a certified police academy or be sworn officer or certified EMS provider.
This course is designed for Emergency and Commercial vehicle operators. The course will emphasize the legal aspects of emergency vehicle operation, vehicle dynamics, vehicle maintenance, vehicle inspections and human dynamics. The practical exercise of the course will be conducted at an outdoor site, where the student will practice, then demonstrate their individual proficiency in operating the type of vehicle appropriate for their individual operation. The outdoor course will be set up in conformance with the recommended National Law Enforcement Driver's Training Guide and Federal Emergency Management Agency Training Guide.

CJ 120
Firearms Certification
2 Cr. Hrs. – 4 Contact Hrs. Ⓓ
Prereq: Student must be registered as part of a law enforcement or corrections program.
This course will prepare a student to use firearms safely. The course will be conducted in compliance with the curriculum set forth by the National Rifle Association Police Practical Course. It will cover areas such as semiautomatic handguns, shotguns, use of force, safe handling of guns, ballistics, malfunctions and overall safety.
(1 hour lecture and 3 hours lab.)

CJ 122
The Police Patrol Function
3 Cr. Hrs. – 5 Contact Hrs. **Ⓓ**
Prereq: Student must be enrolled in the Law
Enforcement AAS degree program.
A study of the history, theory, duties and responsibilities of the patrol division; communications, development of observational powers, care and use of protective weapons, patrol vehicles & other equipment. Handling of emergency request for assistance, vehicle stops, burglary, robbery, sex offenses, the mentally ill and other kinds of situations.
(2 hours lecture and 3 hours lab.)

CJ 123
Traffic Enforcement
3 Cr. Hrs. – 5 Contact Hrs. **Ⓓ**
Prereq: Student must be enrolled in the Law
Enforcement AAS degree program.
This course provides the student with the knowledge needed to analyze traffic control problems and the fundamentals of traffic accident investigations. The course will include motor vehicle laws in the State of Michigan.
(2 hours lecture and 3 hours lab.)

CJ 130
Tactical Communication
3 Cr. Hrs. – 3 Contact Hrs. **Ⓓ**
Prereq: None
The class focuses on a basic introduction to tactical Spanish with an emphasis on commands and informational phrases for Emergency and Law Enforcement personnel. This allows them to handle situations, to acquire information about what they see, and to read necessary information to others in Spanish.

CJ 193
HAZ-MAT Communications
1 Cr. Hr. – 1 Contact Hr. **Ⓓ**
Prereq: None
A study of the 29 Codes of Federal Regulations (CFR), Section 1910.1200 and the Hazard Communications (Right to Know) Regulation. The course focuses on the impact these regulations have on the occupational workforce. Requirements for the implementation and monitoring of the regulations are examined. Also included are the studies of Federal Regulations cited in Section 301, Title III, Superfund Amendments and Reauthorization Act (SARA) of 1968, Right To Know Act of 1968.

CJ 198
Computer Forensics
3 Cr. Hrs. – 3 Contact Hrs. **Ⓓ**
Prereq: CIS 120A and CJ 101
This course is designed to introduce the student to the world of computer forensics and cyber crime. The student will gain a basic understanding of the application of computer investigations and analysis techniques in the interest of determining potential legal evidence. *(This course is also listed as CIS 198.)*

CJ 201
Criminal Law
3 Cr. Hrs. – 3 Contact Hrs. **ⒻⓌⓈ**
Prereq: None
The study of the philosophy of legal sanctions and their historical development, from common law to modern American criminal law. Includes the judicial process, classification of crimes, elements of and parties to crimes, general definitions of crimes, and common defenses.

CJ 202
Police Administration II
3 Cr. Hrs. – 3 Contact Hrs. **Ⓕ**
Prereq: None
The study of theories, procedures and methods of operation of public police with emphasis on discretionary powers. This course is a study of the administration of police line operations; including theories, types and methods of patrol, liaison between units, enforcement policy, manpower distribution and analysis of operations. We will discuss the operation of the detective and juvenile divisions and such problems as organized crime, vice, etc. Also includes a review of career opportunities and current trends in law enforcement.

CJ 204
Criminal Investigation
3 Cr. Hrs. – 3 Contact Hrs. **Ⓕ**
Prereq: None
An introduction to criminal investigation procedures including theory of investigation, conduct at crime scenes, collecting and preservation of criminal evidence. Methods in the use of police science laboratory, fingerprinting, ballistics, documents, report writing and procedures in the courtroom are covered. Additionally, study in case preparation, interviewing, and basic investigative techniques will be included.

Ⓓ By Demand　　Ⓕ Fall　　Ⓦ Winter　　Ⓢ Summer

CJ 205
Interrogation and Case Preparation
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: None
Comprehensive study of Miranda decision; principles of psychology of questioning, interrogation of suspects, interviewing witnesses and informants, preparation of statements, declarations and confessions, problems in case preparation, and mechanical means of deception.

CJ 206
Evidence and Criminal Procedure
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: None
This course deals with rules of evidence of particular import at the operational level in law enforcement and with criminal procedures in important areas such as arrest, force and search and seizure. An introduction to major court holdings, procedural requirements that stem from these holdings, and their effects on daily operations of the criminal justice system.

CJ 207
Police and Community Relations
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: None
The primary objective of this course is to acquaint the student with the need for the police to become a part of the community rather than apart from it. An examination of the attitude of people towards the police, as well as the feelings of the police about the community they are sworn to protect will be made. Public relations will be distinguished from community relations. The image of the police will be examined as well as the current methods being used by police agencies to better their relations with the community. A study of the police officer's role in attaining and maintaining public support. Including recognition and understanding of community problems, community action programs, methods of coping with crisis situations, victimology, ethics and minority cultures, environments, crime prevention and police operations.

CJ 208
Police Science Laboratory I
3 Cr. Hrs. – 3 Contact Hrs. Ⓓ
Prereq: None
General course in police laboratory techniques: photography, recording the crime scene, collection and preservation of evidence and fingerprints, development of studies in the area of firearms, hair microscopy and chemistry.

CJ 250
Corrections I
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓢ
Prereq: Meet Ready to Succeed Requirement
History, development and philosophy of corrections; tribal and biblical antecedents; Western adaptations; developments in the U.S.; current forms and approaches to include probation, parole, medium security concepts; the work of related agencies.

CJ 251A
Legal Issues in Corrections
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: None
Exploration of probation, sentencing and philosophies, legal concepts applicable to probation, parole, sentencing and incarceration; objectives of the correctional process and factors influencing correctional decision-making.

CJ 252A
Correctional Institutions/Facilities
3 Cr. Hrs. – 3 Contact Hrs. ⓌⓈ
Prereq: Meet Ready to Succeed Requirement
This course is designed to provide a more in-depth study of corrections as part of the Criminal Justice System and specific discussions of the evolution of corrections, organization and development of jails in America, alternatives to incarceration, probation, parole and the concept of community-based corrections. The course will provide the student with a background for coursework in corrections. Particular emphasis will be placed on the Michigan Department of Corrections with some discussions of alternatives to the current correctional philosophy in Michigan.

CJ 257
Client Relations in Corrections
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: None
This course is designed to provide a basic understanding of the meaning and function of culture, the impact and meaning of discrimination and discussion of the various minorities represented in the State of Michigan. Attitude formation, including such topics as self-perception, human relations and group and peer pressure will be studied. Affirmative action will be highlighted.

CJ 258A
Client Growth and Development
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: None
This course is designed to examine the growth and development of the correctional client, with particular emphasis on early environment, psychological and sociological factors. Specific problems such as substance abuse, sexual deviations, medical disorders and mental disorders will be discussed. Intervention strategies will be considered.

CJ 290CI
Criminal Justice Cooperative Internship
Variable 1-4 Cr. Hrs. ⒻⓌⓈ
Prereq: Instructor permission
Notes: The student must have a GPA of 2.5 or higher. The student must have completed a minimum of 6 credit hours in their major field of study and 30 credit hours toward a degree.
The Cooperative Internship Program is a paid or non-paid fieldwork experience in the industry within the student's major area of study. Variable credit (1-4 cr. hrs. per semester) may be earned dependent upon the number of work hours available from the employing organization. A student may sign up for as many internships as desired, however, the number of credit hours which can be applied towards a degree/certificate depends on the student's course of study and departmental requirements. The maximum number of hours of cooperative internship is 12 credit hours depending upon the program. This course is offered on a pass/no pass basis.

CJ 298
Instructor Skill Development
3 Cr. Hrs. – 3 Contact Hrs. Ⓓ
Prereq: None
Notes: Student must be a certified law enforcement or corrections officer, currently employed by an agency.
This course is designed to impart a wide range of teaching skills, concepts, and techniques specific to the law enforcement trainer. Topics covered include adult learning, training needs, research methodology, instructional methodology, and evaluation techniques.

Dance

DNC 100
Modern Dance I
1 Cr. Hr. – 2 Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
Basic exercises and technique for the beginning student in modern dance. Movement, rhythmic and compositional forms will be studied.

DNC 101
Modern Jazz Dance I
1 Cr. Hr. – 2 Contact Hrs. Ⓕ
Prereq: Meet Ready to Succeed Requirement
Basic dance exercises, technique, and jazz sequences will be taught in this course. Students will gain the ability to recognize appropriate music and various phases of jazz dance history.

DNC 102
Ballet I
1 Cr. Hr. – 2 Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
Beginning and intermediate level ballet dance exercises, techniques, and ballet dance sequences will be taught in this course.

DNC 106
Social Dance
1 Cr. Hr. – 2 Contact Hrs. ⒻⓌ
Prereq: Meet Ready to Succeed Requirement
Beginning dance steps and techniques relating to social dance, including ballroom and contemporary novelty dances. A study of the history, music and rhythms that are related to social dance.

DNC 138
Dance Choreography and Design
2 Cr. Hrs. – Variable Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
Application of choreographic knowledge in the design of a dance work to include the principles of dance composition, direction and performance.

DNC 200
Modern Dance II
1 Cr. Hr. – 2 Contact Hrs. Ⓦ
Prereq: DNC 100
Intermediate work in modern dance composition and technique. History of modern dance is also studied as well as different dance forms used in composing dance.

DNC 201
Modern Jazz Dance II
1 Cr. Hr. – 2 Contact Hrs. Ⓕ
Prereq: DNC 101
Continuation of beginning and intermediate level jazz dance exercises, techniques and sequences will be taught in this course.

DNC 206
Social Dance
1 Cr. Hr. – 2 Contact Hrs. ⒻⓌ
Prereq: DNC 106
Intermediate dance steps, variations, and techniques relating to social dance, including ballroom and contemporary novelty dances. A study of history, music and rhythms that are related to social dance. Field trips to either a dance club or workshop in social dance are offered with this course and an additional fee may be required.

DNC 210 A-D
Repertory Dance Tour Company
2 Cr. Hrs. – 4 Contact Hrs. ⒻⓌ
Prereq: None
Credit will be given for practical work as a dancer for participating in the Repertory Dance Tour Company. This company will tour area schools, organizations, institutions, etc., presenting creative and educational aspects of performing dance. Performing dance positions by audition only prior to class registration.
DNC 210A - First Semester
DNC 210B - Second Semester
DNC 210C - Third Semester
DNC 210D - Fourth Semester

Economics

ECON 101
Principles of Economics
4 Cr. Hrs. – 4 Contact Hrs. **❶❿❺**
Prereqs: Meet Ready to Succeed Requirement and MATH 040

A course appropriate for economics, social science, business administration, and engineering majors, and any other students interested in how their economic system works. This is a course in macroeconomics, which attempts to show how a market system determines levels of employment and unemployment, and the factors affecting inflation and economic growth. Various theories of the macro economy are examined. Government attempts at economic stabilization, including the role of the Federal Reserve System are discussed.

ECON 102
Principles of Economics
4 Cr. Hrs. – 4 Contact Hrs. **❶❿**
Prereqs: Meet Ready to Succeed Requirement and MATH 040

A course in microeconomics, especially suited for social science, business and engineering majors. Various types of competition and how these affect decision making by the firm are discussed. Price and output determination by the firm are also examined. Other topics include the pricing of resources, the role of trade unions, international trade and finance, income distribution and poverty, and the basic characteristics of the economic systems of selected countries other than the United States.

Education

ED 101A
Introduction to Education
3 Cr. Hrs. – 3 Contact Hrs. **❶❿**
Prereq: Meet Ready to Succeed Requirement

A comprehensive survey of preschool, elementary and secondary teaching, stressing objectives and philosophy, student guidance, curriculum study, and methods of teaching. Opportunities to explore professional education as a career, directed observation and professional readings are included. Students are introduced to Muskegon Community College's library; facilities and research techniques are discussed by library staff. Twenty-five hours of fieldwork are required, allowing for practical experience in the field.

ED 106
Introduction to Outdoor Education
2 Cr. Hrs. – 2 Contact Hrs. **❶**
Prereq: None

This course presents information, techniques and activities for exploring the positive relationships between the individual and the natural environment of the outdoor world. It provides students hands-on learning experiences and teaches learning functions of community living and cooperation away from home. Emphasis is placed upon living and learning with children in an outdoor educational environment. Twenty-five hours of on-site fieldwork are required. (May be taken for CDA renewal.)

ED 107
Child Care: Operating a Successful Business
3 Cr. Hrs. – 3 Contact Hrs. **❶**
Prereq: None

Existing licensed centers and child care providers will develop an understanding of administrative and business responsibilities, record keeping, taxes, curriculum development, personnel, parent involvement and the developmental growth needs of child care setting. Twenty-five hours of fieldwork are required. (May be used for CDA renewal.)

ED 109
The Parent-Child Connection
3 Cr. Hrs. – 3 Contact Hrs. **❶❿**
Prereq: None

This course will develop an understanding of the parenting process and present content and research basic to the fundamental concepts, issues and skills in child rearing. Twenty-five hours of fieldwork are required. (May be used for CDA renewal.)

| ❶ By Demand | ❶ Fall | ❿ Winter | ❺ Summer |

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ED 111
Introduction to the Education of Young Children
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: None
Notes: An interview with the program coordinator is required for accptance into this course.

The course is designed to introduce students to the field of early childhood education, and to the certificate programs offered by the Education Department. The education of young children will be examined from a broad perspective. Various philosophies, program models and current trends in early childhood education will be emphasized. Criteria for "safe", "healthy", exemplary early childhood programs, developmentally appropriate practices, and learning environments – including multi-cultural and special needs – will be examined. Training prescriptions will be developed for all students. Field trips to day care centers or preschools, and twenty-five hours of fieldwork are required.

ED 111 is a prerequisite for all students seeking the CDA Certificate.

ED 118
Creative Curriculum for Children
3 Cr. Hrs. – 3 Contact Hrs. Ⓓ
Prereq: None

Program development will be offered in the areas of science, social studies, art, music, outdoor environment, language arts, math, multi-cultural learning, and reading. Instructional techniques, curriculum materials, guidance, school/family relationships, and community resources will be investigated. Twenty-five hours of fieldwork are required. (May be used for CDA renewal.)

ED 120B
Early Childhood Education Curriculum
3 Cr. Hrs. – 4 Contact Hrs. ❶Ⓦ
Prereq: Meet Ready to Succeed Requirement

An introduction to current practices in early childhood education curriculum as related to the total growth and development of young children. Professional staff responsibility, program development, goal setting, scheduling, evaluation and instructional techniques will be investigated. Curriculum material, state standards, learning outcomes, guidance, school-family relationships, community resources and significant child development research will be explored through developmental learning centers. Twenty-five hours of fieldwork are required.

ED 200
Literacy Birth to Five
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: None

Emphasis will be placed on developing literacy in the young child age 0-5 through appropriate practices, processes, and contexts. Theory and Practice will be linked for success; and Evaluating and Directing Learning will occur. Twenty-five hours of fieldwork are required.

ED 202
Teaching of Reading in the Elementary School
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: None

A study of current philosophies, instructional strategies and materials in the teaching of reading from preschool through middle school grades. Lectures, discussions, readings, research, workshops, and classroom observation/participation will be included. Particular interests in reading at specific age/grade levels may be pursued in depth. Twenty-five hours of fieldwork are required.

ED 207
Principles of Elementary Education
3 Cr. Hrs. – 3 Contact Hrs. ❻
Prereq: None

Appropriate for the elementary school curriculum, this course will include educational philosophies, learning theories, teaching strategies, teaching and support staff responsibilities, parent/community/volunteer involvement, curriculum modeling, trends and innovations, behavior management, scheduling and evaluation, multi-cultural learning opportunities, developmental and special learning and growth needs of children with different learning abilities, special topics, and current research. Particular interests at specific age/grade levels may be pursued in depth. Twenty-five hours of fieldwork are required.

ED 210
Child Care and Guidance
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: Departmental approval

This is the culminating course in the early childhood education sequence. Instruction is provided in competency and guidance techniques for the young child. Students will write, have proofed and finalize the six "competency goals." These are required for the credential, in preparation for the final evaluation. Their autobiography and an individualized training prescription will be written by the field advisor following the on-site observation. Counseling, evaluations and recommendations for the completion of the program are provided. A twenty-five hour practicum is required.

ED 211
Behavior Management
3 Cr. Hrs. – 3 Contact Hrs. ❻Ⓦ
Prereq: None

A comprehensive review of the theory and practice of behavior management in applied settings. Emphasis will be placed on the development of entry-level competency in behavior analysis and treatment. This will include, but not be limited to, an introduction to the principles of behavior modification as well as the theories and techniques associated with the psychodynamic, biophysical, and environmental perspectives as they relate to the broad field of behavior management. Eighty percent of the classroom content and discussion will be identifying and targeting strategies applicable to the 0-8 year old age group. Students learn three levels of classroom supports: Universal, Targeted and Intensive. Classroom lecture is supported with evidence-based preactice. Twenty-five hours of fieldwork are required. (May be used for CDA renewal.)

ED 214
Infants and Toddlers
3 Cr. Hrs. – 3 Contact Hrs. ❻Ⓦ
Prereq: None

The development of the newborn to 36-month-old child is examined in this course. Current research practices and publications of leading child specialists are reviewed as they relate to the cognitive, language, social, emotional and sensorimotor growth of the infant and toddler. Twenty-five hours of fieldwork are required.

ED 216
Educating the Exceptional Child and Young Adult
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: None

A comprehensive survey of professional research, practice, trends and laws in the education of people with special needs. Areas of impairment studied include mental, hearing, visual, physical, emotional, and learning disabled. The exceptionality of gifted and talented are examined as well. Twenty-five hours of fieldwork are required. (May be used for CDA renewal.)

ED 219
Science in the Elementary Classroom
3 Cr. Hrs. – 3 Contact Hrs. ❻
Prereq: None

The focus of this course is on learning science concepts and methods relating to the physical environment, and learning to teach the concepts to children. Basic life, earth and physical science content will be taught, as well as instructional methods for application in the elementary school classroom. Students will gain practical knowledge through fieldwork and on-site investigations. The course is designed for prospective elementary school classroom teachers, and is a part of the elementary school curriculum in many colleges. Twenty-five hours of fieldwork are required.

❻ By Demand   ❻ Fall   Ⓦ Winter   Ⓢ Summer

ED 220A
Early Childhood Assessment
2 Cr. Hrs. – 2 Contact Hrs. ❶Ⓦ
Prereq: ED 111
An introduction to techniques and strategies assessing the behavior, achievement and performance of young children. The importance and value of observations of children, types and varieties of assessment, role of assessment in multi-cultural settings, importance of portfolio development and observation systems will be discussed. Twenty-five hours of fieldwork are required.

ED 221
Teaching Students with
Learning and Behavior Problems
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: ED 211
This course is designed to enable students to effectively teach children with learning disabilities and emotional or behavioral impairments. The emphasis is on teaching skills and content areas, methods and procedures, interventions and strategies helpful in educating children at risk. It is highly desirable and recommended for any student who plans to work with special needs children, or in inclusive classrooms. Twenty-five hours of fieldwork are required.

ED 222
Educating the Deaf
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: None
This course deals with the educational, social and psychological implications of deafness. Historical perspectives and contemporary practices in elementary, secondary and post-secondary deaf education will be explored. Causal factors relative to deafness will be investigated along with current developments in treatment. An additional focus of the course will be interpersonal relationships of deaf members. "No-voice" class assignments and examinations will be designed to develop basic competency in receptive (seeing and understanding) and expressive (signing) use of American Sign Language (ASL). The course could be used as an elective in the ASA degree or in any of the Education Department certificate programs. Twenty-five hours of fieldwork with hearing impaired are required. (May be used for CDA renewal.)

ED 223
Child Care Center Administration
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: None
This course is designed for those who wish to begin a child care business as well as those already engaged in working as a child care center director. It deals with the nature of childcare, the challenges and procedures of building a new center, classroom design, and analysis of the problems faced by a start-up business. Emphasis will be placed on solving practical problems by developing a personnel notebook, parent/guardian notebook, center notebook, a budget/business plan, designing room space and being prepared to order age appropriate equipment and materials. Twenty-five hours of fieldwork are required.

ED 225
Child Development
3 Cr. Hrs. – 3 Contact Hrs. ❶ⓌⓈ
Prereq: None
Basic issues in the development of infants and children, and methods of studying children will be discussed. In-depth exploration of the physical, behavioral, psychosocial and cognitive development of children will be viewed from a multi-cultural perspective. This course may be used in addition to, or in place of ED250 (Human Growth and Learning) to fill the requirements of all Education Department certificate and degree programs. It may also be used to meet the academic requirements of C.D.A. certificate renewal. Twenty-five hours of fieldwork are required.

ED 226
Interdisciplinary Approaches to
Early Interventions
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: Meet Ready to Succeed Requirement
This course is a comprehensive review of the needs, services and issues for infants and toddlers ages 0-3 at risk and with special needs. The students will begin to understand/develop a team base and collaborative approaches when working with and providing services to children with special needs. In addition, the role of parents and caregivers will also be emphasized. Twenty-five hours of fieldwork are required, including lab experiences at selected sites.

ED 227
Educational and Assistive Technology
3 Cr. Hrs. – 3 Contact Hrs. **Ⓓ**
Prereqs: Meet Ready to Succeed Requirement, and ED 101A or CIS 100 or CIS 110 or CIS 120A

Notes: If you meet all prerequisites except the CIS portion and have computer experience, please contact the Education Department Chairperson for possible instructor permission. Registration Restriction: You must pass a background check to complete the fieldwork for this class.

This course will explore the use of technology in teaching as a managerial and instructional tool. There will be a focus of communicative technology for special needs students, especially those that fall on the autism spectrum. Evaluation of various software and technology applications will be provided on an experiential basis. This course is designed to meet the requirements of pre-service technology adopted by the State of Michigan for all entry-level teachers. A minimum of twenty-five hours of fieldwork will be required for all students in an autistic classroom or a special needs classroom that includes autistic diagnosed children and/or adults.

ED 228
Creative Curriculum, Infants, Toddlers and Twos
3 Cr. Hrs. – 3 Contact Hrs. **Ⓓ**
Prereq: Meet Ready to Succeed Requirement

This class will provide participants with an overview and thorough understanding of Infant and Toddler Curriculum and its utilization for Infants, Toddlers and Twos. The class will include how to best use a curriculum tool, as well as how to use an assessment piece for curriculum as a means of collecting useful outcomes information that will benefit programs with future planning. A site visit is required if the student has not had one for the ED 120B class. A minimum of twenty-five hours of fieldwork will be required for all students in the area of Infants & Toddlers.

ED 229
Fundamental Concepts of Autism Spectrum
3 Cr. Hrs. – 3 Contact Hrs. **Ⓓ**
Prereq: Meet Ready to Succeed Requirement, ED101A, and either CIS 100 or CIS 110 or CIS 120A

Note: If you meet all prerequisites except the CIS portion and have computer experience, please contact the Education Department for possible instructor permission. Registration Restriction: You must pass a background check to complete the fieldwork for this class.

This course will explore autism from birth through adulthood in four distinctive age groups. It is designed to assist caregivers, family, educators, health care professionals and others in recognizing autistic characteristics and understanding the effects of implementation of early intervention strategies and programs. A minimum of twenty-five hours of fieldwork will be required for all students in an autistic classroom or special needs classroom that includes ASD diagnosed children and/or adults.

ED 230
Children's Literature
3 Cr. Hrs. – 3 Contact Hrs. **ⒻⓌ**
Prereq: None

This course will investigate literature for children, and appropriate learning activities suitable for the preschool, elementary and middle school student. Relationships are explored between child development, school curricula, instructional strategies, language arts, multi-cultural activities, and literature. Particular interests in the practical application of literature with specific age/grade levels may be pursued in depth. Twenty-five hours of fieldwork are required.

ED 231
Introduction to Autism Spectrum Disorders (ASD) Therapies I
3 Cr. Hrs. – 3 Contact Hrs. ❶

Prereq: Meet Ready to Succeed Requirement, ED101A, and either
CIS 100 or CIS 110 or CIS 120A

Note: If you meet all prerequisites except the CIS portion and have computer experience, please contact the Education Department for possible instructor permission. Registration Restriction: You must pass a background check to complete the fieldwork for this class.

This is the first course in a series of two that transmit information on how teachers and others can support and teach students on the ASD (autism spectrum disorder) spectrum. Participants will also learn how we can make life for all persons on the autism spectrum richer and more rewarding. Students will have the opportunity to learn up-to-date, comprehensible, and usable information on autism in order to support those on the spectrum. Students must pass a background check and complete twenty-five hours of fieldwork.

ED 232
Advanced Autism Spectrum Disorders (ASD) Therapies II
3 Cr. Hrs. – 3 Contact Hrs. ❶

Prereq: Meet Ready to Succeed Requirement, ED101A, and either
CIS 100 or CIS 110 or CIS 120A

Note: If you meet all prerequisites except the CIS portion and have computer experience, please contact the Education Department for possible instructor permission. Registration Restriction: You must pass a background check to complete the fieldwork for this class.

This is the second course in a series of two that transmit information on how teachers and others can support and teach students on the ASD (autism spectrum disorder) spectrum. Participants will also learn how we can make life richer and more rewarding for all persons on the autism spectrum. Students will have the opportunity to learn up-to-date, comprehensible, and usable information on autism in order to support those on the spectrum. Students must pass a background check and complete twenty-five hours of fieldwork.

ED 250
Human Growth and Learning
3 Cr. Hrs. – 3 Contact Hrs. ❶❷

Prereq: None

A comprehensive study of the human life cycle will be explored. This course will include all stages of growth and development—from birth to death, language acquisition and information processing, learning theories and basic theoretical models. Domains of cognitive, affective, physical and social development will be explored. Current research in the field will be investigated. Students may pursue in–depth interests in human growth/learning at specific age/grade/ability levels. Twenty-five hours of fieldwork are required. (May be used for CDA renewal.)

ED 251
Health Needs of the Young Child
3 Cr. Hrs. – 3 Contact Hrs. ❷

Prereq: None

The emphasis in this course is on identification, treatment, and prevention of common childhood illnesses, and the promotion of good health, safety and nutrition for the young child. Physical and dental health will be emphasized, along with signs and symptoms of illness within varying age groups. Treatment options and procedures for non-professionals will be discussed. Prevention will be focused on how to promote optimum health, how to prevent injuries, and nutritional requirements of young children. Twenty-five hours of fieldwork are required. (May be used for CDA renewal.) *(This course is also listed as AH 251.)*

ED 252A
Child Development Practicum
3 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereq: ED 210
Note: With instructor permission, ED 110 may be taken as a corequisite.
On-the-job experience under the supervision of the Education Department with cooperating childcare sites. Written materials and performance appraisal required. This course is graded. Early Childhood Education students only.

ED 272
Education Practicum
3 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereqs: ED 101A, ED 109 or ED 211; and ED 225 or ED 250; and instructor permission
This course will provide a 240-hour practical on-the-job experience under the guidance of a supervising teacher and college faculty. Placements will include a K-12 setting and give a prospective in preparing for various education environments and student needs.

Education-Related

(These courses may be used for CDA renewal.)

ART 211
Art Education Workshop
3 Cr. Hrs. – 6 Contact Hrs. Ⓓ
Prereq: Meet Ready to Succeed Requirement
Experience through studio work with art materials and methods appropriate to grade school use.

MATH 105
Mathematics for Elementary Teachers
4 Cr. Hrs. – 4 Contact Hrs. ⒻⓌ
Prereq: MATH 100A (Formerly MATH 050); Minimum Grade of "C"
Not a "methods" course. A general course for students majoring in elementary education. The basic ideas behind our number system and geometric concepts are discussed. Topics include: problem solving, sets, system of numeration, the real number system, geometry and metric measure.

MU 192
Music for the Classroom Teacher
4 Cr. Hrs. – 4 Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
Coreq: MU 190C
This course is required for future elementary classroom teachers. No previous musical training is necessary. The course provides a background in the fundamental elements of music through singing, playing classroom rhythm and melody instruments, recorder and autoharp. Includes introduction to methods of teaching music, observation and participation in area schools.

PEP 201
Elementary Physical Education for the Classroom Teacher
2 Cr. Hrs. – 2 Contact Hrs. ⒻⓌ
Prereq: None
A theory and activity course designed to acquaint the prospective classroom teacher with planning and teaching his/her own physical education program. Concepts of program planning plus practical experience in teaching varied levels of physical education activities are included. This course is required for physical education majors and suggested for elementary education majors.

PSYC 202
Educational Psychology
3 Cr. Hrs. – 3 Contact Hrs. ⒻⓌ
Prereq: PSYC 201; Minimum Grade of "C"
This course explores interrelationships between the fields of psychology and education. Research data, learning theories, cultural pluralism and special topics reflective of current educational change are examined. Particular interests in educational psychology at specific age/grade levels may be pursued in depth. Forty-five hours of classroom experience in the public/private schools will be required. Exceptions to be approved by the instructor.

Electricity

ELTC 101L&L
Electricity-Basic
3 Cr. Hrs. – 4 Contact Hrs. ❶Ⓦ❸
Prereq: None

This course is not a requirement of the Electronics Technology Program. A theory and activity course designed to introduce the basic relationships between voltage, current, and resistance. Topics include: soldering, DC circuits, volt-ohm-amp meter operation, alternating current, relays, ladder diagrams, residential wiring, and safety. Practical laboratory experiments reinforcing the above topics are provided.

ELTC 103
Residential Wiring
3 Cr. Hrs. – 4 Contact Hrs. ❶
Prereq: ELTC 101 or ELTC 101L&L

A study of the layout, installation and testing of electrical components and circuits found in residential wiring. Extensive hands-on assignments are combined with the application of the current National Electrical Code governing residential wiring.

ELTC 150
Industrial Electricity
3 Cr. Hrs. – 4 Contact Hrs. ❶Ⓦ
Prereq: ELTC 101L&L or ELTC 101;
Minimum Grade of "C"

This course is intended for electrical maintenance personnel with some previous electrical experience or coursework. It will review basic DC and AC electrical theory and components, safety, use of test instruments and electrical symbols. Other topics include: ladder diagrams, control circuits, starters, contactors, relays and overload devices. "Troubleshooting" will be emphasized and there will be an introduction to the use of programmable controllers for machine control.

ELTC 152
National Electrical Code
3 Cr. Hrs. – 3 Contact Hrs. ❸
Prereq: None

This course covers the National Electrical Code as currently adopted by the State of Michigan. Designed for the apprentice electrician, this course is also approved by the State of Michigan for the required upgrade for Journeymen and Master Electricians.

ELTC 160L&L
Programmable Controllers
3 Cr. Hrs. – 4 Contact Hrs. ❶Ⓦ
Prereq: ELTC 150

This course introduces the concept of machine control through programmable controllers. Program design, controller operation, wiring techniques, programming techniques, and applications are examined; related lab exercises will be conducted with Allen-Bradley SLC 500 controllers and RSLogix 500 Software.

ELTC 203
Advanced Programmable Controllers
3 Cr. Hrs. – 4 Contact Hrs. ❸
Prereq: ELTC 160L&L

This course is a continuation of ELTC 160L&L. Applications and programming of advanced instructions from the Allen-Bradley SLC 500/ MicroLogix 1000 instruction set are covered. Topics include data handling, logic functions, bit shift/sequencer functions, math operations, analog I/O, subroutine files and interrupts.

Electronics

ELTR 101
Electronics-Basic
4 Cr. Hrs. – 6 Contact Hrs. ❶
Prereq: None
Coreq: ELTR 111
Topics include: series and parallel circuits, batteries, electromagnetism, conductors, insulators, volt-ohm-amp-meters, oscilloscopes, capacitance, inductance, resonance, impedance matching, and transformers. Laboratory experiments reinforcing the above topics are provided. This course covers: familiarity with common hand tools, safety practices, soldering, use and care of common laboratory equipment.

ELTR 102A
Active Devices and Circuit Analysis
4 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereqs: ELTR 111, and ELTR 101 or ELTR 101L&L
This is a course in solid state devices and circuits. It includes performance measurements, device testing, multi-stage amplifiers, coupling techniques, amplifier design, and feedback principles. Some devices covered are BJT's, JFET's, MOSFET's, and diodes. Laboratory experiments will be required.

ELTR 109
Personal Computer Maintenance
2 Cr. Hrs. – 2 Contact Hrs. ❶Ⓦ
Prereq: CIS 110 or CIS 120A
This course provides students with skills needed in the upgrading and maintenance of personal computers. Students will learn how to install integrated circuits for memory into a computer's motherboard, upgrade video displays and drivers, upgrade disk controller boards, replace disk drive, install a multimedia system, and perform diagnostic tests on equipment. Common system problems will also be covered as part of hands-on troubleshooting using Intel-based computers. *(This course is also listed as CIS 109.)*

ELTR 111
Electronics Mathematics
5 Cr. Hrs. – 5 Contact Hrs. ❶
Prereq: TMAT 101A or MATH 040
Coreq: ELTR 101
One year high school algebra recommended. This course gives the beginning electronics student the mathematical skills necessary to solve electronic problems. Topics include: basic algebra, series and parallel circuits, direct and alternating current solutions, Kirchoff's loop equations, Thevinin's Theorem, right triangle trigonometry, vector algebra, logarithmic and exponential equation solution.

ELTR 112
Digital Electronics I
3 Cr. Hrs. – 4 Contact Hrs. Ⓦ
Prereq: None
Digital Electronics I is the first course in a three-semester sequence of digital courses. Content includes number systems, codes, logic gates, Boolean algebra and combinational logic circuits. Relevant laboratory experiments will be required of students each week.

ELTR 202A
Industrial Electronic Systems
4 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereq: ELTR 102 or ELTR 102A
The advanced study of electronic circuits and their application to the control of industrial and commercial equipment and processes. The design, construction and analysis of operational circuits includes power supplies, SCRs, UJTs, diacs, triacs, phototransistors, relays, programmable controllers, timing circuits and motors with their associated control circuits. Proper procedures are stressed in laboratory assignments which are designed to provide practical experiences for the student.

COURSE DESCRIPTIONS

ELTR 209
Personal Computer Maintenance II
(A+ Certification)
3 Cr. Hrs. – 5 Contact Hrs. ❶Ⓦ
Prereq: ELTR 109 or CIS 109
This course is designed to take the successful PC Maintenance student to the next, more in-depth level of PC Maintenance and Repair. The Web presentations, text assignments, demonstrations, and related CD-ROM teaching materials will help prepare the student to be competent to pass the A+ Certification written exam. The related labs will provide the needed hands-on experience to develop system understanding and competent analysis and repair procedures. Lab experience will include the building of a complete computer system, with troubleshooting and analysis of the system. It is recommended that CIS 143 be taken to provide more network background before taking the A+ exam. *(This course is also listed as CIS 209.)*

ELTR 211A
Microcomputer Interfacing
3 Cr. Hrs. – 5 Contact Hrs. Ⓦ
Prereqs: ELTR 205 and ELTR 210
The third in a series of digital courses in which principles and techniques of interfacing a microprocessor to special peripheral hardware are examined. The student will design and construct circuits to interface data converters, stepper motors, and AC/DC loads to a variety of I/O port configurations.

ELTR 212
Medical Instrumentation and Measurement
4 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereqs: ELTR 205 and AH 101
This course introduces the student to operating and servicing basic medical instrumentation such as EEG, ECG, defibrillators, safety analyzers, etc. Basic physiological signals and terminology are covered. Typical medical equipment circuits are constructed and tested. Electrical safety is emphasized.

Engineering

MCC offers the pre-engineering courses required by all ABET accredited engineering schools in Michigan. A BSE in Manufacturing Engineering is available from Western Michigan University on the MCC campus.

ENGR 105 Introduction to Engineering

4 Cr. Hrs. – 4 Contact Hrs. **F**
Prereq: MATH 100A (Formerly MATH 050)

An introduction to the engineering profession and to its various disciplines; to the professional skills required of engineers; including oral and written communications, ethics of the profession, and team building and teamwork; and to the design process. Video presentations of professional activities and studies will be shown.

ENGR 202 Statics

3 Cr. Hrs. – 3 Contact Hrs. **F**
Prereqs: PHYS 203L&L and MATH 162; Minimum Grade of "C" in each

A study of force systems in two and three dimensions. Composition and resolution of forces and force systems, principles of equilibrium applied to various bodies, simple structures, friction, centroids, moments of inertia. Vector algebra is used where appropriate. Graphing calculators will be utilized.

ENGR 204 Engineering Dynamics

3 Cr. Hrs. – 3 Contact Hrs. **W**
Prereq: ENGR 202

Vector description of force, position, velocity, and acceleration in fixed and moving reference frames. Kinematics and kinetics of particles, assemblies of particles and rigid bodies. Includes translation, plane motion, rotation, impulse-momentum and work-energy methods. Introduction to vibrations and time response. Graphing calculators will be utilized.

COURSE DESCRIPTIONS

English

ENG 085
Essential Writing Skills
2 Cr. Hrs. – 3 Contact Hrs. 🄵🅦🅂
Prereq: None
This course will prepare the student for ENG 091 or ENG 101. Essential Writing Skills is an equivalent to ENG 089, but is offered in a classroom setting. The student will work on writing skills, learn the writing process, practice group editing, and study basic sentence structure.

ENG 089
Refresher English
2 Cr. Hrs. – 2 Contact Hrs. 🄵🅦🅂
Prereq: None
Refresher English offers an individualized introduction to basic writing through process oriented instruction. The self-paced course covers basic skills, including sentence structure, writing journals, paragraphs, and essays.

ENG 091
Introduction to English Composition
3 Cr. Hrs. – 4 Contact Hrs. 🄵🅦🅂
Prereq: ENG 085 or ENG 089;
Minimum Grade of "C"
A course in which students concentrate on mastering basic principles of English grammar, sentence structure, punctuation, usage, and mechanics. Emphasis is placed on writing clear sentences, effectively developed paragraphs, and short essays. The course is intended to prepare students for English 101 or BCOM 101 as well as to assist them in other college courses in which writing is required. This course includes a one-hour laboratory to be used for group instruction or individual instruction as deemed necessary by the instructor, and assumes entry level computer skills of each student.

COURSE DESCRIPTIONS

READY TO SUCCEED

Before enrolling in many courses, you must meet the READY TO SUCCEED
reading competency requirement by test scores or course completion.

COMPASS	Reading score of 76 or higher *(Not valid after 5 years)*
ACT	Reading score of 19 or higher
MME	1 or 2 on both Reading and Writing
College Credits	15 College credits (100-level or higher) with cumulative 2.0 or higher GPA
Reading Course	Earning a "C" grade or better in Reading 040 or Reading 050

READING

COMPASS Reading	ACT Reading	MME	Placement
76-100	19 or higher	Level 1 or 2 on Reading & Writing	No Reading course required. *(**Ready to Succeed** requirement has been met.)*
56-75	18	N/A	RDG 050
11-55	12-17	N/A	RDG 040
0-10	N/A	N/A	See a Counselor

*Note: **COMPASS** test scores are not valid after **5 years**.*

WRITING

COMPASS Writing	ACT Writing	MME	Placement
80-100	19 or higher	Level 1 or 2 on Reading & Writing	ENG 101 or BCOM 101 *(**Ready to Succeed** requirement must still be met.)*
69-79	18	N/A	ENG 101 or BCOM 101 and ENG 114 *(**Ready to Succeed** requirement must still be met.)*
31-68	N/A	N/A	ENG 091
11-30	N/A	N/A	ENG 085 or ENG 089
0-10	N/A	N/A	See a Counselor

*Note: **COMPASS** test scores are not valid after **5 years**.*

COURSE DESCRIPTIONS

ENG 101
English Composition
3 Cr. Hrs. – 4 Contact Hrs. **F W S**
Prereqs: Meet Ready to Succeed Requirement and
ENG 091; Minimum Grade of "C"
A course in which students will develop the abilities to read critically, to think logically, to discuss intelligently, and primarily to write effectively using exposition, argumentation, and research. A grade of "C" or better is required to enter into English 102.

ENG 102
English Composition
3 Cr. Hrs. – 3 Contact Hrs. **F W S**
Prereq: ENG 101; Minimum Grade of "C"
A course in which the student will develop the ability to interpret and criticize a variety of literary forms, especially fiction, drama and poetry. Students will discuss these works and write critical essays.

ENG 114
Refresher English
1 Cr. Hr. – 1 Contact Hr. **F W S**
Prereq: None
Notes: COMPASS writing score of 69-79, or ACT
writing score of 18 is required
This writing course is designed to improve basic skills so that students can successfully complete college level writing assignments. Emphasis is placed on sentence writing, punctuation, paragraph development, and research skills. This course is individualized and self-paced. It should be taken before or at the same time as English 101 or BCOM 101.

ENG 130
Introduction to Women's Studies
3 Cr. Hrs. – 3 Contact Hrs. **F W S**
Prereqs: Meet Ready to Succeed Requirement and
ENG 091; Minimum Grade of "C"
This is a fundamentals course in which students study women's diverse experiences, perspectives, and contributions by examining cultural beliefs and stereotyped images of women and their roles in different times and places. Interdisciplinary in its range of course content, This course explores representations of women and their efforts to define new identities through work, creative activity, and feminism, both historically and at present. The course covers socialization, sexuality, the history of the women's liberation movement, and different perspectives in feminism. Course goals: raise awareness, make connections, read, think, and write critically, and apply course knowledge and issues to personal experiences. *(This course is also listed as WS 101.)*

ENG 199A
Personalized Writing
1 Cr. Hr. – 1 Contact Hr. **F W S**
Prereq: None
Personalized Writing is an individualized course to expand writing skills. Students pursue a self-paced study emphasizing specific skills needed at work, in school, or in everyday life. Course content depends on individual needs. Students meet once a week with an instructor for direction, instruction, and encouragement.

ENG 199B
Personalized Writing
2 Cr. Hrs – 2 Contact Hrs. **F W S**
Prereq: None
Similar to ENG 199A.

ENG 200
Literature of Western Civilization
3 Cr. Hrs. – 3 Contact Hrs. **F**
Prereq: ENG 102
An intensive study of selected major literary works of Western Civilization from 2600 B.C. through the Renaissance.

ENG 201
Literature of Western Civilization
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: ENG 102
A continuation of English 200. Study of world literary classics from the Renaissance until modern times.

ENG 204
Introduction to Fiction
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: ENG 102
Note: With instructor permission, ENG 102 may be taken as a corequisite.
An analytical study of novels, novellas and short stories ranging from Robinson Crusoe to modern African short stories with the purpose of developing and enlarging an understanding of and appreciation for cross-cultural literary forms and fiction itself.

ENG 205
Introduction to Poetry
3 Cr. Hrs. – 3 Contact Hrs. Ⓓ
Prereq: ENG 102
An introduction to the study of poetry with the purpose of developing critical values and the ability to read with understanding and appreciation. Students will each select a poem by a leading English or American poet as the basis of a major critical study.

ENG 206
Introduction to Drama
3 Cr. Hrs. – 3 Contact Hrs. Ⓓ
Prereq: ENG 102
A study of representative dramas and theaters from Greek to modern times.

ENG 207
Diverse Voices
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: ENG 102
Note: With instructor permission, ENG 102 may be taken as a corequisite.
This course focuses on literature of multicultural origins: ethnic voices from America, representative fiction from Japan, India, Russia, Africa, South and Central America, Western Europe and developing national communities. This course analyzes the literature from these varied cultures by exploring ethnic, aesthetic, and thematic cultural inspirations.

ENG 208
Introduction to Cinema
3 Cr. Hrs. – 3 Contact Hrs. ⒻⓌⓈ
Prereq: ENG 102
An introduction to the art of the film; the course will include representative foreign and domestic films, at least one documentary film, and several (2-4) experimental and/or underground films. In addition to thematic study of films, the course explores the various elements of movie-making; script, light, sound, color, acting, directing, and editing. *(This course is also listed as COM 203.)*

ENG 210
The Nature of Language
3 Cr. Hrs. – 3 Contact Hrs. Ⓢ
Prereq: ENG 102
Introduction to the English language through a study of its history and characteristics as described by structural and transformational grammarians and cultural mavens.

ENG 211
World Mythology
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: ENG 102
Overview of representative Greco-Roman, Middle Eastern, Norse, English, Pacific Island, Indian, Chinese, Japanese, African, South American, Native American mythology and epics. Surveyed for understanding of creation, Fertility and Hero myths and their meaning in our cultural and personal attitudes and ideas.

ENG 213
Literature of Shakespeare
3 Cr. Hrs. – 3 Contact Hrs. ⒻⓌ
Prereq: ENG 102
Overview of Western Civilization's most respected and famous author, William Shakespeare. The course explores several plays and poems in depth as well as the culture and traditions of Shakepeare's England. In addition, students will discover Shakespeare's influence on our contemporary world. Field trips are anticipated (optional).

ENG 218
Popular Literary Genres:
Horror, Fantasy and Science Fiction
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: ENG 102
This course focuses on three genres of literature possessing rich histories in the development of folklore, literary forms, and literary criticism, as well as abundant connections with the development of popular culture in the twentieth and twenty first centuries. The class will read five novels spanning these genres, as well as selected short works of fiction and commentary by authors and critics active in these fields. In addition, films with connections to the literature will be viewed to better understand the themes expressed in the literature and their popular reception in a visual medium.

ENG 221
Advanced Writing
3 Cr. Hrs. – 3 Contact Hrs. Ⓓ
Prereq: ENG 102
A writing "workshop" course designed to introduce students to the practice of expository prose. Students will read and write in a variety of essay forms – from personal narratives to critical reviews –as well as critique each other's work.

ENG 222
Creative Writing
3 Cr. Hrs. – 3 Contact Hrs. Ⓕ
Prereq: ENG 102
Written recommendation of the freshman composition instructor may be required. The study of writing techniques as well as actual writing and critical discussion of various types of short fiction are stressed. Students are encouraged to take a literature course prior to enrolling in this writing-intensive course.

ENG 223
Poetry Writing Seminar
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: ENG 102
An informal forum in which students experiment writing their own poetry. It includes the study of open forms and patterned forms. Students discuss each other's work as well as the works of modern and contemporary poets.

ENG 225
Major American Writers/
American Literature I
3 Cr. Hrs. – 3 Contact Hrs. Ⓕ
Prereq: ENG 102
This course is a study of representative literature of the United States from the earliest settlement to 1865. Serving both the historical and critical perspectives, the focus is upon certain recurring themes which have grown out of the American experience and their continuing relevance for today's student.

ENG 226
Major American Writers/
American Literature II
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: ENG 102
Note: With instructor permission, ENG 102 may be taken as a corequisite.
Continuation of English 225, from the Civil War to the present.

ENG 227
British Literature 1 (673-1744)
3 Cr. Hrs. – 3 Contact Hrs. Ⓕ
Prereq: ENG 102
In British Literature I (673-1744), students will survey the realm of British literature and discuss its forms, functions, meanings and themes. Students will write formal and informal interpretations of the writings and complete essays and take two exams.

ENG 228
British Literature II (1750-today)
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: ENG 102
Notes: With instructor permission, ENG 102 may be taken as a corequisite. Prior completion of ENG 227 is recommended.
In British Literature II (1750-today), students will survey the realm of British literature and discuss its forms, functions, meaning and themes. Students will write formal and informal interpretations of the writings and complete essays and take two exams.

ENG 231
Themes in Women's Literature
3 Cr. Hrs. – 3 Contact Hrs. ❺
Prereq: ENG 102

This course examines women in contemporary American culture viewed from literary, historical, psychological, political, sociological and multicultural perspectives. The course explores the variety of writing styles women have used to think about issues such as the search for identity, power, societal roles, relationships and conflict, marriage, sexuality, treatment as the other, responses to patriarchy, achievement, and daily life. Students will be exposed to contemporary feminist criticism and encouraged to think critically about the impact of gender on literature, expression, and experience.

ENG 234D
Library Skills/Research Skills
1 Cr. Hr. – 1 Contact Hr. ⓓ
Prereq: ENG 101

This course is designed to acquaint the student with resources available in the library: print, electronic resources, online databases, and the Internet. It will give the student basic knowledge for developing search strategies, conducting research, evaluating source material, and compiling an extensive bibliography.

ENG 250
Poetry Workshop
3 Cr. Hrs. – 3 Contact Hrs. ⓓ
Prereq: None

Generally a summer offering with specialists in poetry. Workshop includes writing and criticism. May be elected for a maximum of six credits over a period of two summers - three credits per summer.

Foreign Languages

Chinese

CHIN 101
Basic Chinese
4 Cr. Hrs. – 4 Contact Hrs. ❺
Prereq: Meet Ready to Succeed Requirement and ENG 091

This is a basic introduction to the Chinese Mandarin language. This course is designed for students who have little or no experience with Chinese. It aims to help students develop the four basic language skills of listening, speaking, reading and writing Chinese. Students will learn Pinyin (the Chinese sound system) as a tool to pronounce Chinese characters. The focus of the course will be learning Chinese characters, vocabulary, grammar and cultural information. Students are required to participate in a Cultural Observation Project (e.g. field trip to a Chinese restaurant) which requires active participation in the target language. The field trip will occur during class time when possible.

French

FR 101
Basic French
4 Cr. Hrs. – 4 Contact Hrs. ❺
Prereq: Meet Ready to Succeed Requirement and ENG 091

This is a beginning course for students who have had no previous study of French. The emphasis is on developing communication in French through listening, speaking, reading and writing activities.

FR 102
Basic French
4 Cr. Hrs. – 4 Contact Hrs. ⓦ
Prereq: FR 101; Minimum Grade of "C" or successful completion of two recent years of high school French and instructor permission

A continuation of FR 101. The student continues to develop the capacity to understand, speak, read and write French.

FR 201
Intermediate French
4 Cr. Hrs. – 4 Contact Hrs. ❶
Prereq: FR 102; Minimum Grade of "C" or
successful completion of three recent
years of high school French and instructor
permission

This second year course is designed to improve the four basic skills begun in the first year. This course reviews and reinforces material learned in the first year, examines more tenses and other aspects of grammar, and provides practice in expanding capabilities in reading, writing, speaking and understanding French.

FR 202
Intermediate French
4 Cr. Hrs. – 4 Contact Hrs. ❶
Prereq: FR 201; Minimum Grade of "C" or
successful completion of four recent years
of high school French and instructor
permission

This course is a continuation of FR 201.

German

GER 101
Basic German
4 Cr. Hrs. – 4 Contact Hrs. ❶❾
Prereqs: Meet Ready to Succeed Requirement and
ENG 091

This course is the first semester of a communicative language course to promote proficiency and practical competence in elementary German. It will focus on the essential elements of effective communication by teaching skills in listening, speaking, reading and writing. It will also provide cultural insights into life in German-speaking countries.

GER 102
Basic German
4 Cr. Hrs. – 4 Contact Hrs. ❾
Prereq: GER 101; Minimum Grade of "C" or
successful completion of two recent years
of high school German and instructor
permission

This course is a continuation of GER 101 with continued emphasis on communication and proficiency.

GER 201
Intermediate German
4 Cr. Hrs. – 4 Contact Hrs. ❶
Prereq: GER 102; Minimum Grade of "C" or
successful completion of three recent years
of high school German and instructor
permission

This is the first semester of an intermediate level German course, which stresses skills to help the student communicate competently and appropriately in various situations in German. It reflects the American Council on the Teaching of Foreign Languages (ACTFL) proficiency guidelines. Listening, speaking, reading and writing skills will be strengthened by using authentic, contemporary information.

GER 202
Intermediate German
4 Cr. Hrs. – 4 Contact Hrs. ❶
Prereq: GER 201; Minimum Grade of "C" or
successful completion of four recent years
of high school German and instructor
permission

This is a continuation of GER 201 with expansion of communicative and proficiency abilities, contemporary cultural information, and grammatical knowledge.

Spanish

SPAN 090
Workplace Conversational Spanish I
3 Cr. Hrs. – 3 Contact Hrs. ❶❷
Prereq: None

This course offers an introduction to the Spanish language with particular emphasis on pronunciation, workplace greetings, farewells, courtesies, basic grammar principles, numbers, and cultural concepts as applicable to the workplace setting. Enrollment in SPAN 090 does not require the ready to succeed prerequisite.

SPAN 091
Workplace Conversational Spanish II
3 Cr. Hrs. – 3 Contact Hrs. **Ⓓ**
Prereq: SPAN 090

A continuation of Workplace Conversational Spanish I, this course provides students with the knowledge, vocabulary, and linguistic structures necessary to use Spanish immediately in real world interactions at the beginner level. Particular emphasis is placed on workplace conversation. Students also learn about the culture and customs of Spanish speaking countries as they relate to the workplace

SPAN 101
Basic Spanish
4 Cr. Hrs. – 4 Contact Hrs. **ⒻⓌⓈ**
Prereqs: Meet Ready to Succeed Requirement and ENG 091

This course is for students with little or no experience with Spanish. It is designed to help the student achieve a minimal oral capability, to comprehend the structure of the language, and to develop moderate reading and writing skills. There is no laboratory requirement, but the student is required to spend five sessions with a native speaker, when available, for group conversation practice. There will be occasional sessions on cultural matters.

SPAN 102
Basic Spanish
4 Cr. Hrs. – 4 Contact Hrs. **ⒻⓌⓈ**
Prereq: SPAN 101; Minimum Grade of "C" or successful completion of two recent years of high school Spanish and instructor permission

The student continues to develop the capacity to read, write, speak and understand Spanish. There will be occasional sessions on cultural matters. The grammatical emphasis is on identifying and using the various tenses. There is no laboratory requirement, but the student is required to spend five sessions with a native speaker when available for group conversation practice.

SPAN 150
Intensive Basic Spanish
4 Cr. Hrs. – 4 Contact Hrs. **Ⓕ**
Prereq: ENG 091, or be eligible for ENG 101 based on Compass placement test results, or successful completion of 3 or more years of high school Spanish and instructor permission, or speak Spanish natively

This course provides a rapid review of the grammar concepts and vocabulary covered in SPAN 101 and SPAN 102. It is intended for students who have completed at least three years of high school Spanish who feel they are not ready for a 200 level college Spanish course. It is also appropriate for native speakers of Spanish who wish to review the grammar. Unless the student has instructor permission, this course is not open to students who have completed SPAN 101 or SPAN 102. Students who successfully complete SPAN 150 are not eligible to take SPAN 101 or SPAN 102.

SPAN 201
Intermediate Spanish
4 Cr. Hrs. – 4 Contact Hrs. **ⒻⓌ**
Prereq: SPAN 102 or SPAN 150; with a minimum grade of "C", or successful completion of three recent years of high school Spanish and instructor permission

This course reviews and reinforces the material learned in the first two semesters, examines more tenses and other aspects of grammar, and provides practice in expanding capabilities in reading, writing, speaking and understanding Spanish. There is no laboratory requirement, but the student is required to spend five sessions with a native speaker, when available, for group conversation practice. There will be occasional sessions on cultural matters.

SPAN 202
Intermediate Spanish
4 Cr. Hrs. – 4 Contact Hrs. **Ⓦ**
Prereq: SPAN 201; Minimum Grade of "C" or successful completion of four recent years of high school Spanish and instructor permission

This course focuses on the remaining tenses and on the subjunctive mood. The student will have more opportunities to develop skills in reading, writing, speaking and understanding Spanish. There is no laboratory requirement, but the student is required to spend five sessions with a native speaker, when available, for group conversation practice. There will be occasional sessions on cultural matters.

French

(See Foreign Languages)

Geography

GEOG 101A
Physical Geography
4 Cr. Hrs. – 5 Contact Hrs. 🅕🅦
Prereq: Meet Ready to Succeed Requirement
This integrated lecture and lab is a course study in Earth Systems Science; the atmosphere, hydrosphere, and surface features of the lithosphere. The coursework focuses on the development of geographic models and their use as a tool to explain phenomena in man's physical environment.

GEOG 104
Cultural Geography
3 Cr. Hrs. – 3 Contact Hrs. 🅕🅦
Prereq: Meet Ready to Succeed Requirement
A study of the world's people and how they occupy the earth. Important topics include: population density and distribution, languages, religions, political systems and international relations, economic systems, and urbanization. Emphasis will be placed on spatial thinking and global interconnectedness.

GEOG 105
World Regional Geography
3 Cr. Hrs. – 3 Contact hrs. 🅕🅦
Prereq: Meet Ready to Succeed Requirement
An introductory examination of the major cultural realms of the world—areas which share similar cultural and economic conditions. The physical environment and human impact on that environment will also be studied for each region. Units of study may include: Anglo-America, Europe, Russia and her neighbors, sub-Saharan Africa, North Africa/Southwest Asia, Monsoon Asia, East Asia, and middle and South America. Emphasis will be placed on spatial thinking and global interconnectedness. A previous course in physical or human geography would be helpful, but is not mandatory.

GEOG 215
Introduction to Weather and Climate
4 Cr. Hrs. – 5 Contact Hrs. 🅕🅦
Prereq: Meet Ready to Succeed Requirement
Notes: Completion of MATH 040, GEOG 101A, and the knowledge of basic computer skills, including the ability to manipulate images, are recommended foundations
This integrated lecture and lab is an introductory study of the atmosphere which includes both weather and climate. Fundamental physical laws governing weather elements will be examined; such as solar radiation, temperature, moisture, pressure, winds, and weather systems. Current weather data is delivered via the internet, which is coordinated with learning activities. Students will be introduced to the excitement of weather in near real-time. Broad aspects of climates and local microclimatology will also be integrated. An optional field trip to the National Weather Service Office, Grand Rapids may be offered.

GEOG 230
Elements of Map Design
3 Cr. Hrs. – 3 Contact Hrs. 🅓
Prereqs: Meet Ready to Succeed Requirement and MATH 040
This course is an introduction to the fundamental principles of cartographic design. Students will learn the language of geography through course activities that include concepts of space, tools of map representation, and process reasoning as related to base map development. Acquisition of geographic data, geographical mathematics, and map reading and analysis skills will be developed as a foundation for further geospatial studies. Skills and concepts will be presented through professional quality maps and charts.

GEOG 231
Introduction to Geographic Information Systems
3 Cr. Hrs. – 3 Contact Hrs. **Ⓓ**
Prereqs: Math 040 and CIS 120A and GEOG 230
Note: Concurrent enrollemnt in GEOG 230 with instructor permission

This course provides an in-depth introduction to the fundamentals of Geographic Information Systems (GIS) with applications to a variety of problems using established data sources and repositories. A review of the necessary hardware and software elements used in GIS will be made. Various applications of GIS technology used in environmental science, business and government will also be presented. Specific topics taught will include an understanding of GIS terminology, raster and vector data sources, accuracy, methods of data acquisition, conversion and input, requirements for metadata, working with spatial databases and spatial analysis. The course will include production of professional quality maps using ArcView software. This is a course in a curricular sequence developing GIS professional expertise.

GEOG 232
Applications of Geographic Information Systems
3 Cr. Hrs. – 3 Contact Hrs. **Ⓓ**
Prereq: GEOG 231

This course is a continuation of GEOG 231 Specific topics will include geospatial data acquisition and analysis, methods of aerial data acquisition, conversion and input, further work with geodatabases and spatial analyses. During this course applications of GIS to a variety of problems using established data sources and repositories will be conducted. Various applications of GIS technology used in environmental science, business and government will also be presented. The course will include production of professional quality maps using ArcView software. This is a course in a curricular sequence developing GIS professional expertise.

GEOG 290CI
Cooperative Internship
Variable Credit Hrs. **Ⓓ**
Prereqs: GEOG 231 and instructor permission
Note: Student must have a GPA of 2.5 or better

The Cooperative Internship Program is a paid or non-paid fieldwork experience in geospatial technology skills using geographic information systems, remote sensing, and/or global positioning systems technologies. Variable credit hours may be earned dependent upon the number of work hours available from the employing organization. A student may sign up for as many internships as desired; however, the number of credit hours which can be applied towards a degree/certificate depends on the student's course of study, certificate and departmental requirements. This course is offered as a pass/no pass grade. The internship course starting and ending dates are determined on an individual basis.

Geology

GEOL 101A
Introduction to Physical Geology
4 Credit Hrs. – 5 Contact Hrs. ❶Ⓦ
Prereq: Meet Ready to Succeed Requirement
This integrated lecture and lab is a scientific study of the materials, structures and systems of the planet Earth. Students will investigate the processes affecting the interior and exterior of the Earth, and the rocks, minerals, and structures produced by these processes. The course may include a one-day weekend field trip, weather permitting.

GEOL 102
Introduction to Earth History
4 Credit Hrs. – 5 Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
This integrated lecture and lab is an introduction to the geologic history of the planet Earth and its life forms. Based on the unifying theories of plate tectonics and organic evolution, the course presents the evidence used by geologists to reconstruct Earth's ancient environments and organisms, and establishes connections between Earth's past and present environments. The course may include a one-day weekend field trip, weather permitting.

GEOL 201
Oceanography
4 Cr. Hrs. – 4 Contact Hrs. ❶
Prereq: Meet Ready to Succeed Requirement
Oceanography is the study of the oceans through the lens of many different scientific disciplines. This course emphasizes geological, chemical, physical, and biological aspects of oceanography and how these systems interact and influence one another. Topics range from air-sea gas exchange and its influence on global climate, to the differences between waves and tsunamis and what causes them to occur, to life in the ocean and how it is influenced by geologic, chemical, and physical processes in the ocean. As part of the course field trip participation may be required.

German

(See Foreign Languages)

Graphic Design

GRD 100ID
Introduction to InDesign
1 Cr. Hr. – 2 Contact Hrs. ❶Ⓢ
Prereq: None
This course will provide an introduction to Adobe InDesign. Students will be introduced to menu items, tools and palettes in contemporary page layout software, InDesign. Students will learn basic layout tools and palettes. Students will learn the most common quick key strokes, color modes and palettes. Students will create basic layout and designs using InDesign, including importing text and images, creating multi-page layouts using master pages and importing text from Word documents.

GRD 100IL
Introduction to Illustrator
1 Cr. Hr. – 2 Contact Hrs. ❶ⓌⓈ
Prereq: None
This course will provide an introduction to contemporary design software, Adobe Illustrator. Students will be introduced to menu items, tools, and palettes in Illustrator. Students will learn basic drawing tools and manipulation of points and paths to create imagery. Students will learn the most common quick key strokes, color modes, and palettes. Students will create basic layout and designs using Illustrator.

COURSE DESCRIPTIONS

GRD 100PS
Introduction to Photoshop
1 Cr. Hr. – 2 Contact Hrs. ❶❷❸
Prereq: None

This course will provide an introduction to Adobe Photoshop. Students will be introduced to menu items, tools, and palettes in the image editing software, Photoshop. Students will learn basic tools, palettes, and quick keys strokes. Students will learn different color modes, palettes, filter effects, and layers usage. Students will manipulate basic images using image editing techniques specific to Photoshop.

GRD 107
Image Assembly
2 Cr. Hrs. – 4 Contact Hrs. ❷
Prereq: None

Image assembly is a lecture/laboratory course which places major emphasis on precision hand work and correct interpretation of job specifications as they relate to the assembly of film and electronic images. Extensive computer file manipulation will be stressed as well as page imposition. In addition to making files ready for output, page imposition software will be used.

GRD 120
Introduction to Graphic Design
3 Cr. Hrs. – 6 Contact Hrs. ❶❷
Prereq: None

Introduction, study, and practice of basic design vocabulary, elements, and principles. Individual elements of design such as line, shape, value, texture, space, size, and color will be explored as they relate to electronically generated digital formats and print designs. Emphasis will be given to the principles of design (i.e., balance, emphasis, rhythm, and unity) to analyze the effectiveness of printed communications and other related electronic media. Students will create basic designs in contemporary design software including Illustrator, Photoshop and InDesign.

GRD 130
Drawing for Graphic Design
3 Cr. Hrs. – 6 Contact Hrs. ❶❷
Prereq: None

Study and practice of basic graphic design drawing elements such as line, value, texture, composition, one and two-point perspective and color. Students will apply these elements as they develop concepts for graphic design. Tools used include pencil, pen and ink, colored pencils or markers, and the computer.

GRD 140
Introduction to Typography
3 Cr. Hrs. – 6 Contact Hrs. ❶❷
Prereq: None

Introduction and study of the history, vocabulary, and principles of typography. Basic type identification, styles, and measurements will be discussed and practiced. The primary purpose of type as a means of communication combining readability and legibility will be reinforced. Design elements and principles will be presented in relation to designing with type.

GRD 150
Multimedia Production
3 Cr. Hrs. – 6 Contact Hrs. ❶
Prereq: None

The student will use contemporary multimedia software and prepared files to create, storyboard, assemble and produce multimedia presentations. The fundamentals and terminology of "movie" production will be taught. Techniques in basic interactivity, presentations, animation, and commercial production, as well as preparing files for various kinds of output will be stressed. The student should have strong knowledge of the computer operating system, contemporary photo editing software and drawing software.

GRD 160
History of Graphic Design
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: None

This course will explore the evolution of graphic design from the invention of the alphabets to the age of mass media, from the invention of the printing press to the present. Students will be required to give oral presentations, participate in team exercises and write brief surveys of various elements within course readings. Outside research will be required as well as text readings.

❶ By Demand ❷ Fall ❸ Winter ❹ Summer

GRD 167A
Introduction to Internet Animation
1 Cr Hr. – 1 Contact Hr. ❻
Prereq: CIS 100 or CIS 110 or CIS 120A
This course provides students with hands-on experience creating web-based animation using an animation editor. Topics include working with the various tools and objects available for creating and manipulating multi-layered graphics, an introduction to scripting, working with animation frames and tweening, and publishing the graphics for use on the Internet. *(This course is also listed as CIS 167A.)*

GRD 184
Introduction to Computer Animation
3 Cr. Hrs. – 6 Contact Hrs. ❻
Prereq: None
This course will introduce students to 3d modeling, rendering, and animation environments. Those who complete the course will be able to operate the user interface to navigate and import objects from other CAD programs, create complex computer models, use program modifiers for the manipulation of models and animations, apply texture maps and materials, create complex lighting setups, and create photo realistic rendered scenes. *(This course is also listed as CAD 184.)*

GRD 200
Portfolio Preparation
3 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereq: None
This course will focus on preparing the graduating student for college transfer or interviews and portfolio reviews with prospective employers. Students will analyze, critique, and update existing designs for inclusion in their professional portfolio. Students will update existing resume, business card and letterhead. Students will have a professional portfolio deliverable in three formats; print, CD, or DVD and web-based. There are no prerequisites although students should be at or near the final semester of the graphic design curriculum.

GRD 210
Graphic Design II
3 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereq: GRD 120
Students will learn about concept development, communication planning, and the execution of 2 and 3 dimensional designs through the development of an identity system as defined throughout the course. Criteria will be established and the solutions must be thoughtful, logical and conclusions appropriate. Solve and manage a complex communication problem. Develop cohesive program components to the identity system. Manage time accordingly to have all components complete by the established deadline.

GRD 290CI
Production Practicum
3 Cr. Hrs. – Variable Contact Hrs. ❻
Prereq: Instructor permission
This is a capstone class. The purpose of this class is to give the student intense on-the-job experiences either in their area of interest or an area where they feel they would like further exposure that may not be available at the college.

Graphic Reproduction

GR 110
Introduction to Graphic Reproduction
3 Cr. Hrs. – 6 Contact Hrs. ❶
Prereq: None

A lecture/lab entry-level course for all graphic design students. Work is done in areas of copy preparation, composition, imagesetting/film, stripping, platemaking and offset press operations. The five major printing processes will be explored with major emphasis placed on offset lithography.

GR 160
Digital Imaging
3 Cr. Hrs. – 6 Contact Hrs. ❷
Prereq: None

A lecture/laboratory course where students will study and practice designing with photographs utilizing digital photography and image editing software. Students will create product, portrait and landscape digital imagery, manipulate them in image editing software, and utilize in print graphic design projects. Student must have use of a digital camera. Emphasis will be placed on creating images and manipulating them in Photoshop and on how to achieve desired results for the final design.

GR 200L&L
Principles of 35 mm B&W Photography
3 Cr. Hrs. – 6 Contact Hrs. ❶
Prereq: None

Fundamentals of photography, including cameras, emulsion characteristics, processing, filters, chemistry, and optics. The student must have the use of a 35 mm SLR or viewfinder camera. The student will be expected to buy film and paper as directed by the instructor.

GR 220
Electronic Publishing
3 Cr. Hrs. – 6 Contact Hrs. ❶
Prereq: BUS 179

This is a lab/lecture course focusing on introduction, study and practice of publication layout and design utilizing contemporary page layout software, Adobe InDesign. Students will create design briefs for each major project assigned. Students will utilize the elements and principles of design while creating multi-page publications.

GR 225
Intermediate Photography
3 Cr. Hrs. – 6 Contact Hrs. ❸
Prereq: GR 200L&L

Intermediate Photography is a course in photography that builds on basic camera and black and white darkroom techniques introduced in GR 200L&L, and introduces many new skills and approaches to the photographic medium. More sophisticated compositional skills and aesthetics of both shooting and printing photographs are developed throughout the course. Alternative darkroom processes are introduced, such as cyanotype, sepia toning and hand coloring. We will be experimenting outside of the conventions of the 35mm format with the Holga camera and the pinhole camera. More advanced technical skills such as learning The Zone System, using archival printing and professional presentation are also emphasized.

GR 240
Studio Lighting For Photography
3 Cr. Hrs. – 3 Contact Hrs. ❹
Prereq: GR 200L&L

Students will study different qualities of light and their uses and effects for the photographic image. Students will apply effective lighting techniques utilizing studio lighting, continuous and strobe as well as natural lighting. A successful photograph will result from the understanding and ability to control these elements.

GR 270
Computer Imaging for the Printing Industry
3 Cr. Hrs. – 6 Contact Hrs. ❶❸
Prereq: None

This is an intermediate course in Illustrator and Photoshop. Students will review the specific tools, palettes and menu items for each application. They will work with key strokes as well as more advanced tools to create, manipulate, and edit images in both vector and bitmap format within the context of creating images for designs to use in the print industry.

Health Education

(See also Allied Health)

HE 100A
Community First Aid and Safety
2 Cr. Hrs. – 2 Contact Hrs. ❶Ⓦ
Prereq: None

Course is designed to prepare the general public with first aid knowledge and skills necessary to care for most injuries and emergencies, including First Aid, Adult, Child, and Infant CPR and AED. Accident prevention information is included. American Red Cross certification can be awarded upon satisfactory completion of 80% or better.

HE 102
Nutrition for Fitness and Sport
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: None

A course designed to provide holistic health, and information to the individual who is physically active, or to those who desire to initiate a personalized fitness program. Required for individuals interested in Physical Education and Health Education majors.

HE 106
Concepts of Health and Well-being
3 Cr. Hrs. – 3 Contact Hrs. ❶ⓌⓈ
Prereq: None

This class is designed to advance the student's knowledge and to enhance their own health. An examination of national health priorities regarding the reduction of preventable death, disease and disability will be studied. Health related issues included are: substance abuse, stress reduction, grief and loss, development of healthy relationships, sexually transmitted diseases, life-style related diseases and principles of a healthy life-style.

HE 110
Industrial Safety and Workplace Training
1 Cr. Hr. – 2 Contact Hrs. ❶ⓌⓈ
Prereq: None

Industrial Safety and Workplace Training is a first aid, prevention, and cardiopulmonary resuscitation (CPR/AED) program to prepare individuals to respond to injuries and sudden illnesses that may arise in the workplace. This course is designed to meet the specific training needs of employers and their employees. The course gives individuals in the workplace the knowledge and skills necessary to prevent, recognize and provide basic care for injuries and sudden illnesses until advanced medical personnel arrive and take over. Included are a review of basic safety laws (MIOSHA, OSHA, HAZMAT, Safety Data Sheets) and personal safety measures, which an employee can practice at home in preparation for work.

HE 202A
Sports Injuries and Prevention
3 Cr. Hrs. – 4 Contact Hrs. Ⓦ
Prereq: None

A study of the basic fundamentals of sports injury care. The course includes the organization of, and procedures for, the prevention and taping of sports injuries. BIOL 105L&L is not required as a prerequisite but is strongly encouraged.

HE 220
Internship in Athletic Training
1 Cr. Hr. – 2 Contact Hrs. ❶ⓌⓈ
Prereq: None

A 40 clock-hour internship in an area sports medicine clinic. This course will give prospective athletic trainers the opportunity to acquaint themselves with the advanced therapeutic modalities and rehabilitative exercise equipment not found in the smaller athletic training setting. It will also allow the student to observe differences (and similarities) between the clinical and collegiate training facilities.

History

HIST 101
Western Civilization - to 1500
4 Cr. Hrs. – 4 Contact Hrs. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement
This course will examine the development of Western Civilization from pre-history to the High Middle Ages/Renaissance, investigating the legacies of the Neolithic Period, ancient Mesopotamia and Egypt, Greece, Rome, Islam and Medieval Europe. Topics will include political structures, artistic expressions, religious beliefs, and intellectual developments. Social history will be emphasized and the course may culminate with student participation in a Medieval Festival.

HIST 102
Western Civilization - 1500 to Present
4 Cr. Hrs. – 4 Contact Hrs. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement
This course will investigate the development of modern Western Civilization covering the period from the Renaissance (about 1500) to the present, emphasizing the developments which have shaped the civilization of the 20th/21st century in the West: government, economics, society, religion, philosophy, ethics, science, and the arts.

HIST 150
World History to 1500 CE
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: Meet Ready to Succeed Requirement
This course deals with basic content and methods of history through an introductory study of world cultures before 1500 CE. The course focuses on specific societies in Africa, Asia, Europe, and the Western Hemisphere, analyzing and comparing the ways in which political, economic, social, cultural, and demographic factors influenced the development of these various cultures.

HIST 151
World History from 1500 CE
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: Meet Ready to Succeed Requirement
This course deals with basic content and methods of history through an introductory study of world cultures from 1500 CE to the present. The course focuses on specific societies in Africa, Asia, Europe, and the Western Hemisphere, analyzing and comparing the ways in which political, economic, social, cultural, and demographic factors influenced the development of these various cultures.

HIST 201
United States to 1877
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement
A course covering the history of the United States from its Native American and European origins to the end of Reconstruction. Major topics include the development of British colonial policy, the causes of the War for Independence, the formation of the Constitution and Bill of Rights, the development of democracy during the Jefferson and Jackson Administrations, immigration, industrial and urban history, Manifest Destiny and territorial expansion, the institution of slavery, the ante-bellum reform movement, the causes and consequence of the Civil War and Reconstruction.

HIST 202
United States from Reconstruction to Present
3 Cr. Hrs. – 3 Contact Hrs. ❶❻❺
Prereq: Meet Ready to Succeed Requirement
A study of the social, economic, political, and intellectual development of the American nation and people, from Reconstruction to the present. The major topics include: territorial expansion and American foreign policy; the growth and importance of industry and business; the urban community and its problems; trade-commerce fields; the urban community and its problems; industry and business; the struggle and achievement of labor; the study of immigration and race relations; the quest for women's equality; American educational and cultural advances; the increased use of government to improve society; the Cold War, détente and current to developments in U.S. – World relations; and the transformation of American Political ideology.

HIST 204
Imperial and Soviet Russia 1622 to the Present
3 Cr. Hrs. – 3 Contact Hrs. ❿
Prereq: Meet Ready to Succeed Requirement
A course covering the reigns of Peter the Great, Catherine the Great and the later Romanovs; political, economic and social development in the 18th and 19th centuries; the Russian Revolution of 1917-21; the Five-Year Plans; Soviet foreign policy during World War II; Soviet policy after Stalin; Soviet society and culture to its collapse in 1991.

HIST 207
African American History
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: Meet Ready to Succeed Requirement
A study of the dynamic role of Black people in the United States from their African origins to present day America. The course emphasizes significant Black contributions in American history, and selected achievements of African American women will be studied. Contemporary issues related to the African American experience in the U.S. will be researched. A visit to an African American historical site or event may be included in the course.

HIST 211
Michigan History
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
A study of the social, economic, and political development of Michigan. Emphasis is on Michigan's history since the time of French exploration. Major topics dealt with in the course include: American Indians; French exploration and settlement; Michigan under the British flag; "territoryhood" to statehood; Michigan's role in the Civil War; lumbering and mining activity in the latter half of the 19th century, the development of Michigan's automotive industry and the concurrent rise of industrial unionism in Michigan. Some emphasis will also be placed on Great Lakes history and the local history of the Muskegon area.

HIST 212A
Gettysburg Battlefields
1 Cr. Hr. – 2 Contact Hrs. ❿
Prereq: None
This course concentrates on an intensive study of the pivotal battle for America's future: Gettysburg. Major topics include the varying causes of the Civil War, Northern and Southern armies and military strategy, and the short and long ramifications of the three day battle for Gettysburg.

HIST 214
Siege of Vicksburg
1 Cr. Hr. – 2 Contact Hrs. ❿
Prereq: Meet Ready to Succeed Requirement
This course concentrates on an intensive study of a ten-month campaign resulting in a siege of the city of Vicksburg. Primary topics include examination of the geography and topography of the Mississippi Valley during the 1860's as it relates to the American Civil War.

HIST 220
Labor Studies
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: Meet Ready to Succeed Requirement
A survey course studying and critically analyzing the historical, political, and legal frameworks of the labor movement, major labor laws, causes and purposes of the labor movement, union structure and behavior, and labor-management approaches to solving employment disputes in the U.S. and internationally.

Humanities

HUM 195
Introduction to Humanities
3 Cr. Hrs. – 3 Contact Hrs. **F W S**
Prereq: Meet Ready to Succeed Requirement
This course will provide the student with an awareness of the cultural strengths and weaknesses of our changing cybernetic society. The student will study how the performing and creative arts, philosophy, psychology, religion and applied technology impact the individual as well as society. In both an historical and individual context, the student will learn that the understanding of what it means to be human is an art which can help facilitate the development of one's full potential.

International Cultural Studies

ICS 101BEL
International Cultural Studies and Biological Field Studies in Belize
2 Cr. Hrs. – 2 Contact Hrs. **F**
Prereq: instructor permission
Notes: The student must accept the terms of participation.
This is an interdisciplinary travel-study course providing students an introduction to international culture and biology through cultural and biological field studies. This hybrid course will contain online and on-campus components and includes a seven-day visit to Belize. Emphasis will be placed on Mayan culture and the tropical rain forests of Belize. The student will study Mayan culture and history as well as Mayan past and current interaction with the rain forest ecosystem. This course will cover classification of organisms, basic ecological principles, experimental design, field sampling techniques and scientific communication. Specific biology topics emphasized will vary each year. This course will also involve working with local Belizeans, offering MCC students the opportunity to meet people from diverse backgrounds. It is offered in conjunction with the Sibun Educational and Adventure Lodge in Belize. Students will spend a great portion of each day in the field and should be in good physical condition. Beyond tuition and texts, additional costs include the airfare to Belize, package price for room and board, and spending money while in Belize. *(This course is also listed as BIOL 101BEL.*)

ICS 101GER
International Cultural Studies in Germany
2 Cr. Hrs. – 2 Contact Hrs. **W**
Prereq: None
Notes: Students must be selected to participate in the Exchange Program between Muskegon Community College and the Kaufmännische Schule Stuttgart-Nord and must accept the terms of participation. German language abilities are not required but are highly recommended.
This course introduces students to the Global Community as represented by Germany. The student will study German culture, history, and politics through lectures, discussions, and actual travel to Stuttgart, Germany. It is offered in conjunction with the Kaufmännische Schule Stuttgart-Nord in Stuttgart, Germany, and culminates with a ten-day visit to Germany. Beyond tuition and texts, additional costs include the airfare to Stuttgart, Germany, and spending money while in Germany.
Also note: This course does not carry the Ready to Succeed prerequisite, but does not fulfill the Foreign Language option under the International category of the ASA degree.

D By Demand   **F** Fall   **W** Winter   **S** Summer

Machining Technology

MT 101A
Basic Machining
3 Cr. Hrs. – 5 Contact Hrs. 🄕🅦🅢
Prereq: None

This introductory course presents theory and hands-on experience in the practical application of machining. The course is structured for the student who has little or no previous experience in the field. The course introduces the student to industrial safety, precision measuring, common manufacturing materials, fasteners, and the operation of basic machine tools. These machine tools include the pedestal grinder, drill press, lathe, vertical milling machine, horizontal milling machine, and the surface grinder. CNC machining and other advanced metalworking methods will also be discussed.

MT 102
Intermediate Machining
3 Cr. Hrs. – 6 Contact Hrs. 🄕🅦🅢
Prereq: MT 101A

This course offers an in-depth examination of the machine tools commonly found in industry. The capabilities of drilling, turning, milling, and grinding machines will be explored as well as how these methods relate to advanced machining techniques and modern machine controls. A major focus of milling and turning will be experienced in the lab portion of this course. Each student will operate a CNC machine during the lab. The precision and quality that can be expected of these processes and their relationship to manufacturing will be stressed throughout the course.

MT 103
Advanced Machining
3 Cr. Hrs. – 6 Contact Hrs. 🄕🅦🅢
Prereq: MT 102

This course will explore advanced machine tool operation and advanced grinding techniques. A major focus of grinding will be experienced in the lab portion of the course. Machines to be used in this class are: EDM, Surface Grinder, and Numerical Control Machine. Advanced operation of the Lathe, Mill, and Grinder will be discussed.

MT 150
Machinery Handbook
3 Cr. Hrs. – 3 Contact Hrs. 🄓
Prereq: TMAT 101A; minimum grade of "C"

This course familiarizes the technical student with the Machinery Handbook and its uses in the solution of problems.

MT 205
NC/CNC (Numerical Control/ Computer Numerical Control)
3 Cr. Hrs. – 4 Contact Hrs. 🄕🅦🅢
Prereq: MT 101A

An introductory course in practical application of numerical control machining, and off-line programming. Designed to expose students to the basic concepts of numerical control with G and M codes.

MT 206
2-D CAD/CAM
Computer-Aided Design/Machining
3 Cr. Hrs. – 5 Contact Hrs. 🄕🅦🅢
Prereq: MT 205

Using Master CAM software, this class first explores the fundamentals of 2-D CAM systems. Students will learn to use the design package to create part drawings and simple solid models. Tool paths for these parts will be generated using the tool path module to create CNC programs for the Lathe, Wire EDM, and Mill. Part processing will be covered and reviewed in detail for each program written.

MT 216
3-D CAD/CAM
Computer-Aided Design/Machining
3 Cr. Hrs. – 5 Contact Hrs. 🅦🅢
Prereq: MT 206

This class continues the study of CAM into the realm of complex 3-D machining. Various complex surfaces will be designed, programmed, and machined. 3-D CNC programs will be created for both the Mill and Wire EDM. 3-D part processing will be covered in detail for each program. The trimming of complex surfaces is stressed. Installation of third-party software and interfacing with CAD software will also be covered. Students will also learn to create tooling and material libraries.

MT 225
Moldmaking
3 Cr. Hrs. – 6 Contact Hrs. ⓌⓈ
Prereq: MT 206
In this course, the student will learn proper machining techniques and design considerations for manufacturing many different types of molds. The student will apply precision machining methods in the production of several molds used for the manufacturing of plastic components. Molds for many common molding processes will be explored including blow molding, compression molding, thermoforming, and injection molding.

MT 230
Basic Diemaking
3 Cr. Hrs. – 6 Contact Hrs. ⒻⓈ
Prereqs: MT 102 and MT 206
This course offers an overview of Diemaking for the machinist. Components of both punching dies and simple progressive dies will be explored. Students will apply their skills to both the manufacture of single stage punches and dies and routine punch repair processes. Primary learning will focus on precision grinding, machining, and material selection. The ram EDM machine will also be introduced.

MT 235
Advanced Diemaking
3 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereq: MT 216
This course continues the study of Diemaking which begins in MT 230. The student will study the manufacture of compound dies for both forming and punching. Both ram and wire EDM processes will be explored. Precision grinding and machining will be stressed throughout. Common die feeding mechanisms, die setting, and die safety will also be covered.

MT 240
Basic Machine Repair
3 Cr. Hrs. – 6 Contact Hrs. ⒻⓌⓈ
Prereq: MT 101A
This course provides a general overview of various mechanical systems found in manufacturing equipment. Both preventive maintenance and repair skills are stressed. The systems examined are: basic mechanics and mechanical skills, lubrication systems, bearings, belt drives, chain drives, gears and gear systems, couplings, fluid power systems and variable speed drives. Troubleshooting techniques are stressed throughout the course.

MT 245
Advanced Machine Repair
3 Cr. Hrs. – 6 Contact Hrs. ⒻⓌ
Prereq: MT 240
This course stresses preventive maintenance of the various mechanical systems found in the manufacturing environment. Both preventive and predictive maintenance will be explored in depth. This course culminates in the student preparing a computerized preventive maintenance plan for an actual manufacturing facility. Basic electronics will be covered as it relates to troubleshooting machine problems.

Management

(See Business)

Marketing

(See Business)

Materials Technology

MET 101
Industrial Materials
3 Cr. Hrs. – 4 Contact Hrs. 🄵🅦
Prereq: None

Industrial Materials is the study of the many materials which are used by modern industry, their basic similarities and differences, their physical, chemical, and electrical properties, and the ways in which materials are altered or combined to enhance their suitability for a specific industrial application.

MET 102
Basic Cast Metals
3 Cr. Hrs. – 5 Contact Hrs. 🄵🅦
Prereq: None

Basic cast metals is an introductory study of the processes and methods of producing castings. The student will be introduced to patternmaking, finishing, and inspection. Laboratory tests of materials used in cast metals will be conducted. The student will be given an overview of cast metal manufacturing procedures. This course attempts to create a basic understanding and appreciation of the complexities of the cast metal industry.

MET 201
Metallurgy
3 Cr. Hrs. – 5 Contact Hrs. 🄵🅦🅢
Prereq: None

Metallurgy studies the physical, chemical, and electrical properties of metals and their alloys, as well as the effect on these properties of various mechanical and thermal treatments. The many indications of these properties and tests to establish their magnitude are also included.

MET 202
Advanced Metals
3 Cr. Hrs. – 5 Contact Hrs. 🄳
Prereq: MET 101

This course includes the study of adhesives, ceramics, coatings, composites, lubrication, and other emerging materials used in manufacturing. A major emphasis is placed on the testing of material to determine properties, usability, and magnitude. Students must have access to transportation as this course also involves off-campus lab experiments.

MET 203
Materials Testing
3 Cr. Hrs. – 5 Contact Hrs. 🄳
Prereq: MET 101

Conventional destructive and non-destructive testing and evaluation of materials. To detect and characterize flaws and microstructure changes in materials, using lab equipment and reporting the findings. Also, analysis of the relationship between externally applied forces and internal reactions in materials.

MET 204
Introduction to Plastics
3 Cr. Hrs. – 5 Contact Hrs. 🄳
Prereq: MET 101

This course covers an introductory study of plastic materials, their applications, and the plastics industry. The students will be introduced to thermoplastics and thermosetting plastic materials, processing methods, applications, tooling, and plastic equipment.

MET 212
Patternmaking, Gating and Risering
3 Cr. Hrs. - 6 Contact Hrs. 🄵🅦
Prereq: MET 102

This course will combine software for both Design and Machining Casting patterns for casting materials. Each pattern will include the Gating and Risers necessary to produce quality cast products. Introduction to the fundamentals of function, metallurgical and economic designs of casting or patterns. This course will deal with risers, gating, heat transfer, solidification as well as gating ratios, metal velocity and flow rates of different casting materials.

Mathematics

(Includes College Success Center courses)

Before enrolling in any math courses, you must be placed. Placement is done by your ACT Math score or your Compass test score. If you have ACT scores, they should be officially submitted to MCC's Testing Center. If testing is needed you must make an appointment to take the Compass Test by calling the Testing Center at (231) 777-0394. Placement is made at the point at which students EXIT the test.

Before enrolling in math courses numbered MATH 100A *(Formerly MATH 050)* or higher, you must meet the Ready to Succeed requirement

ACT Math scores will not be accepted if taken over 3 years ago and students should take the Compass Math Test.

MATH 035F
Metrics
0.5 Cr. Hr. – 0.5 Contact Hr. 🅕🆆🆂
Prereq: None
This course is an introduction to the metric system and conversions between the metric and English systems.

MATH 036A
Basic Math
3 Cr. Hrs. – 3 Contact Hrs. 🅕🆆🆂
Prereq: None
This course covers topics in basic arithmetic including decimals, fractions, ratios and proportions, percents, English and metric measurements, geometry, integers, and algebraic expressions.

MATH 036FT
Fast-Track Basic Math
3 Cr. Hrs. – 4 Contact Hrs. 🅕🆆
Prereq: Meet Ready to Succeed Requirement
Coreq: MATH 038FT
This course covers the same topics and satisfies the same prerequisites as Math 036A, but students complete the required coursework in the first half of the semester. Those that are successful then proceed to Math 038FT in the second half. Because of the intense pace, two hours of scheduled Supplemental Instruction are required each week. Students who select this option should be highly motivated and feel like this course will be more of a "refresher." Those uncomfortable with an accelerated pace are discouraged from this option. Any students who are unsure should contact the College Success Center.

MATH 038
Pre-Algebra
3 Cr. Hrs. – 3 Contact Hrs. 🅕🆆🆂
Prereq: MATH 036A; Minimum Grade of "C" or successful completion of all MATH 035 Modules
This course is designed for students who have mastered basic arithmetic but are not yet prepared for algebra. Basic math topics are expanded upon and algebra topics such as solving basic equations, factoring, and graphing are introduced.

MATH 038FT
Fast-Track Pre-Algebra
3 Cr. Hrs. – 4 Contact Hrs. 🅕🆆
Coreq: Math 036FT
This course covers the same topics and satisfies the same prerequisites as Math 038, but students complete the required coursework in the second half of the semester, after successful completion of Math 036FT. Because of the intense pace, two hours of scheduled Supplemental Instruction are required each week. Students who select this option should be highly motivated and feel like this course will be more of a "refresher." Those uncomfortable with an accelerated pace are discouraged from this option. Any students who are unsure should contact the College Success Center.

MATH

Before enrolling in math courses numbered MATH 100A (formerly MATH 050) or higher, you must meet the READY TO SUCCEED requirement.

COMPASS Pre-Algebra	ACT Math	Placement
0-39	N/A	MATH 036FT* and MATH 038FT* MATH 036A or BUS 126
40-49	N/A	MATH 038 or TMAT 101A
50-100	N/A	MATH 040 or TMAT 102A

Option available for students who score 30-39 on Compass Pre-Algebra and meet Ready to Succeed requirement.

COMPASS Algebra	ACT Math	Placement
0-24	N/A	MATH 038 or TMAT 101A
25-45	N/A	MATH 040 or TMAT 102A
46-65	20-21	MATH 100A (formerly MATH 050) or MATH 107A or TMAT 201
66-100	22-24	MATH 105 or MATH 109 or MATH 111 or MATH 115

COMPASS College Algebra	ACT Math	Placement
0-45	22-24	MATH 105 or MATH 109 or MATH 111 or MATH 115
46-100	25-27	MATH 112 or MATH 151

COMPASS Trigonometry	ACT Math	Placement
0-45	25-27	MATH 112 or MATH 151
46-100	28 or above	MATH 161

*Note: **COMPASS** test scores are not valid after **5 years**.*
    ***ACT MATH** test score is not valid after **3 years**.*

MATH 040
Beginning Algebra
4 Cr. Hrs. – 4 Contact Hrs. ❶🅦🅢
Prereq: MATH 038; Minimum Grade of "C"
This is an introductory course stressing algebra as the language of mathematics, focusing on correct algebraic thinking, writing, and manipulation. Topics include: Variables, expressions, order of operations, solving linear equations, linear applications, linear inequalities, graphing and finding linear equations, graphing and solving systems of two equations in two variables, exponents, polynomial operations, factoring, solving factorable equations, and operations with rational expressions. This course may require that tests be taken outside of regular class meeting times.

MATH 041
Mathematics for Allied Health Sciences
1 Cr. Hr. – 1 Contact Hr. ❶🅦
Prereq: MATH 038 Minimum Grade of "C"
A brief yet succinct math course designed to transition successful MATH 040 students into successful Chemistry for Allied Health students.

MATH 100A
Intermediate Algebra
(Formerly MATH 050)
4 Cr. Hrs. – 4 Contact Hrs. ❶🅦🅢
*Prereq: Meet Ready to Succeed Requirement and
    MATH 040; Minimum Grade of "C"*
This is an intermediate course in algebra emphasizing more difficult problem types, non-linear graphs, and functions. Topics include: Functions, intervals, compound inequalities, absolute value equations and inequalities, linear inequalities in 2 variables, factoring and operations with rational expressions, radicals and radical operations, fractional exponents, solving radical equations, complex numbers, quadratic equations and functions, completing the square, the quadratic formula, inverse functions, exponential and logarithmic functions (including graphs and properties) and systems of equations with 2 and 3 unknowns. This course may require that tests be taken outside of regular class meeting times.

MATH 105
Mathematics for Elementary Teachers
4 Cr. Hrs. – 4 Contact Hrs. ❶🅦
*Prereq: MATH 100A (Formerly MATH 050);
    Minimum Grade of "C"*
Not a "methods" course. A general course for students majoring in elementary education. The basic ideas behind our number system and geometric concepts are discussed. Topics include: problem solving, sets, system of numeration, the real number system, geometry, and metric measure.

MATH 107A
Math for Liberal Arts
4 Cr. Hrs. – 4 Contact Hrs. ❶🅦🅢
*Prereqs: Must have earned a grade of "C"
    or better in MATH 040.*
A survey course for students whose program of study has no further mathematics requirements. This course satisfies general education requirements, but is not the prerequisite for any other mathematics course. Topics covered include: financial mathematics, symbolic logic, probability and counting principles, voting and apportionment methods, and applications of vertex-edge graphs. The history, language, and usefulness of mathematics will be emphasized throughout the course. Students will be expected to use routine algorithms and engage in critical thinking.

MATH 109
College Algebra with Applications
4 Cr. Hrs. – 4 Contact Hrs. ❶🅦🅢
*Prereq: MATH 100A (Formerly MATH 050);
    Minimum Grade of "C"*
A college algebra course stressing applications and graphing in the following areas: the process of creating a mathematical model of a real life situation, linear, quadratic, periodic, exponential and logarithmic models; mathematics of finance; selected topics in probability. Graphing calculators will be utilized.

MATH 111
Algebra With Coordinate Geometry
4 Cr. Hrs. – 4 Contact Hrs. **F W S**
Prereq: MATH 100A (Formerly MATH 050); Minimum Grade of "C"

Pre-calculus algebra and analytic geometry designed for the student who will be taking calculus. Topics include: solving equations and inequalities algebraically and graphically; functions and graphs; polynomial functions; rational functions and functions involving radicals; exponential and logarithmic functions; linear systems and matrices. Graphing calculators will be utilized.

MATH 112
Trigonometric Functions with Coordinate Geometry
4 Cr. Hrs. – 4 Contact Hrs. **F W S**
Prereq: MATH 111; Minimum Grade of "C"

Pre-calculus trigonometry and analytic geometry designed for the student who will be taking calculus. Topics include: trigonometric functions, identities and equations, graphs of trigonometric functions and their inverse functions, solution of triangles, sequences and series, polar coordinates, parametric equations, DeMoivre's Theorem, the Binomial Theorem, mathematical induction, and conic sections. Graphing calculators will be utilized.

MATH 115
Probability and Statistics
3 Cr. Hrs. – 3 Contact Hrs. **F W S**
Prereq: MATH 100A (Formerly MATH 050); Minimum Grade of "C"

Probability and statistics for business, social science, mathematics, and biological science majors. Topics include: descriptive statistics, probability, probability distributions, confidence intervals, hypothesis testing, analysis of variance, regression, and non-parametric statistics. Graphing calculators will be utilized. *(This course is also listed as BUS 105.)*

MATH 151
Survey of Calculus
4 Cr. Hrs. – 4 Contact Hrs. **D**
Prereq: MATH 111; Minimum Grade of "C"

The study of limits, continuous functions, derivatives, integrals, and their applications in business, economics, life sciences and social sciences. This is a terminal, one-semester course and should not be elected by those taking the calculus sequence of MATH 161, 162, 283 and 295. Graphing calculators will be utilized.

MATH 161
Calculus I
4 Cr. Hrs. – 4 Contact Hrs. **F W S**
Prereq: MATH 112; Minimum Grade of "C"

The calculus of elementary functions of one variable. Topics include: definition of a derivative, limits, derivatives and integrals of functions of one variable, related rates, maxima and minima, Rolle's Theorem, the Mean Value Theorem, and the Fundamental Theorem of Calculus. Graphing calculators will be utilized.

MATH 162
Calculus II
3 Cr. Hrs. – 3 Contact Hrs. **F W S**
Prereq: MATH 161; Minimum Grade of "C"
Notes: Concurrent enrollment in MATH 276 is recommended. A graphing calculator is required; see www.muskegoncc.edu/ calculatorhelp for details.

A continuation of the calculus of functions of one variable. Topics include: methods of integration such as substitution, parts, trigonometric substitution and partial fractions; improper integrals; applications of integrals to area, volume, and arc length; an introduction to differential equations; and infinite series. Graphing calculators will be utilized.

MATH 215
Probability & Statistics for Engineering
3 Cr. Hrs. – 3 Contact Hrs. ❿
Prereq: MATH 161; Minimum Grade of "C"
Recommended Coreq: MATH 162
Notes: A graphing calculator is required; see www. muskegoncc.edu/calculatorhelp for details.

This is a calculus-based statistics course. However, no previous statistics experience is required. Topics include: descriptive statistics, probability, discrete and continuous probability distributions, joint probability distributions, confidence intervals, hypothesis testing, analysis of variance, correlation and linear regression, non-parametric techniques, and quality control methods. Graphing calculators will be utilized.

MATH 276
Linear Algebra with Applications
3 Cr. Hrs. – 3 Contact Hrs. ❿
Prereq: MATH 161
Recommended Coreq: MATH 162
Notes: A graphing calculator is required; see www. muskegoncc.edu/calculatorhelp for details.

A study of matrices, matrix operations, systems of linear equations, determinants, vectors, real and complex vector operations, vector spaces, eigenvalues, linear transformations, linear programming, and numerical methods. Applications used in science, engineering, business, computer science, and higher mathematics are integrated.

MATH 283
Calculus III
4 Cr. Hrs. – 4 Contact Hrs. ❺Ⓦ
Prereq: MATH 162; Minimum Grade of "C"
Notes: A graphing calculator is required; see www. muskegoncc.edu/calculatorhelp for details.

The calculus of functions of more than one variable. Topics include: vectors, vector functions, surfaces, the Dot Product, the Cross Product, limits and continuity in 3 dimensions, partial derivatives, chain rule for partial derivatives, gradients, multiple integrals, and vector calculus. Graphing calculators will be utilized.

MATH 295
Differential Equations with Linear Algebra
4 Cr. Hrs. – 4 Contact Hrs. Ⓦ
Prereq: MATH 162; Minimum Grade of "C"
Notes: A graphing calculator is required; see www. muskegoncc.edu/calculatorhelp for details.

An introduction to the theory and solution of ordinary differential equations with techniques involving slope fields, separation of variables, homogeneous functions, exact equations, linear equations of order one, integrating factors, Bernoulli's equation, coefficients linear in two variables, Wronskian, differential operators, Method of Undetermined Coefficients, reduction of order, variation of parameters, power series, Euler equation, the Laplace transform, linear systems, higher order linear equations, matrix algebra, eigenvalues, eigenvectors, determinants, and modeling applications in physical, biological, and social sciences. Computer software will be used to explore some of these topics. Graphing calculators will be utilized.

Music

MU 50PVT-89PVT
Remedial Applied Music
2 Cr. Hrs. – 2 Contact Hrs. 🅵🅦🆂
Prereq: Instructor permission
The following courses are designed for students who do not meet the freshman performance proficiency level as determined by the faculty. Recommendation for participation in 100-numbered applied music courses will be made when the faculty feels that adequate advancement has been made by the student to perform at the level of a freshman music student.

MU 050PVT, 051PVT *VOICE*	MU 070PVT, 071PVT *BASSOON*
MU 052PVT, 053PVT *PIANO*	MU 072PVT, 073PVT *SAXOPHONE*
MU 054PVT, 055PVT *CORNET (TRUMPET)*	MU 074PVT, 075PVT *PERCUSSION*
MU 056PVT, 057PVT *CLARINET*	MU 076PVT, 077PVT *GUITAR*
MU 058PVT, 059PVT *TROMBONE*	MU 078PVT, 079PVT *ORGAN*
MU 060PVT, 061PVT *BARITONE (EUPHONIUM)*	MU 080PVT, 081PVT *HARP*
MU 062PVT, 063PVT *TUBA*	MU 082PVT, 083PVT *VIOLIN*
MU 064PVT, 065PVT *FRENCH HORN*	MU 084PVT, 085PVT *VIOLA*
MU 066PVT, 067PVT *FLUTE*	MU 086PVT, 087PVT *CELLO*
MU 068PVT, 069PVT OBOE (ENGLISH HORN)	MU 088PVT, 089PVT *DOUBLE BASS*

MU 100
Introduction to Music Theory
3 Cr. Hrs. – 3 Contact Hrs. 🅵🅦🆂
Prereq: Meet Ready to Succeed Requirement
Designed for students with little or no theoretical background who are considering music as their major field, or high school seniors who do not have access to a high school theory course. Includes fundamentals to basic musicianship: notation, clefs, scales, intervals, triads, rhythm, meter and tonality.

MU 101
Music Theory
3 Cr. Hrs. – 3 Contact Hrs. 🅵
Prereq: Meet Ready to Succeed Requirement
Coreq: MU 190A and MU 194
Fundamentals of basic musicianship, including notation, clefs, scales, intervals, triads, meter, rhythm and tonality. The analysis and writing of harmony in the styles of composers of the tonal period will be stressed.

MU 102
Music Theory
3 Cr. Hrs. – 3 Contact Hrs. 🅦
Prereqs: MU 101 and MU 190A
Coreqs: MU 191A and MU 195
A continuation of MU 101.

MU 103
Introduction to Music Literature
3 Cr. Hrs. – 3 Contact Hrs. 🅵🅦
Prereq: Meet Ready to Succeed Requirement
A first course in listening to music designed primarily for students with little or no musical training. Starting with the basic elements of music, the course uses extensive audio and visual materials, illustrating the development of music through the ages.

MU 104CS
College Singers
1 Cr. Hr. – 2 Contact Hrs. 🅵🅦
Prereq: Meet Ready to Succeed Requirement
This is a performance ensemble for students with previous musical experience. Auditions will be held at the first class session for placement within the group and to verify that the student and ensemble are a reasonable match. High standards of musical performance are upheld. There are performances held throughout the year for student and adult audiences.

MU 105CS
College Singers
1 Cr. Hr. – 2 Contact Hrs. 🅵🅦
Prereq: Meet Ready to Succeed Requirement
An extension of MU 104CS.

COURSE DESCRIPTIONS

MU 106A
Collegiates
1 Cr. Hr. – 2 Contact Hrs. 🄵🅆
Prereq: none.
Coreq: MU 104CS or MU 104NC or
*   MU 105CS or MU 105NC*
A select SATB vocal performance ensemble for students with previous musical experience. This ensemble performs a wide repertoire of music from the 17th century to present day of varied genres. Auditions will be held prior to the first class session for placement within the group and to verify that the student and ensemble are a reasonable match. High standards of musical performance are upheld.

MU 108CB
Concert Band
(West Michigan Concert WINDS)
1 Cr. Hr. – 2 Contact Hrs. 🄵🅆
Prereq: Meet Ready to Succeed Requirement
This is a performance ensemble for students with previous musical experience. Auditions will be held at the first class session for placement within the group and to verify that the student and ensemble are a reasonable match. High standards of musical performance are upheld. There are performances held throughout the year for student and adult audiences.

MU 109CB
Concert Band
(West Michigan Concert WINDS)
1 Cr. Hr. – 2 Contact Hrs. 🄵🅆
Prereq: Meet Ready to Succeed Requirement
An extension of MU 108CB.

MU 118WMS
West Michigan Symphony
1 Cr. Hr. – 2 Contact Hrs. 🄵🅆
Prereq: Meet Ready to Succeed Requirement
Students who play in the West Shore Symphony Orchestra may receive college ensemble credit. Audition and consent of director determine participation.

MU 118YSO
West Michigan Youth Symphony
1 Cr. Hr. – 2 Contact Hrs. 🄵🅆
Prereq: Meet Ready to Succeed Requirement
Students who play in the West Shore Youth Symphony may receive college ensemble credit. This is a performance ensemble for students with previous musical experience. Auditions will be held at the first class session for placement within the group and to verify that the student and ensemble are a reasonable match.

MU 119A or B
Symphonic Ensemble
1 Cr. Hr. – Variable Contact Hrs. 🄳
Prereq: MU 118WMS or MU 118YSO
A continuation of MU 118WMS or MU 118YSO.

MU 127 to 147
Applied Music: Secondary Instrument
1 Cr. Hr. – Variable Contact Hrs. 🄵🅆🅂
Prereq: Instructor permission
Private study on an instrument. The student must meet with a private instructor a specified number of hours Attendance at studio class may be required and performance is encouraged. Letters A, B, C, D, after number indicate semesters so that the correct number of credits will be shown on transcript.

MU 127-A, B, C, D
JAZZ GUITAR
MU 128-A, B, C, D
VOICE
MU 129-A, B, C, D
PIANO
MU 130-A, B, C, D
CORNET-TRUMPET
MU 131-A, B, C, D
CLARINET
MU 132-A, B, C, D
TROMBONE
MU 133-A, B, C, D
BARITONE (EUPHONIUM)
MU 134-A, B, C, D
TUBA
MU 135-A, B, C, D
FRENCH HORN
MU 136-A, B, C, D
FLUTE
MU 137-A, B, C, D
OBOE (ENGLISH HORN)

MU 138-A, B, C, D
BASSOON
(CONTRA-BASSOON)
MU 139-A, B, C, D
SAXOPHONE
MU 140-A, B, C, D
PERCUSSION
MU 141-A, B, C, D
GUITAR
MU 142-A, B, C, D
ORGAN
MU 143-A, B, C, D
HARP
MU 144-A, B, C, D
VIOLIN
MU 145-A, B, C, D
VIOLA
MU 146-A, B, C, D
CELLO
MU 147-A, B, C, D
DOUBLE BASS

MU 148PVT to 189PVT
Applied Music: Primary Instrument
2 Cr. Hrs. -Variable Contact Hrs. ❶ⓌⓈ
Prereq: Instructor permission
Intensive private study on an instrument. Must meet with a private instructor a specified number of hours per semester. Attendance and performance at studio class may be required. There is a public recital at the end of the year.

MU 148PVT, 149PVT	MU 170PVT, 171PVT
JAZZ GUITAR	*BASSOON*
MU 150PVT, 151PVT	*(CONTRA-BASSOON)*
VOICE	MU 172PVT, 173PVT
MU 152PVT, 153PVT	*SAXOPHONE*
PIANO	MU 174PVT, 175PVT
MU 154PVT, 155PVT	*PERCUSSION*
CORNET (TRUMPET)	MU 176PVT, 177PVT
MU 156PVT, 157PVT	*GUITAR*
CLARINET	MU 178PVT, 179PVT
MU 158PVT, 159PVT	*ORGAN*
TROMBONE	MU 180PVT, 181PVT
MU 160PVT, 161PVT	*HARP*
BARITONE (EUPHONIUM)	MU 182PVT, 183PVT
MU 162PVT, 163PVT	*VIOLIN*
TUBA	MU 184PVT, 185PVT
MU 164PVT, 165PVT	*VIOLA*
FRENCH HORN	MU 186PVT, 187PVT
MU 166PVT, 167PVT	*CELLO*
FLUTE	MU 188PVT, 189PVT
MU 168PVT, 169PVT	*DOUBLE BASS*
OBOE (ENGLISH HORN)	

> *NOTE: There are several sections of class piano. Students with piano background should audition with instructor before enrolling.*

MU 190A
Class Piano for Music Majors
2 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: Meet Ready to Succeed Requirement
Coreqs: MU 101 and MU 194 or
instructor permission
This course is required of all music majors and is open also to students with some previous keyboard experience who can use these transferable humanities credits or desire the training. Special emphasis is given to sight-reading, transposition, playing by ear, harmonizing melodies, accompaniments and scales.

MU 190B
Class Piano (Non-Music Majors)
2 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: Meet Ready to Succeed Requirement
This course is open to any student who wishes to learn to play the piano. No previous training or knowledge of music is necessary.

MU 190C
Class Piano (Basic Piano)
1 Cr. Hr. – 2 Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
Coreq: MU 192
This course in basic piano is a required corequisite for students in MU 192 unless requirements can be met by examination. See instructor.

MU 191A
Class Piano for Music Majors
2 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: MU 190A
Coreqs: MU 102 and MU 195 or
instructor permission
A continuation of MU 190A.

MU 191B
Class Piano (Non-Music Majors)
2 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: MU 190B
A continuation of MU 190B.

MU 192
Music for the Classroom Teacher
4 Cr. Hrs. – 4 Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
Coreq: MU 190C
This course is required for future elementary classroom teachers. No previous musical training is necessary. The course provides a background in the fundamental elements of music through singing, playing classroom rhythm and melody instruments, recorder and autoharp. Includes introduction to methods of teaching music, observation and participation in area schools.

MU 194
Sight-Reading and Ear Training
1 Cr. Hr. – 2 Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
Coreqs: MU 101 and MU 190A
The acquisition of the skills of melodic and rhythmic sight-reading and the disciplining of the ear to reproduce melodies, harmonies and rhythms by dictation.

MU 195
Sight-Reading and Ear Training
1 Cr. Hr. – 2 Contact Hrs. Ⓦ
Prereq: MU 194
Coreqs: MU 102 and MU 191A
A continuation of MU 194.

MU 201
Advanced Theory
4 Cr. Hrs. – 5 Contact Hrs. Ⓕ
Prereqs: MU 101 and MU 102
Coreq: MU 290
A continuation of Theory required of music majors. It combines the elements of counter-point, form analysis and 20th century practices with an emphasis on creative writing and arranging. Advanced sight-singing and melodic, harmonic, and rhythmic dictations are also stressed.

MU 202
Advanced Theory
4 Cr. Hrs. – 5 Contact Hrs. Ⓦ
Prereq: MU 201
Coreq: MU 291
A continuation of MU 201.

MU 203
Vocal and Instrumental
Conducting Techniques
2 Cr. Hrs. – 2 Contact Hrs. Ⓕ
Prereq: Meet Ready to Succeed Requirement
Practical methods and conducting techniques for instrumental and vocal ensembles, with emphasis on rehearsal preparation, interpretation and performance, and basic communication between conductor and ensemble members.

MU 240
Professional Practices in Music
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: None
This course introduces students to career options and common business practices in the music industry. Students learn how to market their music and music performances along with how to promote themselves within the industry, through the use of multimedia which includes Web and print resources. Students are exposed to contract preparation, intellectual property considerations and introduced to performing arts unions. A key component to this course is the study of ethical practices within the music industry.

MU 248 to 289
Applied Music - Advanced Instrument
2 Cr. Hrs. – 2 Contact Hrs. ⒻⓌⓈ
Prereq: Instructor permission
Notes: Student must first complete two semesters of 100-level study on the same instrument. Private study of an instrument.
The student must meet with private instructor a minimum of 13 hours per semester. Attendance and performance at studio is required. There is a staff audition at the end of each semester and a public recital at the end of the year.

MU 248, 249
JAZZ GUITAR
MU 250, 251
VOICE
MU 252, 253
PIANO
MU 254, 255
CORNET (TRUMPET)
MU 256, 257
CLARINET
MU 258, 259
TROMBONE
MU 260, 261
BARITONE (EUPHONIUM)
MU 262, 263
TUBA
MU 264, 265
FRENCH HORN
MU 266, 267
FLUTE
MU 268, 269
OBOE (ENGLISH HORN)

MU 270, 271
BASSOON (CONTRA-BASSOON)
MU 272, 273
SAXOPHONE
MU 274, 275
PERCUSSION
MU 276, 277
GUITAR
MU 278, 279
ORGAN
MU 280, 281
HARP
MU 282, 283
VIOLIN
MU 284, 285
VIOLA
MU 286, 287
CELLO
MU 288, 289
DOUBLE BASS

MU 290 Class Piano
2 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
Coreq: MU 201
A continuation of the freshman piano class plus the addition of clef and vocal score reading. Required of all music majors unless they are able to pass the requirements at the end of their freshman year.

MU 291 Class Piano
2 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: MU 290
Coreq: MU 202
A continuation of MU 290.

Nursing

AH 111
Environmental Stressors and Nutrition
1 Cr. Hr. – 1 Contact Hr. ❶❺
Prereq: None
Notes: Must complete all entry level requirements and receive an acceptance letter into the Nursing Program.

This course is designed to provide the student with the theoretical foundation for the clinical application of nutrition principles in relation to stress adaptation throughout the nursing curriculum. The focus of the course is on the identification of the role of nutrients in maintaining man's dynamic equilibrium and the use of therapeutic diets for clients. **This course is only open to Nursing students.**

NUR 100
Overview of the Nursing Profession
1 Cr. Hr. – 1 Contact Hr. ❶❺
Prereq: None
Notes: Must complete all entry level requirements and receive an acceptance letter into the Nursing Program.

This course is designed to provide students with an overview for a career in the profession of nursing. The focus of the course is on the roles and responsibilities of the licensed practical nurse and the registered nurse as members of the health care delivery team. Emphasis is placed on current issues and trends in nursing practice and education, and the derivation of medical terminology.

NUR 121
Environmental Stressors and Pharmacotherapeutics
1 Cr. Hr. – 1 Contact Hr. ❶❿
Prereqs: AH 111, ANTH 103, BIOL 105L&L, ENG 101, NUR 100, and PSYC 201

This course is designed to provide the student with the theoretical foundation for the clinical application of pharmacotherapeutic concepts in relation to stress adaptation throughout the nursing curriculum. The focus of the course is on the identification of the major drug classifications. Emphasis is placed on the identification of the basic mode of action, therapeutic effects, adverse effects, nursing implications, and patient teaching for the most common drug groups within each classification.

NUR 126
Family Health & Nursing Care
7 Cr. Hrs. - 15 Contact Hrs. ❶❿
Prereqs: AH 111, ANTH 103, BIOL 105L&L, ENG 101, NUR 100, and PSYC 201

This course is designed to provide the student with the theoretical and clinical foundation for nursing practice in the care of the family. The student will use the nursing process to prioritize health needs, promote wellness, and facilitate stress adaptation with the client and family. Emphasis is placed on nursing assessment skills, nurse and patient safety, and health promotion with childbearing families.

NUR 131B
Care of the Childrearing Family
8 Cr. Hrs. – 16 Contact Hrs. ❿❺
Prereqs: NUR 121 and NUR 126

This course is designed to provide the student with the theoretical foundation for facilitating stress adaptation related to childrearing. The focus of the course is on the application of previously learned biopsychosocial and nursing principles and processes in the care of the childrearing family. Emphasis is placed on the identification of the changing priority of health needs and adaptation problems associated with infancy through young adulthood in acute care settings.

NUR 141B
Care of the Maturing Family
8 Cr. Hrs. – 16 Contact Hrs. ❶❺
Prereq: NUR 131B

This course is designed to provide the student with the theoretical foundation for facilitating stress adaptation related to adult maturation. The focus of the course is on the application of previously learned biopsychosocial and nursing principles and processes in the care of the maturing family. Emphasis is placed on the identification of the changing priority of health needs and medical adaptation problems associated with middle and late adulthood.

❶ By Demand   ❶ Fall   ❿ Winter   ❺ Summer

NUR 211A
Care of the Family in Psychological Crisis
4 Cr. Hrs – 8 Contact Hrs. ⓌⓈ
Prereqs: BIOL 207LEC & BIOL 207A, NUR 212B,
*   and PEA 101A*

This course is designed to provide the student with the theoretical foundation for facilitating stress adaptation in clients/families in psychological crisis. The focus of the course is on the identification of biopsychosocial and nursing principles and processes used in the care of clients with mental health needs. Emphasis is placed on all components of the nursing process, therapeutic communication, and collaboration with team members in the care of psychiatric clients.

NUR 212B
Care of the Family in Physiological Crisis
8 Cr. Hrs. – 16 Contact Hrs. ⒻⓌ
Prereqs: NUR 141B and ANTH 103, BIOL 105L&L,
*   BIOL 106L&L, ENG 101, PSYC 201*
Notes: Chemistry competency and an acceptance
*   letter into the Nursing Program are*
*   required. An unencumbered Michigan LPN*
*   license with work experience may replace*
*   NUR 141B.*

This course is designed to provide the student with the theoretical foundation for facilitating man's adaptation to multiple stressors in acute care settings. The focus of the course is on the identification and application of biopsychosocial and nursing principles and processes in the care of the family with complex health needs. Emphasis is placed on the application of all components of the nursing process, including use of advanced psychomotor skills, in the care of adults in physiological crisis.

NUR 222A
Managing the Care of the Family
5 Cr. Hrs. – 11 Contact Hr. ⓌⓈ
Prereqs: NUR 211A, NUR 212B,
*   BIOL 207LEC & 207A, and PEA 101A*

This course is designed to provide the student with a theoretical foundation for managing the nursing care for groups of individual patients and their families. Previously learned biopsychosocial and nursing principles are integrated into the nurse manager role. Emphasis is placed on the use of management principles, the nursing process, trends in nursing, and transition into the registered nurse role.

Philosophy

PHIL 101
Basic Concepts of Philosophy
3 Cr. Hrs. – 3 Contact Hrs. ⒻⓌⓈ
Prereq: Meet Ready to Succeed Requirement
A course which presents some of the issues, questions and problems of philosophy as these issues and thoughts are developed by traditional and contemporary philosophers.

PHIL 102
Principles of Logic
3 Cr. Hrs. – 3 Contact Hrs. ⒻⓌⓈ
Prereq: Meet Ready to Succeed Requirement
A course which aims to give students an understanding of the fundamental forms of rational argument and critical reasoning skills that can be used in a wide range of disciplines and careers. There will be an examination of deductive and inductive reasoning, as well as formal and informal fallacies to facilitate the art of distinguishing correct from incorrect reasoning.

PHIL 104
Symbolic Logic
3 Cr. Hrs. – 3 Contact Hrs. **Ⓦ**
Prereq: Meet Ready to Succeed Requirement
An introductory course in Symbolic Logic, the most powerful system of deductive logic yet devised. Includes propositional and predicate logic through identity with an emphasis on natural deduction. Particularly of value for those interested in computer science, mathematics, logic or philosophy.

PHIL 202
Introduction to Ethics
3 Cr. Hrs. – 3 Contact Hrs. **Ⓕ**
Prereq: Meet Ready to Succeed Requirement
An inquiry into both the good of the individual person and the good of society. Two-thirds of the course presents logic and an in-depth analysis of such ethical theories as relativism, egoism, utilitarianism, deontology, virtue ethics, religion, and contractarianism. One-third of the course will examine a varying assortment of such applied ethical issues as euthanasia, abortion, distributive justice, sexual ethics, and environmental ethics.

PHIL 203
Philosophy of Religion
3 Cr. Hrs. – 3 Contact Hrs. **Ⓕ**
Prereq: Meet Ready to Succeed Requirement
A brief comparative study of the history and content of major world religions followed by philosophical inquiry into the meaning, truth and value of religious phenomena.

PHIL 204
Biomedical Ethics
3 Cr. Hrs. – 3 Contact Hrs. **ⒻⓌⓈ**
Prereq: ENG 101
An inquiry into many ethical problems which are particularly connected to the health care professions, but which are of concern to all persons. Issues studied include: professional responsibility in medicine, paternalism, patients' rights, medical experimentation, the right to die, abortion and the right to health care in the context of limited societal resources. About one-third of the course consists of a survey of those issues and results of ethical theory and logic which sharpen perception, reduce confusion and encourage headway.

PHIL 205
Business Ethics
3 Cr. Hrs. – 3 Contact Hrs. **ⒻⓌ**
Prereq: Meet Ready to Succeed Requirement
One-third of this course presents basic ethical theory and logic which together facilitate a deeper understanding of ethical problems. The second third covers those ethical problems that are apt to confront the business person directly and frequently. The final third of the course is an inquiry into broader ethical problems confronting business and society.

PHIL 207
Environmental Ethics
3 Cr. Hrs. – 3 Contact Hrs. **Ⓦ**
Prereq: Meet Ready to Succeed Requirement
One-third of this course presents basic ethical theory and logic that together facilitate a deeper understanding of ethical problems. Two-thirds of the course will explore issues in environmental ethics such as various attitudes toward nature, individual and public policy choices that affect the local and global environment, sustainability, the moral status of animals, and the proper role of science and technology in an environmentally sensitive world.

PHIL 210
World Religions
3 Cr. Hrs. – 3 Contact Hrs. **Ⓦ**
Prereq: Meet Ready to Succeed Requirement
In this course the student will attempt to understand and critically analyze the world's major religions and how they impact societies and individuals. The religions covered are: Hinduism, Jainism, Buddhism, Taoism and Confucianism, Shinto, Judaism, Christianity, Islam and Sikhism. Other topics that may be covered include Native American religion, religious movements, and the impact of religion on world culture and society.

Physical Education

(See Dance for DNC course descriptions)

All Muskegon Community College Physical Education activity classes are open to both men and women. The strength and physical ability required should be carefully considered in registering for individual or team activities.

Students pursuing an ASA must take one credit hour from: PEA 101A, PEA 103, PEA 104A, PEA 118, or PEA 201 and one PEA/DNC credit hour of choice to satisfy graduation requirements.

All DNC classes may be taken as either Aesthetic Values credit or elective Physical Education credit. Any single course, however, will not satisfy both PEA and Aesthetic Values requirements.

Many classes are offered on the modular system (fewer than fifteen weeks) to take advantage of Michigan weather. Most modular classes are 7 weeks. Check the schedule of classes for starting date. Classes meet in the gym for the initial meeting unless noted on MyMCC.

Although it is still highly recommended, a physical examination is not mandatory for physical education activity classes. The physical education requirement may be waived by a medical excuse based on a physician's signed statement. Where the physical education requirement has been waived, the student must still complete 62 credit hours to earn a degree.

Some courses require payment of a fee in addition to tuition.

Physical Education - Activity

PEA 100C
Hatha Yoga
1 Cr. Hr. – 2 Contact Hrs. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement
Basic postures, nutrition, meditation and the psychological and philosophical principles of yoga will be studied. Breath control and focusing the mind are practiced throughout the course.

PEA 101A
Fitness, Wellness & Nutrition
1 Cr. Hr. – 2 Contact Hrs. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement
A study of the body functions as they relate to exercise, postural alignment, good nutrition and diet. Students will understand and experience factors important to the physical, psychological and social well-being of the individual. Individual physical fitness testing, exercise programs, leisure-time exploration and consumer skill development will be presented.

PEA 103
Weight Training
1 Cr. Hr. – 2 Contact Hrs. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement
Weight training is a course which covers objectives, fundamental skills, safety suggestions and procedures to develop individual conditioning and weight training programs. Performance and written tests are given.

PEA 104A
Walking, Jogging and Conditioning
1 Cr. Hr. – 2 Contact Hrs. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement
A course designed for individuals interested in establishing a physical fitness program emphasizing the cardiovascular component. The class includes individually prepared programs of walking/jogging, flexibility and muscular endurance conditioning.

PEA 105
Pocket Billiards
1 Cr. Hr. – 2 Contact Hrs. ❶Ⓦ
Prereq: Meet Ready to Succeed Requirement
This course is designed to teach the various games of pocket billiards. It will include rules, regulations, the fundamentals of the different games, and match play tactics and tournament competition.

PEA 106
Leisure Games
1 Cr. Hr. – 2 Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
Explanation of rules, strategies and courtesies of table tennis, shuffleboard, badminton, table games and other appropriate lifetime activities. This class includes singles and doubles play.

PEA 107
Archery
1 Cr. Hr. – 2 Contact Hrs. ⒻⓈ
Prereq: Meet Ready to Succeed Requirement
Fundamental skills, techniques and rules of archery are practiced and studied, shooting 10-160 yards.

PEA 108
Bowling
1 Cr. Hr. – 2 Contact Hrs. ⒻⓌⓈ
Prereq: Meet Ready to Succeed Requirement
This course includes history, rules, courtesies, fundamental skills, and team competition. (Fee)

PEA 109
Sport Judo and Self-Defense
1 Cr. Hr. – 2 Contact Hrs. ⒻⓌ
Prereqs: Meet Ready to Succeed Requirement and be at least 14 years old
The course will include a history of the sport, basic individual fundamentals, rules interpretation, courtesies and self-defense techniques.

PEA 110
American Karate System I
1 Cr. Hr. – 2 Contact Hrs. ⒻⓌ
Prereqs: Meet Ready to Succeed Requirement and be at least 14 years old
Course is designed to acquaint the student with the basics and history of karate. The beginning student will learn the proper stretching and warm-up exercises. Students will be instructed to use hand and foot techniques of Karate along with self-defense.

PEA 111A
Tae Kwon Do Ap Koobi
1 Cr. Hr. – 2 Contact Hrs. Ⓕ
Prereqs: Meet Ready to Succeed Requirement and be at least 14 years old
Students will practice the breathing, balance, rhythm, timing, and focus necessary to perform the basic blocks, punches, strikes, kicks, and turns from the front stance; demonstrate the 1st Taegeuki form; increase advantage through leverage and alignment; translate Korean terms of class protocol; discuss significance of trigrams to forms; apply self-defense escapes from wrist/hand grabs; and begin to develop an awareness of one's surroundings for safety issues.

PEA 112
Wrestling I
1 Cr. Hr. – 2 Contact Hrs. Ⓕ
Prereq: Meet Ready to Succeed Requirement
This course covers history, explanation of rules and regulations, demonstration and practice of basic holds, rides and takedowns. Practical and written testing.

PEA 114
Golf I
1 Cr. Hr. – 2 Contact Hrs. ⒻⓈ
Prereq: Meet Ready to Succeed Requirement
Fundamentals, skills, strategies and rules of golf are practiced and studied. Practice on the driving range, putting green and actual play are included. Skill and written testing. (Fee)

PEA 116
Tennis I
1 Cr. Hr. – 2 Contact Hrs. Ⓕ
Prereq: Meet Ready to Succeed Requirement
This course includes the history, explanation of rules and regulations, practice of fundamental skills and class tournament competition. Skill and knowledge testing.

PEA 118
Cycling
1 Cr. Hr. – 2 Contact Hrs. ⒻⓈ
Prereq: Meet Ready to Succeed Requirement
This course is designed to introduce the individual to the activity of cycling. The class will include safety factors of cycling and a progressive cycling program. Fitness and written testing are included.

PEA 130
Beginning Swimming
1 Cr. Hr. – 2 Contact Hrs. ❶
Prereq: Meet Ready to Succeed Requirement
Course is designed for beginners and advanced beginners. Materials covered include: adapting to the water, basic strokes, including swimming on front, back, and side, and safety skills. Individualized instruction in sequence as readiness occurs. American Red Cross certification is awarded upon satisfactory testing and completion.

PEA 131
Intermediate Swimming
1 Cr. Hr. – 2 Contact Hrs. ❶
Prereq: PEA 130 or American Red Cross Level 3 certificate or equivalent
This course is designed for intermediate swimmers. Materials covered include: improving the five basic strokes, safety, learning three new strokes and understanding swimming for fitness. Individualized instruction in sequence as readiness occurs. American Red Cross certification is awarded upon satisfactory testing and completion.

PEA 133
Water Safety Instructor
1 Cr. Hr. – 2 Contact Hrs. ❶
Prereqs: Meet Ready to Succeed Requirement, must hold a current lifeguard training certificate and be at least 17 years old
The skills test includes: swim 25 yards of front crawl, back crawl, side stroke, breast stroke, and elementary back stroke and 15 yards of butterfly stroke, maintain a position on back for one minute, and tread water for one minute. Course covers review of the styles of swimming, teaching the styles, and observation and teaching. Upon successful completion of the course, water safety instructors are qualified to teach all levels of the American Red Cross Infant and Pre-school Aquatics Program, Levels I-VI in the Learn to Swim Program, Parental and Child Aquatics and the Water Safety Outreach Programs. They will also have Fundamentals of Instructor Training. American Red Cross certification is awarded upon satisfactory testing and completion.

PEA 134A
Lifeguard Training
1 Cr. Hr. – 3 Contact Hrs. ❶
Prereqs: Meet Ready to Succeed Requirement and be at least 15 years old, able to swim 500 yards continuously; swim 200 yards in front crawl; 100 yards of breast stroke; 200 yards either front crawl or breast stroke; swim 20 yards using front crawl or breast stroke; then dive to a depth of 7 to 10 feet, retrieve a 10 pound object, return to the surface and swim 20 yards back to the starting point with the object (7.5 hours to be individually arranged with the instructor)
This course focuses on Lifeguarding skills and knowledge needed to prevent and respond to aquatic emergencies. It prepares lifeguard candidates to recognize emergencies, respond quickly and effectively to emergencies and prevent drowning and other incidents. The course also teaches other skills and individual needs to become a professional lifeguard. American Red Cross certificates for Lifeguard Training, First Aid, CPR for Professional Rescuers, Waterfront Lifeguarding, Preventing Disease Transmission, Oxygen Administration, and AED Essentials are awarded upon satisfactory testing and completion.

PEA 139A
Basic Canoeing/Kayaking
1 Cr. Hr. – 2 Contact Hrs. ❶❷
Prereq: Meet Ready to Succeed Requirement
This course is designed for those students who wish to gain additional knowledge and skill in the sports of canoeing and kayaking. The course will cover the history, equipment design, regulations, skills and techniques involved in safe paddling in flat, open and swift water. For admittance into the course, the student must have swimming ability sufficient to enable him/her to maintain himself/herself in the water for ten minutes comfortably and calmly, with relaxation and gentle movements, while clothed in shirts, trousers and tennis shoes or the equivalent.

PEA 152
Softball
1 Cr. Hr. – 2 Contact Hrs. ❶❷
Prereq: Meet Ready to Succeed Requirement
A course which covers skills, explanation of rules and regulations, demonstration and practice of basic skills. There will be practical and written testing.

PEA 153
Baseball I
1 Cr. Hr. – 2 Contact Hrs. **F**
Prereq: Meet Ready to Succeed Requirement
This course is designed to cover the basic fundamental skills, rules and strategies of baseball. There will be practical skill and written tests on rules and basic fundamentals.

PEA 154A
Volleyball I
1 Cr. Hr. – 2 Contact Hrs. **F**
Prereq: Meet Ready to Succeed Requirement
The fundamental skills, rules, strategies and courtesies of power volleyball are practiced and studied. Written and skill testing are required.

PEA 155
Basketball I
1 Cr. Hr. – 2 Contact Hrs. **F W**
Prereq: Meet Ready to Succeed Requirement
This course includes: history, explanation of rules, basic individual fundamentals, offensive and defensive theory and testing of individual skills and knowledge.

PEA 156
Beach Volleyball
1 Cr. Hr. – 2 Contact Hrs. **S**
Prereq: Meet Ready to Succeed Requirement
Notes: First class meets in the Bartels-Rode Gymnasium at MCC.
The fundamental skills, rules, strategies and courtesies of beach volleyball are practiced and studied. Opportunity to play, officiate and critique will be offered. Written and skill testing are required.

PEA 200
Kundalini Yoga
1 Cr. Hr. – 2 Contact Hrs. **F W**
Prereq: None
Basic postures, meditation, nutrition, and psychological and philosophical principles of kundalini yoga will be studied. Breath control, mantra (aloud and silent), and focusing the mind are practiced throughout the course.

PEA 201
Aerobic Movement For Fitness
1 Cr. Hr. – 2 Contact Hrs. **F W S**
Prereq: Meet Ready to Succeed Requirement
An introduction to aerobic fitness programs and routines. Students will learn simple aerobic routines including steps set to music, achieving better cardiovascular endurance, muscular strength, overall flexibility and individual fitness testing.

PEA 209
Sport Judo and Self Defense II
1 Cr. Hr. – 2 Contact Hrs. **F W**
Prereqs: PEA 109 and be at least 14 years old, and have basic experience in some martial art such as judo, jujutsu, karate, self-defense or other similar art.
Sport judo and self-defense II (jujutsu) will include advanced techniques enabling the student to become more skilled in martial arts such as kata (forms) and shiai (competition).

PEA 210
American Karate System II
1 Cr. Hr. – 2 Contact Hrs. **F W**
Prereqs: PEA 110 and be at least 14 years old.
The major objectives of the class are to learn advanced karate techniques; tournament rules; develop confidence, coordination, and character; prepare the student in officiating and the responsibility of teaching basic karate techniques.

PEA 211A
Tae Kwon Do Dwit Koobi
1 Cr. Hr. – 2 Contact Hrs. **W**
Prereq: Must be at least 14 years of age.
Students will: practice the breathing, balance, rhythm, timing, and focus necessary to perform the basic blocks, punches, strikes, kicks, and turns from the back stance; demonstrate the 3rd Palgwe form; increase power by adding momentia; translate Korean terms of basic moves; discuss symbolism of T'aegukki to life; apply self-defense escapes from garment grabs/body hugs; and begin to develop an awareness of one's habits for safety issues.

PEA 212
Wrestling II
1 Cr. Hr. – 2 Contact Hrs. Ⓦ
Prereq: PEA 112
This course is designed to teach wrestling in theory and practice. Specialized work at different levels to increase the standards of wrestling for coaches or physical educators will be emphasized. Students will have an opportunity to discover their own shortcomings and how to cope with them.

PEA 214A
Golf II
1 Cr. Hr. – 2 Contact Hrs. ⒻⓈ
Prereq: PEA 114
This course is designed for those students who wish to play, teach or coach the game of golf. Normally considered to be for the intermediate student of golf. *(Fee)*

PEA 216
Tennis II
1 Cr. Hr. – 2 Contact Hrs. Ⓕ
Prereq: PEA 116
This course is designed for those students who wish to gain additional knowledge and skill for advanced play, teaching or coaching tennis.

PEA 252
Softball II
1 Cr. Hr. – 2 Contact Hrs. ⒻⓈ
Prereq: Instructor permission
A softball course which covers the history, explanation of rules and regulations, demonstration and practice of basic skills. There will be practical and written testing covering rules and basic skills.

PEA 253
Baseball II
1 Cr. Hr. – 2 Contact Hrs. Ⓕ
Prereq: PEA 153
The course will specialize in teaching the theory and practice of baseball. Work will be provided at different levels to increase knowledge and understanding of the game for coaches and teachers.

PEA 254A
Volleyball II
1 Cr. Hr. – 2 Contact Hrs. Ⓕ
Prereq: PEA 154A
This course includes the study of advanced individual skills and team strategies. Coaching techniques and officiating are emphasized. Outside team competition is offered. Practical skill tests and written exams.

PEA 255
Basketball II
1 Cr. Hr. – 2 Contact Hrs. ⒻⓌ
Prereq: None
This course is designed for those students who wish to gain additional knowledge and skill which would be of value to those who wish to play, teach, officiate or coach the game of basketball.

Physical Education - Professional

PEP 100
Foundations of Physical Education
2 Cr. Hrs. – 2 Contact Hrs. Ⓕ
Prereq: None
An orientation to the profession of physical education, its history, basic principles, relation to growth and mental health and vocational opportunities. This course is intended for all students who wish to major or minor in physical education and/or related fields.

PEP 201
Elementary Physical Education for the Classroom Teacher
2 Cr. Hrs. – 2 Contact Hrs. ⒻⓌ
Prereq: None
A theory and activity course designed to acquaint the prospective classroom teacher with planning and teaching his/her own physical education program. Concepts of program planning plus practical experience in teaching varied levels of physical education activities are included. This course is required for physical education majors and suggested for elementary education majors.

PEP 203
Fundamentals of Coaching
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ❺
Prereq: None
This course is designed for both experienced and novice coaches interested in understanding and/or improving their professional coaching skills. Topics to be covered include: philosophy, growth and development, sports safety training, psychology, litigation/liability and sports management. American Red Cross Sports Safety Training, which includes adult CPR, certification is awarded upon successful completion (80% or better).

Physical Science

PHSC 101A
Introductory Physical Science
Lecture and Lab
4 Cr. Hrs. – 6 Contact Hrs. ❶Ⓦ❺
Prereqs: Meet Ready to Succeed Requirement and MATH 040
This is a course for non-science majors offering students a broad exposure to the physical sciences. The approach to this course is conceptual and contemporary, and includes topics from various physical sciences. Students will use both empirical and theoretical evidence to gain an understanding

of the fundamental laws that govern the universe.

Physics

PHYS 201L&L
Principles of Physics
4 Cr. Hrs. – 6 Contact Hrs. ❶
Prereq: MATH 112
An integrated lecture and lab course that develops, by means of lecture and laboratory experience, a basis for understanding the physical aspects of phenomenon classified as mechanics, heat, and waves (sound). This course is especially suitable for pre-professional students such as pre-med, pre-law, pre-dental, and life science and liberal arts majors.

PHYS 202L&L
Principles of Physics
4 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereq: PHYS 201L&L
An integrated lecture and lab continuation of PHYS 201 which considers the physical aspects of phenomenon classified as magnetism, electricity, light, and nuclear physics. This course is especially suitable for pre-professional students such as pre-med, pre-law, pre-dental, and life science and liberal arts majors.

PHYS 203L&L
Engineering Physics
5 Cr. Hrs. – 7 Contact Hrs. 🅕
Prereq: MATH 161
Recommended Coreq: MATH 162
A course designed for students majoring in engineering, mathematics or the physical sciences. Lectures, labs, demonstrations, discussions and problems on the principles of mechanics, sound, waves, heat and thermodynamics. Computer applications included. Graphing calculators will be utilized.

PHYS 204L&L
Engineering Physics
5 Cr. Hrs. – 7 Contact Hrs. 🅦
Prereqs: MATH 162 and PHYS 203L&L
A continuation of PHYS 203L&L. Lectures, labs, demonstrations, discussions, and problems on the principles of electricity, magnetism, circuits, light, and modern physics. Computer applications included. Graphing calculators will be utilized.

Political Science

PSCI 111
Introduction to American Government
4 Cr. Hrs. – 4 Contact Hrs. 🅖🅦🅢
Prereq: Meet Ready to Succeed Requirement
A study of the structure and function of U.S. national, state, and local government emphasizing the basic rights and responsibilities of citizenship, as well as an introduction to basic forms and philosophies of government.

PSCI 112A
Contemporary Issues in
U.S. Public Administration
4 Cr. Hrs. – 4 Contact Hrs. 🅓
Prereq: PSCI 111
A study of the administration of American government and the problems currently confronting it. Emphasis will be placed upon current and controversial problems of administration. An attempt will be made to include those areas meeting needs and interests of students.

PSCI 202
International Relations
3 Cr. Hrs. – 3 Contact Hrs. 🅕🅦
Prereq: Meet Ready to Succeed Requirement
This course examines political relationships worldwide. It will include the analysis of conflicts in the world, and how nations search for peace through the United Nations. Additional areas to be examined are international law, the World Trade Organization, the International Monetary Fund, the World Bank, currency exchange rates, the integration of trade blocs like the European Union, environmental pollution, and economic development.

PSCI 203
Readings In the History of
Western Political Thought
3 Cr. Hrs. – 3 Contact Hrs. 🅓
Prereq: PSCI 111
An introduction to the history of Western Political Thought from Plato to Nietzsche. The course will concentrate on the original texts which will be subjected to critical analysis. Major themes will be identified and examined in the light of the American democratic experience.

PSCI 205
Contemporary Political Issues in
United States Government
3 Cr. Hrs. – 3 Contact Hrs. 🅕🅦
Prereq: Meet Ready to Succeed Requirement
Recommended prereq: PSCI 111
An intensive study and critical analysis of contemporary political issues in U.S. Government involving issues that deal with some or all of the following: basic concepts of U.S. democracy, state-federal relationships, government finance, political interest groups, legislative powers, executive powers, judicial powers, civil rights, civil liberties, and international relations.

PSCI 210
International Organizations
1 Cr. Hr. – 1 Contact Hr. **F****W**
Prereq: Meet Ready to Succeed Requirement
This course concentrates on the objectives, functions and structure of selected international organizations. Potential organizations include but are not limited to: United Nations, Arab League, North Atlantic Treaty Organization, Organization of African Unity. International Organizations study will prepare and provide students an opportunity to participate in an off campus conference featuring simulations of a selected organization.

PSCI 211
Comparative Government
3 Cr. Hrs. – 3 Contact Hrs. **F****W**
Prereq: Meet Ready to Succeed Requirement
This course will compare governments in various European, American, Asian, and African states. Students will examine political, cultural, economic, and historical reasons for similarities and differences between nations. The United States will be used as a model for comparison.

PSCI 220
Labor Studies
3 Cr. Hrs. – 3 Contact Hrs. **F**
Prereq: Meet Ready to Succeed Requirement
A survey course studying and critically analyzing the historical, political, and legal frameworks of the labor movement, major labor laws, causes and purposes of the labor movement, union structure and behavior, and labor-management approaches to solving employment disputes in the U.S. and internationally.

PSCI 290CI
Campaign Cooperative Internship
3 Cr. Hrs. – 3 Contact Hrs. **D**
Prereq: None
The Cooperative Internship Program is a paid or non-paid fieldwork experience in electoral politics within the student's major area of study. Variable credit may be earned dependent upon the number of work hours available from the sponsoring organization. A student may sign up for no more than two (2) internships as desired; however, the number of credit hours which can be applied toward a degree depends upon the student's course of study and departmental resources. The maximum number of hours of cooperative internship is 6 credit hours depending upon the program. This course is offered on a pass/ no pass basis.

Psychology

PSYC 102
Applied Psychology
3 Cr. Hrs. – 3 Contact Hrs. 🅕🅦🅢
Prereq: Meet Ready to Succeed Requirement
This course focuses on the practical application of psychological principles in everyday life. A variety of psychological perspectives will be utilized to enhance students' ability to understand and change behavior.

PSYC 201
General Psychology
4 Cr. Hrs. – 4 Contact Hrs. 🅕🅦🅢
Prereq: Meet Ready to Succeed Requirement
This course provides an academic survey of research methods and statistics, and in-depth study of neuroscience, development, learning/memory, sensation/perception, states of consciousness, motivation/emotion, stress/health, disorders/ therapy, and social psychology. It is especially recommended for those who plan to continue their education beyond the associate degree level.

PSYC 202
Educational Psychology
3 Cr. Hrs. – 3 Contact Hrs. 🅕🅦
Prereq: PSYC 201; Minimum Grade of "C"
This course explores interrelationships between the fields of psychology and education. Research data, learning theories, cultural pluralism and special topics reflective of current educational change are examined. Particular interests in educational psychology at specific age/grade levels may be pursued in depth.

PSYC 203
Abnormal Psychology
4 Cr. Hrs. —4 Contact Hrs. 🅕🅦
Prereq: PSYC 201; Minimum Grade of "C"
Students will study the etiology, assessment, diagnosis, and treatment of psychological disorders in adults and children. They will learn about the biological, psychological, and sociocultural perspectives on these disorders, along with the related legal and ethical issues.

PSYC 207
Life Span Development
4 Cr. Hrs. – 4 Contact Hrs. 🅕
Prereq: PSYC 201; Minimum Grade of "C"
This course will survey the psychological research and theory of patterns of biological, cognitive, emotional, and social development from conception through death.

PSYC 208
Adolescent Development
3 Cr. Hrs. – 3 Contact Hrs. 🅦
Prereq: PSYC 201; Minimum Grade of "C"
This course will survey the psychological research and theory of patterns of biological, cognitive, emotional, personality, and social changes experienced as individuals develop from childhood through adolescence and young adulthood. The course follows an ecological systems approach as individuals are situated within social contexts, family, peers, school, community, and the larger culture.

PSYC 209
Psychological Disorders of Childhood
3 Cr. Hrs. - 3 Contact Hrs. 🅦
Prereq: PSYC 201; Minimum Grade of "C"
This course provides a topical survey of the area of childhood psychological disorders. This course will include an examination of assessment, diagnosis, and treatments of various behavioral, emotional, and developmental /learning disorders commonly found during childhood and adolescence. In addition, child maltreatment and non-accidental trauma will also be discussed.

PSYC 210
Social Psychology
3 Cr. Hrs. – 3 Contact Hrs. 🅕🅦
Prereq: PSYC 201 or SOC 101
Social psychology focuses on how an individual's thoughts, feelings, and actions are influenced by others. This course will survey the research and theory of patterns of social identity, social influence, social perception, and social cognition. Additional topics include altruism, aggression, attitude change, and interpersonal attraction. There is an ongoing emphasis on how social psychology applies to medicine, the law, and work organizations. *(This course is also listed as SOC 210.*)

Reading

RDG 040
Essential Reading Skills
(formerly RDG 040C)
3 Cr. Hrs. – 3 Contact Hrs. ❻Ⓦ❺
Prereq: None
This course is for students scoring between 11 and 55 on the COMPASS Reading Test. Topics covered include prefixes, suffixes, vocabulary, reading for the main idea, and identifying supporting details. Course includes weekly assignments, some one-on-one and small group instruction. Additional lab time and/or small group meetings are required.

RDG 050
Essential Reading Skills
(formerly RDG 040A)
1 Cr. Hr. – 1 Contact Hr. ❻Ⓦ❺
Prereq: None
This course is designed for students scoring 56-75 on the Compass Reading Test. Course instruction includes word attack, prefixes-suffixes, vocabulary, reading for the main idea, and finding supporting details. Course includes individualized weekly assignments and private instruction. Additional lab time and/or small group meetings are required.

RDG 060
Reading and Succeeding in College
(formerly RDG 040E)
1 Cr. Hr. – 1 Contact Hr. Ⓦ
Prereq: RDG 040 or RDG 050
RDG 060 is designed for at-risk students who have completed RDG 040 or RDG 050 but have not reached 10th grade reading level on the Nelson-Denny Reading Test and, consequently, are not ready for RDG 130, RDG 140, or RDG 150. Each student will have an individual weekly appointment with an instructor. Course instruction will cover the following: time management, concentration strategies, reading strategies, how to read and study a textbook assignment, how to take lecture notes, and how to study for tests. Additional lab time and/or small group meetings are required. Note: We recommend that students are also enrolled in a class which requires a textbook and has an instructor lecture. It is NOT recommended that students enroll in College Success Seminar (CSS 100A) during the same semester.

RDG 130
Advanced Reading Skills I
1 Cr. Hr. – 1 Contact Hr. ❻Ⓦ❺
Prereq: Meet Ready to Succeed Requirement or COMPASS Reading score of 76 or higher
This course will provide individualized weekly assignments and private instruction tailored to meet the student's needs. After the student completes a pretest, the instructor and student will decide whether the primary focus will be vocabulary development or comprehension. Coursework for vocabulary development builds a practical college-level vocabulary by teaching Greek and Latin etymology, dictionary skills, vocabulary memory devices and use of context. Coursework for comprehension improves reading speed and develops comprehension of main ideas and details. Additional lab time and/or small group meetings will be required.

RDG 140
Advanced Reading Skills II
1 Cr. Hr. – 1 Contact Hr. ❻Ⓦ❺
Prereq: RDG 130
This course is designed for students who have already completed RDG 130 and wish to further improve their reading skills. It will provide individualized weekly assignments and private instruction tailored to meet the student's needs. After discussing the student's work and test scores from RDG 130, the instructor and student will decide whether the primary focus will be vocabulary development or comprehension. Coursework for vocabulary development builds a practical college-level vocabulary by teaching Greek and Latin etymology, dictionary skills, vocabulary memory devices and use of context. Coursework for comprehension improves reading speed and develops comprehension of main ideas and details. Additional lab time and/or small group meetings will be required.

RDG 150
Study Skills/Test Taking
1 Cr. Hr. – 1 Contact Hr. ❶Ⓦ❺
Prereq: Meet Ready to Succeed Requirement or
COMPASS Reading score of 76 or higher
This course teaches time management, concentration, memory improvement, note taking, test taking, text study, and college library skills. Note: We recommend that students taking RDG 150 also take at least one lecture-type college course during the same semester. It is NOT recommended to take College Success Seminar (CSS 100A) during the same semester.

READY TO SUCCEED

Before enrolling in many courses, you must meet the READY TO SUCCEED reading competency requirement by test scores or course completion.

COMPASS	Reading score of 76 or higher *(Not valid after 5 years)*
ACT	Reading score of 19 or higher
MME	1 or 2 on both Reading and Writing
College Credits	15 College credits (100-level or higher) with cumulative 2.0 or higher GPA
Reading Course	Earning a "C" grade or better in Reading 040 or Reading 050

READING

COMPASS Reading	ACT Reading	MME	Placement
76-100	19 or higher	Level 1 or 2 on Reading & Writing	No Reading course required. *(**Ready to Succeed** requirement has been met.)*
56-75	18	N/A	RDG 050
11-55	12-17	N/A	RDG 040
0-10	N/A	N/A	See a Counselor

*Note: **COMPASS** test scores are not valid after **5 years**.*

Real Estate

RE 101
Real Estate I
3 Cr. Hrs. – 3 Contact Hrs. **Ⓓ**
Prereq: None
This course provides background information for the State Real Estate Salesperson's examination. The course is designed for real estate sales people and those interested in entering the real estate profession. Content includes economics, legal aspects, nature of real property, ownership, and property rights. Several certified professional realtors are used as resource persons for key subject areas.

Recreation

REC 111
Introduction to Recreation and Leisure
3 Cr. Hrs. – 3 Contact Hrs. **ⒻⓈ**
Prereq: None
An examination of the history and development of the park and recreation movement; sociological, economical, psychological and political consideration of leisure and recreation in contemporary societies; professional and service organizations and their interrelationships; and orientation to the professional field.

REC 122
Leadership in Recreation
2 Cr. Hrs. – 2 Contact Hrs. **Ⓦ**
Prereq: None
This course is designed to acquaint the student with fundamental knowledge of leadership and group functioning. It presents, among several related aspects, the development of leadership study, characteristics of group functioning, and selected supervision topics such as delegation and evaluation. Some questions to be considered are: What determines leadership effectiveness What influence does the situational environment have on leader behavior What contributes to group cohesion and stability What leadership roles present difficulty to the recreation and leisure service practitioner What factors motivate subordinate work behavior

REC 123
Recreation and Leisure Programming
2 Cr. Hrs. – 2 Contact Hrs. **Ⓦ**
Prereq: None
This course is designed to provide the student with an understanding of recreation programming as it relates to a variety of settings, situations and people. Emphasis will be placed on the concepts and processes of organizing, conducting and evaluating programs.

REC 211-214
Field Study in Recreation Leadership
1-4 Cr. Hrs. – Variable Contact Hrs. **Ⓓ**
Prereqs: REC 111 and REC 122 and REC 123
An in-depth experience in the field(s) of private, agency, or municipal recreation and parks (to include community school programs) primarily for recreation majors and minors. Students will meet several times prior to their field study experience with the college coordinator.

REC 211 .... 1 credit
60 HOURS
REC 212 .... 2 credits
120 HOURS
REC 213 .... 3 credits
180 HOURS
REC 214 .... 4 credits
240 HOURS

COURSE DESCRIPTIONS

REC 215
Recreation and Special Populations
2 Cr. Hrs. – 2 Contact Hrs. ❿
Prereq: REC 111
This course is specifically designed to acquaint the student with an overview of therapeutic recreation which involves physically, mentally or emotionally challenged; social deviant; the aged and substance abusers within institutions, agencies and in the community. The course is intended for students interested in general recreation as well as those who wish to specialize in working with special groups.

Respiratory Therapy

RT 101
Respiratory Therapy Physics
1 Cr. Hr. – 1 Contact Hr. ❺
Prereq: None
This course introduces the student to the basic concepts of classical physics used in respiratory care.

RT 110L&L
Equipment and Procedures I
3 Cr. Hrs. – 5 Contact Hrs. Ⓦ
Prereqs: AH 102 and RT 101
Coreq: RT 111LEC
This course is designed to cover equipment and procedures in routine oxygen therapy. Topics included are: the physical properties of gases, manufacture and transport of medical gases, oxygen storage systems, pressure regulating systems, flow regulating systems, oxygen delivery equipment, and oxygen analyzers.

RT 111LEC
Introduction to Respiratory Therapy
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereqs: AH 102 and RT 101
Coreq: RT 110L&L
This course is designed to give an introduction to the field of Respiratory Therapy and to basic medical sciences. Topics included are: the gas laws, physical states and structure of matter, role of energy in chemical and biological systems, acid-base physiology and processes of body metabolism.

RT 120L&L
Equipment and Procedures II
3 Cr. Hrs. – 5 Contact Hrs. Ⓦ
Prereqs: RT 110L&L and RT 111LEC
Coreqs: RT 121 and RT 122
This course is designed to familiarize the student with proper techniques and equipment used for the delivery of aerosol/humidity therapy, incentive spirometry, intermittent positive pressure breathing (IPPB) and chest physical therapy.

RT 121
Pharmacology
2 Cr. Hrs. – 2 Contact Hrs. Ⓦ
Prereqs: RT 110L&L and RT 111LEC
Coreqs: RT 120L&L and RT 122
This course introduces the student to the general principles of pharmacology and gives an in-depth study of cardiopulmonary drugs.

RT 122
Clinical I
2 Cr. Hrs. – 4 Contact Hrs. Ⓦ
Prereqs: RT 110L&L and RT 111LEC
Coreqs: RT 121 and RT 120L&L
This course is designed to introduce the student to patient care. The student will be assigned such responsibilities as general rounds. In addition, students will observe certain respiratory care procedures being performed.

RT 130L&L
Equipment and Procedures III
3 Cr. Hrs. – 5 Contact Hrs. ✦
Prereqs: RT 120L&L, RT 121, and RT 122
Coreqs: RT 131, RT 132, and RT 134
This course is designed to present procedural tasks including: intubation, airway care and management, pulmonary function testing and arterial blood gas sampling.

RT 131
Physiology
3 Cr. Hrs. – 3 Contact Hrs. ✦
Prereqs: RT 120L&L, RT 121, and RT 122
Coreqs: RT 130L&L, RT 132, and RT 134
This course is designed to give the student an in-depth study of cardiopulmonary physiology.

RT 132
Clinical II
3 Cr. Hrs. – 8 Contact Hrs. ✦
Prereqs: RT 120L&L, RT 121, and RT 122
Coreqs: RT 130L&L, RT 131, and RT 134
This course is designed to allow the student to practice techniques mastered in the previous practicum. During this course, the student will also become proficient in performing all basic respiratory care in the hospital.

RT 134
Introduction to Mechanical Ventilation
1 Cr. Hr. – 1 Contact Hr. ✦
Prereqs: RT 120L&L, RT 121, and RT 122
Coreqs: RT 130L&L, RT 131, and RT 132
This course is designed to introduce the student to the theories of adult mechanical ventilation. Emphasis will be placed on patient assessment, indications, modes of ventilation, and management of the mechanically ventilated adult patient.

RT 141
Pulmonary Pathophysiology
2 Cr. Hrs. – 2 Contact Hrs. ●
Prereqs: RT 130L&L, RT 131, RT 132, and RT 134
Coreqs: RT 144 and RT 152CLI
This course examines the mechanism of pulmonary disease. Emphasis is placed on a detailed study of etiology, clinical manifestations, treatment, complications, and prognosis for most pulmonary disorders.

RT 144
Adult Mechanical Ventilation
3 Cr. Hrs. – 3 Contact Hrs. ●
Prereqs: RT 134, RT 130L&L, RT 132, and RT 131
Coreqs: RT 141 and RT 152CLI
This course is a continuation of the Introduction to Mechancial Ventilation course. Emphasis will be placed on the evaluation, care and management of mechanically ventilated adult patients. Additional emphasis will be placed on the application, mechanical functions and operation of specific ventilator systems.

RT 152CLI
Clinical IV
5 Cr. Hrs. – 12 Contact Hrs. ●
Prereqs: RT 130L&L, RT 131, RT 132 and RT 134
Coreqs: RT 141 and RT 144
This course is designed to allow the student to develop competency in the critical care areas, mastering skills in mechanical ventilation of adult patients.

RT 162CLI
Clinical V
7 Cr. Hrs. – 16 Contact Hrs. ●
Prereqs: RT 141, RT 144, and RT 152CLI
This course is designed to allow the student to further develop skills and competence in the adult critical care areas. Here the student will master ventilator therapy of the adult patient. By the end of the semester, the student should be able to assume a well-rounded position on the Respiratory care team.

RT 210
Cardiovascular and Renal Physiology
4 Cr. Hrs. – 4 Contact Hrs. Ⓦ
Prereq: RT 162CLI
Coreq: RT 220C
This course is designed to present the anatomy, physiology and monitoring methods used to examine the heart-lung system and the kidneys. Emphasis will be placed on the electrocardiogram and hemodynamic monitoring, cardiac pharmacology, renal control of electrolytes and applications toward clinical respiratory care.

RT 212A
Advanced Clinical Practicum I
7 Cr. Hrs. – 16 Contact Hrs. ❺
Prereqs: RT 210 and RT 220C
This clinical rotation is designed to prepare the student for an in-depth analysis of various critical care and diagnostic specialties.

RT 220C
Pediatric/Neonatal Critical Care
4 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereq: RT 162CLI
Coreq: RT 210
This course is designed to examine the various methods and procedures used to evaluate and care for the high-risk infant and pediatric patient. Emphasis will be placed on fetal development and monitoring, maternal risk factors, labor and delivery, newborn pathophysiology, mechanical ventilation and cardiopulmonary monitoring.

RT 222A
Clinical Rotation VII
3 Cr. Hrs. – 8 Contact Hrs. ❻
Prereq: RT 212A
Coreqs: RT 230B and RT 240
This is the second and last clinical rotation taken by the second-year student. It is designed to expose the student to various specialties of respiratory care, including one day each in: home care; rehabilitative care; pulmonary function testing; sleep studies; smoking cessation; asthma education.

RT 230B
Pulmonary Diagnostics and Rehabilitation
2 Cr. Hrs. – 2 Contact Hrs. ❻
Prereq: RT 212A
Coreqs: RT 222A and RT 240
This course explores the various methods of testing, evaluating and rehabilitating patients with pulmonary disease and disability. Emphasis will be placed on organization of rehabilitation programs, preventive care and home care.

RT 240
The Health Care Environment
1 Cr. Hr. – 1 Contact Hr. ❻
Prereq: RT 212A
Coreqs: RT 222A and RT 230B
This course is designed to acquaint the student with the environments and forces that shape health care policy. Emphasis is placed on the social, political, medical and economic forces that influence the provision of health care today.

RT 250
Asthma Educator Course
3 Cr. Hrs. – 3 Contact Hrs. Ⓓ
Prereq: None
This is a post-graduate course designed to train health care practitioners to be asthma educators and to prepare them for the national certification exam currently being developed by the American Lung Association. This course is for those health care professionals who have completed formal training in accredited health care programs. This course will cover all aspects of asthma education including pathology, pharmacology, diagnostics, psychosocial training, and asthma management planning.

Sociology

SOC 101
Principles of Sociology
3 Cr. Hrs. – 3 Contact Hrs. 🅕🅦🅢
Prereq: Meet Ready to Succeed Requirement
A course offering the student an opportunity to grasp the basic principles necessary to develop sociological insights. Societal structure, as well as the basic tools of sociological measurement are surveyed. Emphasis is on the United States from a global perspective. The course is designed to equip sociology majors with the necessary foundation to continue in sociology and to provide non-majors with a general understanding of the structure and processes of society.

SOC 102A
Race, Ethnicity, and Immigration
3 Cr. Hrs. – 3 Contact Hrs. 🅕
Prereq: Meet Ready to Succeed Requirement
This course explores the related concepts of race, ethnicity, and immigration and their impact on the social conditions of diverse American communities. Students will learn how race relations shape politics, economics, housing, health, education, law, entertainment, and civil society. Students will learn about the conditions in which different peoples were incorporated into the American polity and how this incorporation affects people's lives on the group and individual level.

SOC 202A
Modern Social Problems
3 Cr. Hrs. – 3 Contact Hrs. 🅦🅢**
Prereq: SOC 101
*Notes: **This course is offered only in odd numbered years*
This course surveys major obstacles faced by societies from a sociological perspective. Social problems rooted in fundamental inequalities are surveyed including: economic inequality, work, education, race and ethnicity, gender, crime, and the family. Social problems are defined, cause is analyzed, and solutions are critically evaluated.

SOC 203
Introduction to Social Work
3 Cr. Hrs. – 3 Contact Hrs. 🅕
Prereq: SOC 101 or SOC 202A
Designed to present the objectives, methods and practices of the current field of social work. Where possible and whenever possible fieldwork is included as part of the course offering. Field observation trips, presentations by practicing social workers, research practitioners and members of relevant social institutions and agencies will also be included. This course also assists those students majoring in education, ministry, medicine or law to gain intelligent awareness of the functions of existing social agencies in the Muskegon community.

SOC 205 Marriage and Family
3 Cr. Hrs. – 3 Contact Hrs. 🅦🅢**
Prereq: SOC 101; Minimum Grade of "C"
*Notes: **This course is offered only in even numbered years*
Marriage and Family explores the sociological and ecological perspectives of intimate relationships and family dynamics of modern society; including changing traditions and family forms. With an emphasis on current research and demographics, topics studied in the course include: gender, sexuality, love, communication, conflict, singlehood and cohabitation, parenting, divorce, and blended families.

SOC 206 Introduction to Aging
3 Cr. Hrs. – 3 Contact Hrs. 🅓
Prereq: Meet Ready to Succeed Requirement
An overview of gerontology that emphasizes identifying, describing and explaining challenges, patterns and processes concerning the elderly. This approach enables students and practitioners to acquire basic knowledge critical for careers related to gerontology, and to anticipate problems and promises of their own later lives.

🅓 By Demand   🅕 Fall   🅦 Winter   🅢 Summer

SOC 210 Social Psychology
3 Cr. Hrs. – 3 Contact Hrs. 🄖🅦
Prereq: PSYC 201 or SOC 101
While psychology focuses on individual thoughts, feelings, and actions, the concentration for social psychology is how an individual's thoughts, feelings, and actions are influenced by others. This course will survey the research and theory of patterns of social identity, social influence, social perception, and social cognition. Additional topics include altruism, aggression, attitude change, and interpersonal attraction. Applications of social psychology for law, medicine and work organizations are pervasive throughout this course. *(This course is also listed as PSYC 210.)*

Spanish

(See Foreign Languages)

Sports Officiating

OFC 111
Sports Officiating for Baseball,
Basketball and Football
3 Cr. Hrs. – 3 Contact Hrs. 🅦
Prereq: None
Sports Officiating will provide the student with the knowledge and expertise necessary to officiate in physical education classes, intramurals, and interscholastically. It includes the basic fundamental skills on officiating as well as the rules and mechanics of baseball, basketball and football.

OFC 112
Sports Officiating for Softball,
Basketball and Volleyball
3 Cr. Hrs. – 3 Contact Hrs. 🄖
Prereq: None
Sports Officiating will provide the student with the knowledge and expertise necessary to officiate in physical education classes, intramurals, and interscholastically. It includes the basic fundamental skills on officiating as well as the rules and mechanics of softball, basketball and volleyball.

Technical Apprenticeship Related Instruction

Muskegon Community College, in cooperation with Muskegon Area industrial employers, labor councils, and the U.S. Department of Labor help train skilled workers for the future needs of industry. Apprenticeship Training programs are divided into two parts: on-the-job training under the supervision of a journeyman in the trade, and a minimum of 576 hours of related classroom instruction at a Federally approved training site. Muskegon Community College provides the related classroom instruction which accompanies apprenticeship training programs.

Muskegon Community College does not select or place students in apprenticeship programs. It does provide the related technical courses which all apprentices must attend. Non-apprentices may also enroll in these courses to prepare themselves for a subsequent apprenticeship, or to upgrade their qualifications for their present jobs.

Any trade which is recognized as apprenticeable by the U.S. Bureau of Apprenticeship and Training may have a local apprentice training program. Local programs require the cooperation of employers and a joint apprenticeship committee representing management and labor.

For information on class schedules and entrance into specific programs, call the Apprenticeship Coordinator at Muskegon Community College.

Successful completion of an apprenticeship training program may be credited toward an Associate in Applied Science Degree Program.

Technical Math

If you are planning to transfer to a four-year institution, consult with a counselor before signing up for a technical math class.

TMAT 101A
Technical Math I
3 Cr. Hrs. – 3 Contact Hrs. 🄵🅆🅂
Prereq: MATH 036A; Minimum grade of "C" or assignment based on Math Placement Test
A course for technical students who require a review of the principles of arithmetic as applied to manufacturing and business problems. Also included will be the use of the scientific calculator and basic algebra.

TMAT 102A
Technical Math II
3 Cr. Hrs. – 3 Contact Hrs. 🄵🅆
Prereq: TMAT 101A; Minimum grade of "C" or assignment based on Math Placement Test
A course presenting the fundamentals of algebra, and geometry as applied to the technical and industrial field. Basic statistics will also be covered.

TMAT 201
Technical Math III
3 Cr. Hrs. – 3 Contact Hrs. 🄵🅆
Prereq: TMAT 102A; Minimum grade of "C" or assignment based on Math Placement Test
A thorough study of basic trigonometry with applications to technical and industrial problems.

Technology-Related

AMT 129
Introduction to Technology
3 Cr. Hrs. – 6 Contact Hrs. ❶Ⓦ
Prereq: None

This course provides an "integrated" introduction to the current computer-based technologies of manufacturing. Students will develop a foundation of understanding through hands-on experience in: basic microcomputer operations, Computer-Aided Design (CAD), Computer-Aided Machining (CAM), Computer Numerical Control (CNC), robotics, Computer Automated Process Control, spreadsheets, and word processing. The course also promotes problem solving, group process decision-making, and communication skills. *(This course is also listed as CIS 129.)*

AMT 200
CAD/CNC Capstone
3 Cr. Hrs. – 6 Contact Hrs. Ⓦ
Prereq: CAD 100 or CAD 110 or CAD 210 or CAD 250

This course covers the development and design and build of products and tooling that utilize both the skills and concepts learned in the CAD/CNC program. This is a required course in the CAD/CNC program. A student must have an advanced knowledge of computer-aided parametric design with an emphasis on solid modeling. The student must also have an advanced knowledge of machine processes. Additionally, the student should have a basic understanding of the properties and heat treatment of metals.

ARE 115
Wind Turbine and Solar Array Installation
3 Cr. Hrs. - 4 Contact Hrs. Ⓦ❸
Prereqs: TMAT 101A and ELTC 101L&L, or instructor permission

The Wind Turbine and Solar Array Installation lab course uses lecture and lab to specify and install solar arrays for roof-top installations as well as taking down and re-installing a wind turbine. The class is focused on safety, structural integrity, wiring to code, performance evaluation, and customer interaction. Students will have hands-on experience with assembly, installation, and commissioning of these systems.

HP 101
Hydraulics/Pneumatics
3 Cr. Hrs. – 4 Contact Hrs. ❶Ⓦ
Prereq: TMAT 101A or MATH 040; Minimum Grade of "C"

An overview of industrial fluid power technology with emphasis on hydraulic and pneumatic components and circuits. Practical hands-on exercises are provided using pneumatic training equipment. Component recognition and circuit analysis are covered for their applications to maintenance, modifications, and design activities in the field.

QC 101
Basic Quality Control
3 Cr. Hrs. – 3 Contact Hrs. ❶Ⓦ
Prereq: None

This course presents practical approaches to quality problems. It includes study of basic techniques and laboratory workshop periods in developments of functional quality control. These include charting, sampling, analyzing probability relations, frequency distributions, vendor control, diagnosing the cause of defects, quality improvement and supervisory obligations.

QC 105
Quality and Productivity Using SPC-Statistical Process Control
3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: QC 101

This course instructs students in the methods and techniques of improved quality of productivity in all types of business and industry. Students are taught to understand the impact of foreign and domestic competition on their own organization and/or future employers. Topics covered include: operating a prevention system versus a detection system of quality control, defining and identifying inhibitors to quality and how to overcome them, chart construction, problem-solving using Pareto analysis, process flow charts, and cause and effect diagrams. The course is project-oriented and team-based.

TECH 200
Applied Alternative and Renewable Energy
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: MATH 100A (Formerly MATH 050),
CHEM 100LEC and CHEM 100A,
ELTC 101L&L, or instructor permission
This course introduces the student to the power generating technologies. It will cover the operating principles, benefits and challenges in traditional, alternative and renewable energy fields. An emphasis is made on fuel cells, wind power, photovoltaics, energy storage, and distribute power generation. An overview of the associated topics in economics and politics will be provided.

TECH 290CI
Cooperative Internship
Variable 1-4 Cr. Hrs. ❶
Prereq: Instructor permission
Notes: Student must have a GPA of 2.5 or better.
The student should have completed a significant portion of the core career requirements in their major field of study with a total of 30 credit hours towards a degree. Additionally, a faculty recommendation from the student's major field of study is required. The Cooperative Internship Program is a paid or non-paid fieldwork experience in business and/or industry within the student's major area of study. Variable credit hours (1-4 Cr. Hrs. per semester) may be earned dependent upon the number of work hours available from the employing organization. A student may sign up for as many internships as desired, however, the number of credit hours which can be applied towards a degree/certificate depends on the student's course of study and departmental requirements. This course is offered as a pass/ no pass grade. The internship course starting and ending dates are determined on an individual basis.

Theater

TH 101
Theater Appreciation
3 Cr. Hrs. – 3 Contact Hrs. ❶❶❶
Prereq: Meet Ready to Succeed Requirement
Designed for non-majors, this class attempts to prepare students for success as theatergoers. We will study the requirements of being an involved spectator at live theater and be introduced to the many elements of production. This is an experience-oriented course and requires attendance at play performances outside of class.

TH 102
Introduction to Acting I
3 Cr. Hrs. – 3 Contact Hrs. ❶
Prereq: Meet Ready to Succeed Requirement
An introduction to the art and craft of acting for the stage. Focuses on character analysis and performance. Physical, vocal, and mental exercises are utilized to develop the individual's self-awareness and communicative skills.

TH 108
Theater for Children
3 Cr. Hrs. – 3 Contact Hrs. ❶❶❶
Prereq: Meet Ready to Succeed Requirement
A course exploring the specialized techniques of play production for or with children, creative dramatics, and theater games. The class is designed for persons working with children such as elementary schoolteachers, special education workers, recreation leaders, and religious education staff. The use of theatrical techniques as educational tools to enhance the learning experience in other subjects is explored.

TH 120
Technical Theater I
1 Cr. Hr. – 1 Contact Hr. ❶
Prereq: Meet Ready to Succeed Requirement
A 5-week fundamental course in the technical theater sequence specifically designed as a prerequisite for Applied Theater classes and crew assignments for play productions. Introduces production staff organization and different types of stages and scenery.

TH 141

Applied Theater - Acting

1 Cr. Hr. – Variable Contact Hrs. ❺Ⓦ❻
*Prereq: Meet Ready to Succeed Requirement and
                obtain instructor permission*
Practicum class earning credit for acting in a Center
for Theater production. Scheduling is flexible but
will include weekend performances and probably
evening rehearsals.

TH 142

Applied Theater - Dance

1 Cr. Hr. – Variable Contact Hrs. ❻
*Prereq: Meet Ready to Succeed Requirement and
                obtain instructor permission*
Practicum class for performing in a Center for
Theater production. Scheduling is flexible but
will include weekend performances and probably
evening rehearsals.

TH 144

Applied Theater - Costuming

1 Cr. Hr. – Variable Contact Hrs. ❺Ⓦ❻
*Prereq: Meet Ready to Succeed Requirement and
                obtain instructor permission*
Practicum class earning credit for crew work on a
Center for Theater play production. Scheduling is
flexible but requires forty hours of lab work during
available times.

TH 145

Applied Theater - Scenery Construction

1 Cr. Hr. – Variable Contact Hrs. ❺Ⓦ❻
*Prereq: Meet Ready to Succeed Requirement and
                obtain instructor permission*
Practicum class earning credit for crew work on a
Center for Theater play production. Scheduling is
flexible but requires forty hours of lab work during
available hours.

TH 147

Applied Theater - Production Crew

1 Cr. Hr. – Variable Contact Hrs. ❺Ⓦ❻
Prereq: Instructor permission
A 4-week practicum class earning credit for crew
work on Center for Theater productions. Scheduling
is flexible but requires forty hours of lab time in
a four-week period. Work assignments are made
in terms of student interest and production needs.
Includes scenery construction, painting, properties,
costume, lighting, and/or sound crews.

TH 148

Applied Theater - Performance Crew

1 Cr. Hr. – Variable Contact Hrs. ❺Ⓦ❻
Prereq: Instructor permission
A 2-week practicum class earning credit for crew
work on Center for Theater productions. Requires
attendance at weekend and evening rehearsals
and performances for a two-week period. Work
assignments will be made in terms of student
interest and production needs. Includes scenery
shifting, properties, costume running, and lighting,
and/or sound crews.

TH 160

Acting for TV and Film

3 Cr. Hrs. – 3 Contact Hrs. ❺
Prereq: Meet Ready to Succeed Requirement
This course is designed to prepare the student
with the basic skills necessary for TV and/or film
acting. Among the topics covered are: acting for
the camera, the use of and differences between
the television and film camera, the use of the
storyboard, shooting out of sequence, developing
continuity, and the use of lighting, sound, special
effects and editing. Rehearsal outside of class time
and shooting on location may be required. The final
class project will culminate in each student acting
in a prepared film scene.

TH 201

Introduction to Theater History

3 Cr. Hrs. – 3 Contact Hrs. ❺
Prereq: Meet Ready to Succeed Requirement
An introductory course designed to give the student
an awareness of the development of theater from
classical Greece through Neo-classical France.

TH 202

Introduction to Acting II

3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
An acting class emphasizing the analysis of scripted
scenes and character interactions. Selected scenes
are rehearsed for possible performance at the end
of the semester.

TH 203

Readers Theater

3 Cr. Hrs. – 3 Contact Hrs. Ⓦ
Prereq: Meet Ready to Succeed Requirement
This performance course is designed to give the
student knowledge of and experience in oral
reading as a theatrical form. Out-of-class rehearsal
and performance time may be required.

TH 212
Summer Theater Workshop
3 Cr. Hrs. – Variable Contact Hrs. **Ⓓ**
Prereq: Meet Ready to Succeed Requirement
A practicum course allowing advanced students to undertake special projects in conjunction with a summer theater company. Projects are usually creative in nature and are undertaken with the advice and supervision of an approved mentor. Although focusing on the specialized crafts of acting, directing, design, technical production, or arts management, project implementation will emphasize the cooperative nature of theater.

TH 217
Creative Dramatics
1 Cr. Hr. – 1 Contact Hr. **Ⓓ**
Prereq: Meet Ready to Succeed Requirement
This course is an introduction to the use of creative dramatics in the classroom, home, and community. The goals and concerns of creative drama will be explored as well as methods for incorporating these techniques into a curriculum. Focus will be centered on the activities that are the basis of every creative dramatics program. A particular interest will be centered on the novice who needs practical advice on how to begin teaching creative thinking and problem solving.

TH 260
Student Production Practicum
2 Cr. Hrs. – Variable Contact Hrs. **Ⓓ**
Prereq: Meet Ready to Succeed Requirement
An experiential course giving credit for creative involvement in the planning, rehearsal, and performance of a play.

Welding Technology

W 101
Basic Welding
3 Cr. Hrs. – 5 Contact Hrs. 🅵🆆
Prereq: None

Basic Welding is designed for the learner who has no welding experience or limited welding experience. Subject material will focus on the theory of welding processes common to local industries. The welding and cutting processes covered will be: Oxyacetylene Welding and Oxyacetylene Brazing (OAW and OAB), Oxyacetylene Cutting (OAC), Plasma Arc Cutting (PAC), heating and bending with the torch, Gas Tungsten Arc Welding (GTAW), Shielded Metal Arc Welding (SMAW), and Gas Metal Arc Welding (GMAW). Students will learn to set-up and operate welding equipment according to approved standards. Theory of each welding process will be covered in the classroom followed by practical experience in the lab. Lab projects will provide experiences in the fabrication of typical weld joints, and are based on relevant sections of the American Welding Society (AWS) SENSE Level 1 standard.

W 102
Welding - Advanced
3 Cr. Hrs. – 6 Contact Hrs. 🅵🆆
Prereq: W 101

This course will cover the three most common electric arc welding methods: Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), and Gas Metal Arc Welding (GMAW). Lab projects will provide experiences based on relevant sections of the American Welding Society (AWS) SENSE Level I standard. Safety, process theory, and equipment setup will also be covered. SMAW - This process involves constructing typical welded joints in the horizontal, vertical-up and overhead positions. The electrode used will be the fast fill/ fast freeze group, which is the E6010/E6011 electrode. GTAW - This part of the course will present the theory and application of the TIG welding process. Shielding gases, tungsten selection and preparation, polarity selection and welding machine set-up will be covered. Welds will be constructed in the flat position only. Projects will be done in mild steel, aluminum, and stainless steel. MIG - In the MIG portion of the course both theory and applications of the welding process will be covered. Topics of discussion will include the following: transfer modes, types and application of shielding gases, stick-out distance, wire feed speeds, voltage selection and machine set-up. Wire and gun maintenance will also be covered. Typical welded joints will be constructed in the flat position only.

W 103
MIG/TIG (Gas Metal Arc and Gas Tungsten Arc Welding)
3 Cr. Hrs. – 6 Contact Hrs. 🅵🆆
Prereq: W 102

This course is an intensive study of Gas Tungsten Arc Welding (GTAW) and Gas Metal Arc Welding (GMAW) processes. Lab projects for this course are designed to align with relevant sections of AWS SENSE Levels I and II. This course is designed for students who need to improve their welding skills in these processes.applications of shielding gases, tungsten electrodes, polarity settings and equipment set-up procedures. Students will weld ferrous and non-ferrous materials. Welding joints will be done in all positions. The course material will place emphasis on creating a fabricated joint that has the same metallurgical and physical properties as the base metal. GMAW - Instruction will include the theory of the welding process, transfer modes, types and applications of shielding gases and machine set-up. Welds will be created in the flat, horizontal, vertical-up/down and overhead positions. Both ferrous and non-ferrous materials will be used. Topics of discussion will include: safety precautions, joint preparation, current selection, wire speed and proper selection of inert gas mixtures.

W 201
Structural Welding
3 Cr. Hrs. – 6 Contact Hrs. **F** **W**
Prereq: W 102

A course designed for advanced welders who want to improve their skills in stick welding or who are preparing for cerification in AWS D1.1 Structural Welding Code. This code is used for welding on bridges, buildings, steel structures, road machinery, farm equipment and other structures. Materials presented will be the AWS code book, safety precautions, joint preparation, electrode selection, setting up equipment and welding procedures. Lab projects for this course are designed to align with relevant sections of AWS SENSE Levels I and II. Lab work will include out-of-position welding using the fast fill/fast freeze (E6010) and fast fill/slow freeze (E7018) category electrodes. Weld testing, both visually and mechanically, will be an integral part of the coursework.

W 202
Pipe Welding
3 Cr. Hrs. – 6 Contact Hrs. **F** **W**
Prereq: W 201

This course is designed for the advanced welders who want to improve their pipe welding skills or are preparing for pipe welding certification to the AWS D1.1 welding code standard. Lab projects for this course are designed to align with relevant sections of AWS SENSE Levels I and II. Topics covered will include: safety practices, tack welds, positioning and pipe welding using methods most frequently found in industrial processes and fieldwork. All common welding positions will be covered. Students are required to perform root pass, filler pass and cover pass on each specimen. Welding processes which will be covered are: Shielded Metal Arc Welding (SMAW), Gas Tungsten Arc Welding (GTAW), and Gas Metal Arc Welding (GMAW). Destructive and visual testing will be part of the coursework.

W 203
Maintenance Welding
3 Cr. Hrs. – 6 Contact Hrs. **F** **W**
Prereq: W 202

A course with emphasis on safety and the combined skills obtained from previous welding and related courses. Students fabricate assembly parts according to print specifications. A degree of creative and technical talent will be needed to translate theory to productivity. The student will be presented with a problem, be expected to find the solution and deliver an oral or written report. Lab projects for this course are designed to align with relevant sections of AWS SENSE Levels I and II.

W 204
Welding Supervision
3 Cr. Hrs. – 6 Contact Hrs. **F** **W**
Prereq: MET 201
Coreqs: W 203 and BCOM 102

A course that requires the welding student to combine hands-on skills and intellectual knowledge of welding processes and use this ability to help beginning welders. The student will assist the instructor in demonstrations of welding processes and techniques used to produce weld specimens in all positions and perform destructive tests for weld soundness. This course provides skills that help you stand out among other candidates in the welding industry. Lab projects for this course are designed to align with relevant sections of AWS SENSE Levels I and II.

COURSE DESCRIPTIONS

Women's Studies

WS 101
Introduction to Women's Studies
3 Cr. Hrs. – 3 Contact Hrs. 🄵🅆🅂
Prereqs: Meet Ready to Succeed Requirement and
ENG 091; Minimum Grade of "C"
This is a fundamentals course in which students study women's diverse experiences, perspectives, and contributions by examining cultural beliefs and stereotyped images of women and their roles in different times and places. Interdisciplinary in its range of course content, This course explores representations of women and their efforts to define new identities through work, creative activity, and feminism, both historically and at present. The course covers socialization, sexuality, the history of the women's liberation movement, and different perspectives in feminism. Course goals: raise awareness, make connections, read, think, and write critically, and apply course knowledge and issues to personal experiences. *(This course is also listed as ENG 130.)*

POLICIES & PROCEDURES

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General Academic Policies

Class Standing

For the purposes of records and reporting, students are classified as freshmen if they have completed 25 credit hours or less, as sophomores if they have completed 26 credit hours or more.

Graduation Credential Requirements

To receive an associate degree, diploma, or certificate at Muskegon Community College, a student must meet the following requirements:

A. All candidates must maintain a 2.0 grade point average. Health programs may have a different GPA requirement.
B. A minimum Muskegon Community College credit requirement (Residency Requirement).
   1. Associate Degrees - A student must complete not less that 30 credit hours or the last 15 credit hours at Muskegon Community College in order to receive an associate degree.
   2. Diplomas - A student must complete 26 credit hours at Muskegon Community College in order to receive a diploma.
   3. Certificates - A student must complete 6 credit hours at Muskegon Community College in order to receive a certificate.
C. Students returning to Muskegon Community College after a three (3) year absence or longer will be under the requirements of the current catalog.

Any exceptions to these graduation requirements must be brought before the Petitions Committee with the full concurrence of the department(s) involved.

Associate in Science and Arts Degree Requirements

The Associate in Science and Arts (ASA) Degree is primarily a transfer-oriented degree. In order to receive the degree, each student must complete a minimum of 62 credit hours of course work and the program requirements as listed in the Muskegon Community College catalog.

Associate in Applied Science Degree Requirements

The Associate in Applied Science (AAS) Degree is awarded for successful completion of an occupationally oriented curriculum. It may also be used as a transfer degree to certain baccalaureate programs.

Candidates for this degree must complete a minimum of 62 credit hours of course work and all course requirements for a specific associate in applied science program as outlined in the Muskegon Community College catalog.

Graduation requirements for the associate degree may include two credits in physical education. Refer to program pages for specific courses which will fulfill graduation requirements.

The maximum number of cooperative internship credit hours that may be applied toward an associate degree is 12 and many programs permit even fewer.

Application for Graduation

To graduate from Muskegon Community College with a degree or a certificate, you begin the process by completing an Application for Graduation. You must have completed at least 47 credit hours if you are applying for an associates degree. This form is available online and at the Student Welcome Center. The application deadline dates are as follows:

Fall Semester Graduation...................................November 1
Winter Semester Graduation...................................March 1
Summer Semester Graduation ....June 1

The graduation audit will be based on the requirements in effect in the printed catalog at the time of the student's initial enrollment, unless updated catalog requirements are specifically requested. (Students may not apply for graduation under requirements that were printed for a year they were not in attendance at the College.) Students returning to Muskegon Community College after an absence of THREE YEARS OR LONGER will be under the requirements of the current catalog.

When your Application for Graduation is complete, a review of your academic record will be conducted by the Records Auditor to determine if graduation requirements have been met. You will be notified in writing of the results.

Students are not eligible for graduation until all delinquent tuition, fees, and fines have been paid. The student is responsible for meeting all graduation requirements.

Multiple Degrees

You may earn and be awarded two or more degrees (and/or certificates), provided that all academic requirements for the degrees have been met. A graduation audit will be conducted for each degree requested on the Application for Graduation. Multiple diplomas or certificates will be awarded where appropriate.

Graduation with Honors

Students who have fulfilled the requirements for an associate degree and have earned a cumulative grade point average of 3.40 or higher will graduate with honors as follows:

Summa Cum Laude: .... 3.80 - 4.00
Magna Cum Laude: .... 3.60 - 3.79
Cum Laude: .... 3.40 - 3.59

President's List - The names of those students who have completed 12 credit hours with a 4.0 grade point average in any semester are published by the College, subject to permission of the student. Those so recognized are designated as President's List Students.

Dean's List - The names of those students who have completed 12 credit hours with a 3.5 grade point average or higher in any semester are published by the College, subject to permission of the student. Those so recognized are designated as Dean's List Students.

Academic Honors List - The names of those students who have completed at least 6 credit hours and fewer than 12 credit hours with a 3.5 grade point average or higher in any semester are published by the College, subject to permission of the student. Those so recognized are designated as Academic Honors List Students.

Academic Forgiveness

(Re-evaluation of Grades for An Entire Semester)
The College permits students within specific and defined guidelines to petition for Academic Forgiveness for an entire semester by submitting a "Performance Agreement" form. You must see a counselor to discuss and initiate the agreement.

Students granted academic forgiveness will have their cumulative grade point averages recalculated. While the forgiven grades will continue to appear on the official transcript, they will be noted on the transcript as forgiven.

Repeated Courses

The Muskegon Community College Course Repeat Rule was developed to provide fair access to classes. It allows the student to repeat the course once. Instructor permission is required to take a course more than twice.

To repeat a course, a student must register for and pay all necessary fees. Each grade received will appear on a student's record, but only the last grade awarded is used in computing a GPA. Keep in mind that if you retake a class and receive a lower grade, the last grade is still the one that counts. When transferring to another college or university, you may be held accountable for all attempts and grades associated with a course taken at Muskegon Community College.

Substitution Waiver

A substitution waiver is the substitution of a required course in a degree or certificate with an alternate course. Substitution waivers do not reduce the total number of credit hours required in a degree or certificate or in general education requirements. Course substitution waivers are granted for a specific degree or certificate and a specific catalog year. The granted substitution waiver will not automatically apply toward other degrees and certificates you are pursuing.

You may request a substitution waiver by contacting the department chairperson.

POLICIES & PROCEDURES

Grading System

Final grades are posted on your academic record and can be found through the MyMCC Portal under your Academic Profile by selecting Grades or Transcripts.

Quantitative Grade Values

A	4.0	B-	2.7	D+	1.3
A-	3.7	C+	2.3	D	1.0
B+	3.3	C	2.0	D-	0.7
B	3.0	C-	1.7	E	0.0

Non-quantitative Grades *(not computed)*

P	Pass
NP	No Pass
W	Withdrawal
WI	Withdrawal—Illness
WM	Withdrawal—Military Activated
CS	Community Service
AU	Audit
I	Incomplete

Pass/No Pass - These grades are not optional but a standard grading system for particular courses.

"Incomplete" Policy - When you are unable to complete all of the required work for a course because of illness or other unpredictable circumstances, you may request an Incomplete (I) grade. When requested by the student, the instructor's judgment will determine whether the incomplete grade will be assigned. If the instructor does not deem the circumstances to be appropriate for an Incomplete (I), you may elect to withdraw from the course according to the withdrawal policy.

Although shorter time periods may be assigned on a case-by-case basis, "I" grades must be completed within one year of the official occurrence of the grade.

Once you complete the necessary requirements for the class, a Change of Grade Form must be submitted for you by the instructor to receive a grade greater than an "E." Any "I" (incomplete) grades that are not changed within one year of the official occurrence of the grade will default to an "E."

Grade Point Average (GPA) - Each letter grade has a point value as indicated above. The number of grade points earned for each course is found by multiplying the credit value of the course by the point value of the final grade. For example, a student with a final grade of "B" in Political Science (PSCI) 111 would earn 12 grade points, since a "B" has a point value of 3, and Political Science 111 is a 4-credit course.

The semester grade point average is calculated by adding the total points for all courses and dividing by the total number of credit hours taken during the semester.

Example:

Course	Credits	Grade	Grade Points
ENG 101	3	A	12
PSCI 111	4	C	8
PHSC 101A	4	B	12
ART 198	3	D	3
TOTAL	**14**		**35**

35 Grade Points divided by 14 Credits equals 2.50 Grade Point Average (GPA)
(35 ÷ 14 = 2.50)

The cumulative grade point average is found by dividing the total of all points earned in all semesters by all credits taken to date.

Academic Load - Students are not permitted to enroll for more than 18 credit hours without the approval of a counselor.

Academic Standing Policy

A. **Academic Probation**. Any student who receives a cumulative grade point average of less than 2.0 "C" for 12 or more semester hours of credit will be placed on academic probation.

B. **Academic Dismissal**. Students placed on academic probation for two consecutive semesters may be dismissed from MCC for one semester. However, students who have been dismissed may enroll in classes for the summer session in order to correct their academic deficiencies. Those who earn a 2.0 grade point average or better for a minimum of three credit hours during the summer session will be permitted to enroll on a probationary status for the fall semester. If the dismissed student enrolls for the fall semester and then fails to achieve a grade point average of 2.0 "C" during the summer session, he/she may be dropped from all classes. Refunds will be handled through the Business Office. Any student who is dismissed from MCC may appeal to the Petitions Committee for reinstatement. The Petitions Committee will review the student's progress and permit re-entry if they think the student has a reasonable chance for success in a subsequent semester. Students who do not appeal will not be allowed to enroll for the dismissal semester.

Registration Information

Registration at Muskegon Community College takes place three times a year, starting in April for the fall semester, early November for the winter semester, and March for the summer session. The fall and winter semesters are 15 weeks in length. The summer session generally begins in May and is offered with a variety of start and ending dates. Register as soon as you are eligible to help ensure your place in the classes you desire.

To ensure you are eligible to register, make sure you have:
- Been admitted or readmitted to Muskegon Community College
- Cleared all financial holds
- Completed all placement tests or submitted appropriate ACT or MME scores.
- Have completed all course prerequisites

A. Testing. Before registering for classes, you must take placement tests which will help you choose the right courses.

B. Counseling. Schedule an appointment to see a counselor early, but preferably after taking the placement tests. The counselor can assist you in curricular planning and with other concerns you may have.

Priority Registration

Priority Registration is available exclusively to currently enrolled students. Using the MyMCC Portal, current students have the first opportunity to select courses before registration is open to other individuals. Registration is based on a priority system that allows you to begin registration according to the number of total MCC credit hours completed. Priority begins with students who have earned the most MCC credit hours and ends with the students with the least MCC credit hours. A few weeks before priority registration begins, students can see a countdown with their first available registration day and time on the MyMCC Portal. You may register at your assigned time or after, but not before.

Online Registration

To register for classes online:
- Go to the MCC Homepage at www.muskegoncc.edu
- Click on MyMCC
- Login using your MCC username and password
- Click on WebAdvisor for Students

In-Person Registration and open web registration is available after priority registration ends. Please refer to www.muskegoncc.edu/register for dates and times.

POLICIES & PROCEDURES

Adding Courses

Prior to the beginning of the semester, you may add courses from the start of the registration period up to the day the class begins. A student must have written permission of the instructor to add a class once it has met. Regarding online classes, a student must have written permission of instructor to add a class on or after its published start date. Refer to WebAdvisor in the MyMCC Portal for class information.

Dropping Courses

(Other than complete withdrawal from the College)
The preferred method of dropping courses is through the MyMCC Portal. You may also process by submitting a signed drop form, in-person or by fax, to the Student Welcome Center proir to the withdrawal deadline. If changing courses/sections after the drop period, students may only transfer from one section of a course to another section of the same course. Students attempting to drop and add courses of different names outside of the 100% refund period will be billed for tuition accordingly.

You are strongly encouraged to consult with your instructor and a counselor prior to processing a withdrawal. If you have financial aid or scholarships, it is especially important for you to contact the Financial Aid Office prior to withdrawing. You may drop/withdraw through MyMCC or by submitting a Drop/Add form to the Student Welcome Center.

- No grade will be recorded on your transcript if the course is dropped **during the drop/refund period**.
- You may withdraw from a course **after the drop/refund period** until the week prior to examinations. For early-ending courses, you may withdraw from a course after the refund period until one day prior to the end date of the course (prior to the final examination). Withdrawal from a course will generate a grade of "W" on your academic record and tuition/fees are not refunded.

Audit Policy

If you wish to attend a class, but do not desire credit or a grade, you may elect to audit a class. If you audit a class, you are required to pay the same tuition and fees as those taking courses for credit.

MCC permits students to register for college credit courses on a non-credit (audit) basis. Those who wish to do so should consult with a member of the counseling staff regarding College policies and procedures for audit status enrollment.

These policies include the following:
3. Students may audit courses so long as they (a) register specifically for audit status; (b) pay regular tuition and fees as listed in the official publications of the College; and (c) comply with all assignments, projects, tests, and learning experiences required of credit-status (regular status) students unless they explicitly make another arrangement that is mutually agreeable to both instructor and student.
4. Audit status students should realize that unless they complete all regular course requirements it will probably not be possible to convert from audit status to credit status at a later date. Audit status students who have completed all regular course requirements to date and wish to change from audit status to credit status must complete a Request to Change from Audit to Credit Form and submit it to Room 100-J or the Student Welcome Center. Such petitions must include a note from the instructor stating the student has completed all regular course requirements to date. This request must be processed prior to the final examination.
5. Students who register for a credit class cannot change to audit status.
6. For students who complete all requirements, instructors will record the progress of audit students in the same manner as credit students. A grade of "AU" will be recorded on the audit status student's transcript at the end of the semester, and will not be used to compute grade point averages.

Credit Hour

As a rule of thumb, each credit hour equals one hour of class or two hours of laboratory work per week. Exceptions are noted in course descriptions.

Employment and Classload

Many students find it necessary or even desirable to be employed while attending college. While enrollment on a full-time basis is very demanding, you may find that you can maintain satisfactory grades even while working part-time. The following table provides general guidelines for those students who plan to work:

Classload/Workload

Credit Hrs. per Semester	Extracurricular Hrs. per Week
13 or more	15 or less
10 - 12	24 or less
7 – 9	32 or less
3 – 6	40 or less

If you stop attending a course and do not formally withdraw, the instructor has the option of initiating a grade of "W" or a grade of "E".

Attendance

You are expected to attend all sessions of the classes in which you enrolled. You may be withdrawn from the class at the discretion of the instructor if you have excessive absences. Instructors who do not take attendance into account when determining your status in the course must maintain other consistent means of showing participation.

Drop/Withdrawal Policy

Withdrawal from College

Withdrawal from college is defined as the student's formal withdrawal from all courses currently in progress.

Military Withdrawal

Any currently enrolled student who is called for military duty shall be dropped from all uncompleted courses with a grade of "WM" - Withdrawal Military and will be granted a refund of all tuition and fees paid upon receipt of a copy of military orders, completed Tuition Refund Appeal to the Student Welcome Center and deliberations of the Petitions Committee.

Illness Withdrawal

The Petitions Committee may allow a "WI" if a qualified professional (doctor, psychologist, etc.) provides written evidence of physical or mental illness. The initiative for such action rests with you, the student, and should be initiated in the semester in which it occurs, except under extenuating circumstances. All Withdrawal Illness requests must be received no later than one year from the last date of the semester being appealed. A completed Tuition Refund Appeal form with proper documentation must be turned into the Student Welcome Center for review by the Petitions Committee.

Dropping A Course During The Refund Period

You may drop courses **during the refund period** using The MyMCC Portal or by submitting a Drop/Add form at the Student Welcome Center and no grades will be recorded on your transcript.

Withdrawing From A Course After The Refund Period Is Over

You may process withdrawals on The MyMCC Portal or by submitting a Drop/Add form to the Student Welcome Center. You are strongly encouraged to consult with your instructor and a counselor prior to processing a withdrawal. If you have financial aid or scholarships, it is especially important for you to contact the Financial Aid Office prior to withdrawing.

You may withdraw from a course after the drop/refund period until the Friday before final exams begin. For early-ending courses, you may withdraw from a course after the refund period until one day prior to the end date of the course (prior to the final examination). Withdrawal from a course will generate a grade of "W" on your academic record and tuition/ fees are not refunded.

POLICIES & PROCEDURES

College Affordability

Costs to attend MCC include registration fees, tuition, special class fees, and books/supplies. Please refer to the MyMCC Portal for current tuition and fee information. Books and supplies may be purchased in the Bookstore located on campus.

To Determine Your Tuition and Fees

Locate the total number of contact hours you have selected to determine your tuition and technology fee. Add the contact hour tuition, technology fee, course fee (if applicable) and the registration fee.

Example:
Nine (9) Contact hours
as an in-district resident

Tuition	$805.50
Technology Fee	$153.00
Registration Fee	$35.00
Lab/Course Fee (if applicable)	n/a
Total Payment Due	**$993.50**

Technology Fee: $17.00 per contact hour
Registration Fee: A $35 refundable registration fee will be assessed each semester to all students when registering for classes.

* Some Courses Require Additional Fees

Paying Tuition

Tuition may be mailed in, paid online through the MyMCC Portal using a credit card, or paid at the Student Welcome Center. If you have financial aid approved, make sure there is enough to cover your tuition and fees. Tuition due dates are posted on the MyMCC Portal.

Payment Plan

To help meet your educational expenses, Muskegon Community College is pleased to offer FACTS Payment Plan as a convenient online payment option. Students who choose to use FACTS may select installment plans that are spread over several months, depending on the length of the semester. FACTS will also prevent your classes from being dropped on the tuition due date while waiting for financial aid awards or other payment methods. You can make payments from checking or savings accounts or by Mastercard, Visa, or Discover credit cards. *(Please note that credit card and debit card payments will incur an additional 2.75% service fee.)* For more specific information about this plan please visit www.muskegoncc.edu/FACTS.

Tuition and Contact Hour Charge Rates

Tuition rates and fees are subject to change; please refer to the MyMCC Portal for current rates and fees. The rates in the following table were effective for Summer Semester 2014:

Contact Hours	In-District	Out-of-District	Out-of-State	Technology Fee
0.5	$44.75	$80.00	$110.00	$8.50
1.0	$89.50	$160.00	$220.00	$17.00
2.0	$179.00	$320.00	$440.00	$34.00
3.0	$268.50	$480.00	$660.00	$51.00
4.0	$358.00	$640.00	$880.00	$68.00
5.0	$447.50	$800.00	$1,100.00	$85.00
6.0	$537.00	$960.00	$1,320.00	$102.00
7.0	$626.50	$1,120.00	$1,540.00	$119.00
8.0	$716.00	$1,280.00	$1,760.00	$136.00
9.0	$805.50	$1,440.00	$1,980.00	$153.00
10.0	$895.00	$1,600.00	$2,200.00	$170.00
11.0	$984.50	$1,760.00	$2,420.00	$187.00
12.0	$1,074.00	$1,920.00	$2,640.00	$204.00
13.0	$1,163.50	$2,080.00	$2,860.00	$221.00
14.0	$1,253.00	$2,240.00	$3,080.00	$238.00
15.0	$1,342.50	$2,400.00	$3,300.00	$255.00
16.0	$1,432.00	$2,560.00	$3,520.00	$272.00
17.0	$1,521.50	$2,720.00	$3,740.00	$289.00
18.0	$1,611.00	$2,880.00	$3,960.00	$306.00
19.0	$1,700.50	$3,040.00	$4,180.00	$323.00
20.0	$1,790.00	$3,200.00	$4,400.00	$340.00

POLICIES & PROCEDURES

Refund Policy

(Subject to change—refer to MyMCC)

Muskegon Community College believes that students should be allowed to attend at least one class meeting without penalty. During that class meeting you can review the detailed requirements of the course syllabus and estimate the workload required. This should enable you to make an informed judgment about the course and increase your probability of success.

Refunds will first be applied to any outstanding debts owed to the College by the student; the balance will be sent in an electronic disbursement through the student's "My MCC OneCard" after the 12th day during the Fall and Winter semesters and after the 9th day during the Summer semester. For more information on the "My MCC OneCard" visit www.mymcconecard.com.

Schedule of Refund Days

Refund days for official withdrawal from college classes for any semester or session will be granted for tuition as follows:

Weeks of Class	Number of Days for Drops	Percent of Refund
15 Week Classes	1st - 8th day of Semester/Session	100% Refund
	9th - 12th day	50% Refund
	After 12th day	0% Refund
14-13 Week Classes	1st - 7th day of Semester/Session	100% Refund
	8th - 11th day	50% Refund
	After 11th day	0% Refund
12-11 Week Classes	1st - 6th day of Semester/Session	100% Refund
	7th - 9th day	50% Refund
	After 9th day	0% Refund
10-9 Week Classes	1st - 5th day of Semester/Session	100% Refund
	6th - 8th day	50% Refund
	After 8th day	0% Refund
8-7 Week Classes	1st - 4th day of Semester/Session	100% Refund
	5th - 6th day	50% Refund
	After 6th day	0% Refund
6-5 Week Classes	1st - 3th day of Semester/Session	100% Refund
	4th - 5th day	50% Refund
	After 5th day	0% Refund
4-3 Week Classes	1st - 2nd day of Semester/Session	100% Refund
	3rd - 4th day	50% Refund
	After 4th day	0% Refund
2-1 Week Classes	1st day of Semester/Session	100% Refund
	2nd day	50% Refund
	After 2nd day	0% Refund

In the event of a canceled course, refunds are automatic.

Academic/Classroom Conduct

Muskegon Community College is a community of scholars whose members include administrators, faculty, staff, and students. Mutual respect and civility are expected in the classroom or other college related academic settings, as well as, in any communication.

- MCC has the duty of providing students with privileges, opportunities, and protections that best promote learning;
- Students have the right to a non-threatening learning environment;
- Students have the responsibility to refrain from infringing on the right of others to learn or the right of teachers to teach; and
- Any student whose behavior disrupts learning may be subject to disciplinary action.

Academic Integrity Policy

Muskegon Community College expects that all faculty and students will adhere to high standards of personal and academic honesty. This means that all academic work will be done by the student to whom it is assigned without unauthorized aid of any kind. Faculty members, for their part, will exercise care in the planning and supervision of academic work so that honest effort will be positively encouraged.

Definitions

Academic dishonesty consists of, but is not limited to:

A. **Cheating.** Cheating is defined as using or attempting to use, giving or attempting to give, and obtaining or attempting to obtain, materials or information, including computer material pertaining to a quiz, examination, or other work that a student is expected to do alone.
B. **Plagiarism.** Plagiarism is defined as the use of another's words or ideas without acknowledgement.

Penalties for violation of these standards of conduct may result in sanctions of up to and including suspension or expulsion from MCC.

Dispute Resolution Process

Should a student not agree with a faculty member's decision or actions as they may relate to this policy, the following steps shall be followed:

A.   A student suspected of academic dishonesty shall be notified in writing within two school days of the time the violation is discovered. Copies of the written notification shall also be filed with the department chair and Vice President for Student Services and Administration.
B. The student should try to reach resolution of the matter through direct discussion with the involved faculty member within three school days of the written notification.
C. If the matter is not resolved in Step B, the student shall bring the matter to the attention of the department chairperson of the involved faculty member.
D. If the matter is not resolved at the department chairperson level, the student shall bring the matter to the attention of the Vice President for Academic Affairs and Finance who shall render a decision within five school days of the receipt of the dispute information.
E. If a satisfactory solution is not reached at the Step D level, the student may file a written request with the Vice President for Student Services and Administration for a hearing before the disciplinary board. This meeting shall be held not more than 20 days following the written request. A student may request a hearing before the disciplinary board.

Wireless Computer Access Policy

Scope

This policy applies to the deployment and operation of wireless network equipment and other devices operating in unlicensed frequencies on the campus of Muskegon Community College. The policy also applies to all segments of MCC's wireless computer network. This includes all administrative, academic, and commercial areas which are part of MCC's family of buildings, as well as, any outdoor spaces on the campus.

Responsibilities

MCC would like to encourage people to use their own technology on our campus. To promote this we provide wireless access to various computer networks. Users of wireless connections at MCC are required to keep their computer's virus protection up-to-date, as well as, install the latest operating system security patches.

In addition, users need to be aware that MCC does not filter wireless access to the Internet and cannot provide secure wireless connections or printing services to those wireless connections. As a result, MCC is not responsible for the loss or damage that may occur, directly or indirectly, to personal equipment and data through the use of our wireless connections. Parents or guardians are responsible for children brought onto campus.

MCC's computing and telecommunication networks, computing equipment and computing resources are owned by MCC and are provided to support its academic and administrative functions. Federal and state laws, along with MCC policies and standards, govern the use of this equipment and technologies. While departments may adopt additional rules and regulations to meet specific administrative or academic needs, any additional requirements must be in compliance with applicable federal and state laws, and this policy.

Access to MCC's wireless computer networks is a privilege that can be withdrawn when individuals abuse it. Behaviors that result in the loss of computer network privileges and possibly disciplinary actions are found in the Computer Usage Policy.

Enforcement

The Office of Information Technology (OIT) is solely responsible for implementation of wireless technology, enforcing campus network standards, and has the authority to resolve frequency interference issues. OIT determines the identity and authenticates all users connecting to the campus network.

Standards

MCC has adopted the following approved standard protocols for wireless networking of the Institute of Electrical and Electronic Engineers, Inc. (IEEE) (IEEE 802.11a, IEEE 802.11b and IEEE 802.11g). The primary purpose of these protocols is not so much to provide separate networks but to ensure that adjacent access points with slightly overlapping areas of coverage do not interfere with each other.

SSID for Muskegon Community College wireless is MCC-INET

It is therefore not feasible to allow individuals to install their own access points without centralized coordination, due to the resulting signal interference and greatly degraded performance of the common wireless network. Access points can interfere with each other and other communications devices or appliances if not administered or deployed properly. Potential problems using microwave ovens and cordless telephones is a prominent example. OIT will manage the shared use of unlicensed frequencies for the campus community and campus authority to resolve interference issues.

Security

Wireless networks are not as secure as wired networks and security for wireless networks is evolving. OIT is responsible for establishing security policies for wireless communications based on current best practices. All wireless network installations must comply with established security policies including the addressing of campus-wide Internet Protocol (IP) and Dynamic Host Configuration Protocol (DHCP) services. As mentioned above, users of wireless connections at MCC are required to keep their computer's virus protection up-to-date, as well as, install the latest operating system security patches.

Email Policy

General Statements

Electronic mail is provided to students, employees, and retirees for the official business and educational purposes of MCC. However, MCC recognizes that use of email will occasionally be personal. Accordingly, MCC authorizes the incidental, non-commercial, and personal use of email services, provided that such use does not interfere with the business or mission of MCC.

MCC is a public institution: legally, email is treated the same as any other form of written communication. Messages are subjected to the same legal restrictions and potential liabilities as those of paper documents. Email messages may be subpoenaed, and are subject to the Freedom of Information Act (FOIA). MCC reserves the right, during an investigation for inappropriate use or compromised accounts, to review the messages sent or received through individual email accounts. This action can be conducted without notice. This is intended to protect the integrity of MCC's information systems and its users against unauthorized or improper use.

Specific Guidelines

A. All users of the MCC email system are expected to conduct themselves in a legal, professional, and ethical manner. Messages that may be viewed as harassing or intimidating are prohibited.

B. MCC email shall be used in accordance with all applicable federal, state, and local laws, as well as, all other applicable MCC policies and procedures, including those pertaining to copyrighted material. Questions regarding copyrighted material should be directed to www.copyright.gov.

C. Altering, dismantling, disfiguring, or other actions intended to hide or disguise the identity of the originator of an email message is prohibited. Any attempt to read, delete, copy, or modify the messages of others is prohibited.

D. MCC email may not be used for commercial purposes, other than those that may be sanctioned by MCC.

E. Users should make every effort to protect themselves and others by keeping their anti-virus software up-to-date, and avoiding suspicious emails and attachments. It is also a good idea to only open outside messages that are from a familiar source.

F. Employees should notify their manager and contact the faculty/staff helpdesk if they think email accounts are being abused. Students who suspect email abuse are encouraged to contact the student help desk at (866)718-5170. Violations of this policy may lead to, or include, withdrawal of email privileges.

Enforcement Procedure

Students

Failure to follow acceptable standards will result in the removal of authorization and privileges to use MCC's computer networks along with associated hardware and software as outlined in the MCC Code of Conduct.

Community Members

Failure to follow acceptable standards will result in the removal of authorization and privileges to use MCC's computer networks.

Reinstatement of lost authorization to use MCC's Technology

When privileges are withdrawn for violation of this policy and the individual feels that he/she has been unfairly treated in the implementation of this policy, the individual may file an appeal with the Vice President for Student Services and Administration. The Vice President for Student Services and Administration will convene a meeting of the relevant parties. His/her decision will be binding.

Student Email and Network Accounts

- Each student has his/her own @muskegoncc.edu email address

  ### *Example:*
  firstname.lastname@muskegoncc.edu

- Each student also has his/her own account to access network resources.

Username Format	Password Format
Firstname.Lastname	First Initial + Last Initial + Student Number +!
Example:	
John.Smith	js0012345!

- Each student has 500MB of storage space on the network.
- Email can be accessed from anywhere with internet connectivity.
- Your home directory can be accessed from anywhere with internet connectivity. You must request off-campus access to your home drive by sending an email to getftp@muskegoncc.edu. Please include your name, student number, log-in name, and phone number. You will not be able to connect to your home drive until you have been notified that you have been added to the authorized ftp user list.

If you do not know your password, please select the "Reset My Password" link on the MyMCC Portal at:

mymcc.muskegoncc.edu.

If you do not know your username, please select the "What's my Username and Student #" link on the MyMCC Portal at:

mymcc.muskegoncc.edu.

How to Access Blackboard

1. Open browser and go to the MyMCC Portal at mymcc.muskegoncc.edu.
2. Sign in with your MCC network username and password. Your Blackboard courses appear in the center of the MyMCC Portal Page.

For more information, contact the Student Technical Help Desk which is available 24 hours-a-day, 7 days-a-week at the toll-free number, (866) 718-5170.

POLICIES & PROCEDURES

Equal Opportunity and Non-Discrimination
Prohibited Activity and Complaint Procedure

I. Sexual Assault

Muskegon Community College treats all matters of sexual assault with the highest concern and seriousness. MCC personnel will encourage the victim to report all offenses to the appropriate authorities and to actively seek assistance and/or counseling. If you have been sexually offended in any way, you should contact the security department immediately at (231)777-0545. College personnel will give full and prompt cooperation to report the assault to local law enforcement authorities. The victim may pursue all remedies or services without academic penalty or coercion in any way by the College or College personnel.

The victim may request that the College list options for changes in academic or working situations after an assault has occurred if it is reasonably available.

The same rights of representation will be given to the victim as provided to the accused in College disciplinary proceedings.

Procedures

Immediately after a sexual assault, the following procedures must be implemented:

- The victim shall notify the security department (231)777-0545 and local authorities.
- The security department will inform the victim of any counseling centers and community crisis centers available for assistance.
- The victim will be informed of the rights accorded to crime victims in general.
- Any necessary medical assistance will be provided using methods and equipment commonly used to preserve evidence.
- In cooperation with local authorities, evidence will be obtained, secured, and maintained.
- The victim may request MCC to take reasonable action to prevent unnecessary or unwanted contact with an alleged assailant.
- State or federal law may require assault suspects to be mandatorily tested for communicable diseases including notice of the results of the testing.
- If viable, disciplinary actions will follow.

Educational programs for awareness will be scheduled periodically throughout the academic year.

II. Non-Discrimination

It is a violation of the Muskegon Community College policy for any students of MCC to discriminate against any other student of MCC on the basis of age, citizenship, color, disability, handicap, height, marital status, national origin, political persuasion, race, religion, sex (including the condition of pregnancy), sexual orientation, veteran status, weight, or other protected categories, and to the extent the law prohibits such discrimination.

Prohibited discrimination includes harassment of an individual based on any of the above categories. Sexual harassment is defined as the behavior of a person of either sex against a person of the opposite or same sex, when behavior falls within the definition outlined below.

Definition

Sexual harassment of students at Muskegon Community College is defined as any unwelcome sexual advances; requests for sexual favors; or other verbal or physical conduct of a sexual nature when:

- Submission to such conduct is made either explicitly or implicitly a term or condition of an individual's employment or academic status.
- Submission to or rejection of such conduct is used as the basis for employment or academic decisions affecting that individual.
- Such conduct has the purpose or effect of unreasonably interfering with an individual's work performance, educational experience, academic status, or creates an intimidating, hostile, or offensive work or educational environment.

Although this definition focuses on sexual harassment, harassment based on any of the categories listed above which meets the standards outlined is prohibited.

No act of retaliation shall occur to any person making a charge, filing a complaint, testifying or participating in any discrimination investigation or proceeding.

The Discrimination Complaint Procedure

Complaint

Any student of Muskegon Community College who believes that he/she has been subjected to discrimination, as defined in the policy statement, should report the circumstances by filing a complaint verbally or in writing to:

Equal Employment Opportunity
Officer (EEOO)
Human Resources Department
Title VI, Title IX, Section 504
Muskegon Community College
221 South Quarterline Rd.
Muskegon, Michigan 49442
(231) 777-0350

There is a form in the Human Resources Office for this purpose. The person filing the complaint is referred to as complainant and the accused is the respondent.

Complaint Review

The EEO officer will make every reasonable effort to review and evaluate the complaint within 30 business days of receiving the complaint. Such review may include interviewing and taking statements from the complainant, respondent, and any person who may be a witness to the alleged events and obtaining and reviewing any document or physical evidence that may be relevant. All interviews and information will be confidential except for those with a need to know in the course of the review. The complainant has the responsibility to demonstrate, by a preponderance of the evidence, that the accusation is valid.

After completion of the review process, the complaint may be acted upon as follows:

1. A written agreement resolving the issue signed by the complainant, respondent, and EEO officer;
2. A withdrawal of the complaint in writing by the complainant;
3. A written dismissal of the complaint by the EEO officer for insufficient evidence; or
4. A written finding by the EEO officer that the merit with a statement of the resulting discipline. Should the discipline involve termination of employment or dismissal of a student, the EEO officer will consult with the President prior to any written finding being issued.

Appeal Process

Either the complainant or respondent may appeal the findings and decision of the EEO officer by filing a written notice of such appeal with the Office of the President within 10 business days of receipt of the decision of the EEO officer with a copy of the appeal notice to the EEO officer. *(Business days are defined as any Monday through Friday, except for nationally-recognized holidays.)*

In the event that an appeal has been made pursuant to the appeal process then no action shall be taken by the EEO officer until the appeal process has been concluded. Under appropriate circumstances, it may be necessary to suspend the respondent from the premises during this process.

Such appeal shall state in detail the reasons for the appeal. The appeal shall be referred to the President and upon receipt by the President of the written appeal, the following steps will be taken:

A. Within 15 working days, a committee of three full-time MCC employees shall be appointed by the President.
B. The committee shall elect a chair who will be responsible for setting a hearing date, notifying the parties, and conducting a hearing as outlined in this policy.
C. The committee shall, in confidence, hear testimony from the complainant, the respondent, and such other parties as the committee may deem essential to reaching a decision on the validity of the accusation. No testimony will be received in the absence of the complainant or the respondent. The right of cross-examination of any testifying person will be available to both the complainant and the respondent, assuming the presence of the same at the hearing. Upon advance written notice, the complainant or the respondent may have an advisor or attorney present.
D. The hearing will be conducted and completed as soon as practicable, but no later than 30 business days after the appointment of the committee by the President.

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POLICIES & PROCEDURES

E. Findings of fact and conclusions reached by the Appeal Committee shall be by majority vote, in writing. Within 15 business days after the conclusion of the hearing, the committee shall submit a written decision on the findings of fact and conclusion to the President, the EEO officer, the complainant, and the respondent. The committee's findings shall be accompanied by a recommendation to the President for appropriate action by the President. The President shall make a written decision within 10 business days after receipt of the recommendation. A copy of the President's decision shall be delivered to the EEO officer, the complainant, and the respondent.

If the EEO officer concludes pursuant to Step A or the President concludes pursuant to the appeal process that a violation of this policy has occurred then the respondent will be subject to discipline. If the respondent is an employee, the discipline will be pursuant to the rules and procedures under the applicable Collective Bargaining Agreement, employment contract or MCC policies. If the respondent is a student, the discipline will be subject to the rules and procedures of the due process provisions in this Catalog.

General Provisions

The timelines specified may be extended by mutual written consent of the complainant, the respondent, and the MCC President. If a complaint, whether informal or formal is directed against the EEO officer, the functions assigned to the person by these procedures will transfer to the President or his/her designee.

The complainant retains the right to file a complaint with the appropriate external government agencies or may resort to remedies at law.

Any retaliatory action of any kind by any Muskegon Community College employee against any other employee or student of the institution as a result of that person's seeking redress under these procedures is prohibited and shall be regarded as a separate and distinct cause for complaint under these procedures.

Any respondent who is an employee and subject to the provisions of a Collective Bargaining Agreement may request to have a steward present at any step of the investigatory process. A respondent who is an employee but not subject to the provisions of any Collective Bargaining Agreement may contest any discipline by utilizing the procedures set forth in the personnel policy manual for administrative, professional, and support staff. Should a complaint against a student also be covered by the Code of Conduct, the complainant may elect to proceed under the EEO process or the student code process, but not under both.

General Student Complaints

The General Student Complaint Form is available at mymcc.muskegoncc.edu/Documents/General_Complaint_Form.pdf.

Student complaints regarding College operations not otherwise covered in the catalog's Petitions section should report in writing the concerns to the Vice President for Student Services and Administration or designee. Student complaints shall not be the basis for any discipline against a supervisor, staff member, or faculty member. There are separate academic and disciplinary appeal processes and procedures to resolve academic and disciplinary issues.

The following procedures shall apply for general student complaints:

1. The Vice President for Student Services and Administration or designee will receive a student's verbal or written complaint. The Vice President for Student Services and Administration or designee 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.

2. 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 Vice President for Student Services and Administration or designee 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 Vice President for Student Services and Administration or designee will seek a resolution by contacting 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.

3. Should resolution not be reached, the Vice President for Student Services and Administration or designee will review the complaint and all supporting material and render a written decision regarding the complaint with rationale.

4. In the event that the Vice President for Student Services and Administration or designee is unable to resolve the complaint, the complaint will be forwarded to the Student Petitions Committee for review and action. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to the meeting. The student will be notified of the meeting location, date and time by the Director of Registration upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.

In considering all other types of petitions/appeals, the Committee reviews requests and refers students to the appropriate campus office for action. These referrals may be accompanied by the recommendation of the Committee. Students may present questions regarding any regulation or policy of MCC.

POLICIES & PROCEDURES

Campus Safety and Security

In compliance with the "Jeanne Clery Disclosure of Campus Security Policy and Campus Statistics Act," formerly known as the Crime Awareness and Campus Security Act of 1990, a guide is issued each year to provide information regarding safety and security procedures and crime statistics.
Refer to our webpage at

www.muskegoncc.edu/pages/1012.asp.

If a threat to human welfare or security of personal or college property should occur, please report it to the Physical Plant office, Room 1107. For emergency situations, please dial Security at 545 on a MCC phone. Keep your vehicle locked at all times.

Crime Statistics

Muskegon Community College is a very safe place to be, as indicated by the statistics stated below. However, you need to be aware that the college is subject to many of the same problems that occur in the community in which it is located. The following information has been prepared to increase your awareness of any problems that may exist.

Reports	2009/10	2010/11	2011/12
Murder	0	0	0
Manslaughter	0	0	0
Sex Offenses	0	0	0
Robbery	0	0	0
Aggravated Assault	0	0	0
Burglary	0	1	0
Auto Theft	0	0	0
Arson	0	0	0
Arrests	2009/10	2010/11	2011/12
Liquor	0	0	0
Drugs	0	0	0
Weapons	0	0	0
Judiciary Referrals	2009/10	2010/11	2011/12
Liquor Law Violations	0	0	0
Drug Abuse Violations	0	0	0
Weapons Violations	0	0	0

Weapons Policy

It is the policy of Muskegon Community College that no person employed by MCC or any student or visitor to the MCC buildings, facilities, grounds, vehicles, or other MCC property shall possess a weapon in an MCC building, on MCC grounds, during an MCC-sponsored activity, or during such times as students are under the supervision of MCC authorities.

Each student enrolled in Muskegon Community College shall abide by the terms of the MCC policy respecting a weapon-free zone.

Any student who violates the terms of this policy shall be subject to immediate removal from MCC property, and the matter shall be referred to the appropriate law enforcement agency for possible prosecution. MCC reserves the right to impose such sanctions as shall be called for by MCC administrative policies, procedures, and regulations.

This policy is not intended to apply to on- or off-duty law enforcement personnel under performance of their duties, armed carriers, and others who have legal cause to carry a weapon and have the President's permission.

First Aid and Emergencies

First aid boxes are mounted on walls in lab areas and are intended for the student's use, when needed.

For major emergencies please call 911 first, then call security at (231) 777-0545.

For minor emergencies or any incident dealing with campus security, please call (231) 777-0545 on any MCC phone to report the incident. In case of fire, pull the nearest fire alarm and leave the building by the nearest exit. Emergency guidelines are posted around campus.

Evacuation
Due to various circumstances and emergencies, the buildings at MCC may need to be evacuated. This could occur with the sounding of a fire alarm bell or by someone alerting your instructor in the classroom. Under any circumstances, we ask that you leave the building(s) immediately and in an orderly fashion utilizing exits to the exterior of the buildings. You may need to reference your emergency evacuation maps and/or locations for evacuation points. Please take all of your personal belongings with you upon evacuation.

School Closing
When an emergency situation necessitates the closing of one or more of the MCC campus locations, MCC will disseminate an emergency message across various communication vehicles. These modes of communication include: RAVE Mobile Safety alert text messages sent to the mobile phones of MCC students and employees who have registered at www.muskegoncc.edu/rave; announcements on West Michigan television and radio outlets via the GRAIL web system; as well as messages on the MCC web home page, the MyMCC Portal, campus e-mail, the MCC Facebook page, and on the main campus phone. All announcements should be noted carefully in as much as only morning, afternoon, or evening classes may be canceled.

The canceling of on-campus classes may not affect off-campus classes. Muskegon Community College classes taught off-campus will be canceled based upon cancellation of classes by individual schools. *(i.e., Grand Haven, Fremont, etc.)*

Severe Weather
When warned of a tornado or other severe weather conditions, staff and students should proceed to sheltered areas outlined on the severe weather poster which is posted in most rooms on campus. No one should leave the building under these circumstances.

Drug-free Campus

Muskegon Community College complies with federal, state, and local laws including those which regulate the possession, use, and sale of alcoholic beverages and controlled substances. The following represents the drug alcohol policies of MCC.

In compliance with the Board of Trustees' policies 4.02.00 and 5.20.00 and the Drug-free Schools and Communities Act Amendments of 1989, the following represent the Drug-free Workplace Regulations of MCC:

- Students and guests may not manufacture, distribute, dispense, possess, or use alcoholic beverages on MCC premises.
- Students and guests may not unlawfully possess, use, or distribute controlled substances and alcohol on MCC premises or while engaged in MCC activities such as conferences or field trips.
- Being under the influence of alcohol or any controlled substance while on MCC premises or engaged in MCC activities is prohibited.
- Students and guests are personally accountable for having knowledge of federal, state, and local laws relating to alcoholic beverages and controlled substances, the minimum drinking age, the transportation of open containers of alcoholic beverages, and the false representation of age by a minor.
- Student employees of MCC shall comply with the terms of this policy. Violation of such policy may result in disciplinary action, up to and including termination of employment and referral for prosecution. Any sanctions imposed will be consistent with local, state, and federal law.
- Student employees are required to notify MCC of any criminal conviction for a violation of the policy occurring in the workplace no later than five days after such conviction.

Violation of this policy by students may result in disciplinary action of up to, and including, suspension or expulsion from MCC and referral for prosecution. All guests on campus are expected to follow the above requirements. Failure to do so may result in a request to leave the MCC property or an MCC activity.

Tobacco Free Environment

The use, distribution or sale of tobacco is prohibited in college buildings, on college premises and in vehicles owned, rented or leased by the college.

The College President or designee will develop and periodically review administrative regulations and procedures necessary to maintain this policy, including provisions for notification, signage, disciplinary consequences, complaint procedures, enforcement and guidelines for temporary policy waivers.

Muskegon Community College will offer and promote programs and services that include practical evidence-based approaches to decrease or stop tobacco use for students and employees.

All college employees are to assist in monitoring and enforcing the above policy.

Dress Code

There is no formal dress code. However, students whose dress is obviously inappropriate may be asked to leave the campus. Shoes should be worn in the buildings. Certain classes may mandate specific articles of clothing to meet safety standards.

Computer Usage Policy

Standards for Acceptable Computer Use at Muskegon Community College

Muskegon Community College would like to promote the free exchange of ideas for learning, teaching, and research through the use of our technology including the Internet, personal computers, local networks, specialized hardware, and software applications. Computers on campus are intended for enrolled college students. Permission may be granted to adult college visitors.

Acting in ways that are mutually respectful of others are good foundations for responsible, legal, and ethical uses of our technology. In addition, you should consider your actions with respect to the following standards when using MCC's technological resources:

- Respecting the personal privacy of others
- Honoring the intellectual property of others
- Following established laws and college policies
- Treating people and equipment around you with care and respect as well as not engaging in any activities that would disrupt others
- Honestly representing yourself and the information you provide others
- Freeing limited technological resources for others to complete their college assignments whenever possible
- Not exposing others to materials which may reasonably be construed as offensive
- Not changing the setup or configuration of software or hardware that does not belong to you

Unacceptable Computer Use at Muskegon Community College

Access to technology at MCC is a privilege that can be withdrawn when an individual abuses it. By logging into an MCC computer you agree to the above standards of acceptable computer use. An individual can lose MCC computer privileges by committing any of the following transgressions:

- Unauthorized Actions. This would include access to any computer system to modify or view files, passwords, or other data along with damaging or altering software components on any network or database.
- Illegal Actions. This would include making copies of licensed or copyrighted software and data without documented permission.
- Malicious Actions. This includes exposing our wireless network to viruses or other destructive software, as well as, sending unsolicited email messages, including spam or other advertising material to individuals who did not specifically request such material, except as approved under the Email Policy.
- Disruptive Actions. This includes, but is not limited to, port scanning, Internet protocol spoofing, network analysis, network monitoring, running traffic generating applications, installing illegal software, or sending offensive electronic communications.
- Disrespecting Others. This includes loud talking, listening to loud music, aggressive behaviors, and sending offensive electronic communications.
- Misrepresenting oneself as another user or sharing passwords with others.
- Displaying or playing text, graphics, audio or video, which may reasonably be construed as offensive to the public.
- Failing to pay fees or fines assessed by MCC.

Article I: Statement of Purpose

The Board of Trustees, administration, faculty, and staff of Muskegon Community College have a primary concern for the academic achievement standards and personal integrity of our students. We recognize our obligation to protect MCC property and we take a special interest in the mental and physical health and safety of our community. We are committed to preserving the peace, uplifting campus morale, and creating a civil climate on our campus. Students enrolling in MCC or a visitor on campus assumes an obligation to behave in a manner compatible with the MCC's function as an educational institution. MCC has adopted the following policies and procedures as an expression of its expectations of student conduct.

Article II:

Section A:
Jurisdiction of MCC
College jurisdiction shall be limited to conduct which occurs on college premises or which occurs off college premises and adversely affects members of the MCC community and/or the pursuit of the MCC mission.

Section B:
Conduct-Rules and Regulations
Any student or organization found to have committed or to have attempted to commit any of the following acts of misconduct is subject to the disciplinary sanctions outlined in Article IV.

A. Acts of being dishonest, including, but not limited to:
   1. Cheating, including cyber cheating
   2. Fabricating
   3. Facilitating academic dishonesty
   4. Plagiarizing, including internet plagiarizing
   5. Committing acts of forgery
   6. Bribing
   7. Submitting the same assignment to more than one instructor without the permission of the instructors

   Please refer to the Academic Integrity Policy for other means of resolution for academic dishonesty issues

B. Violation of any provisions of the professional and/or ethical codes of programs in the fields of respiratory therapy, nursing, or any other applicable programs.

C. Interference with the college-approved operation of any college-recognized student organization.

D. Disorderly conduct, including but not limited to: administration, disciplinary proceedings, disruption or obstruction of teaching, research, and other college and campus activities.

E. Conduct which alarms, threatens, or in some manner disrupts the learning process of another student and/or the ability of faculty to teach.

F. Physical abuse, verbal abuse, threats, intimidation, stalking, coercion and/or other conduct which threatens or endangers the health, well-being, or safety of any person.

G. Sexual misconduct. (See the Non-Discrimination Policy)

H. Harassment which serves to degrade the status of another person. Most often, harassment focuses on a personal attribute, singling it out for ridicule, attack, or disparagement. Attributes include, but are not limited to age, economic class, gender, physical or mental disability, race or ethnic origin, religion, and sexual orientation. Harassment may include physical contact, written or verbal comments or suggestions, obscene or offensive pictures or jokes, hostile or threatening gestures or other forms of degradation. This includes acts of harassment carried out by one or more students on behalf of and/or at the request of another student.

I. Theft of and/or damage to property of MCC, property of a member of the MCC community, or other personal or public property.

J. Hazing, which is an act which endangers the mental or physical health or safety of a student, or involves the forced consumption of liquor or drugs, or which destroys or removes public or private property for the purpose of

initiation, admission into, affiliation with, or as a condition for continued membership in a group or organization. Consent of the participants is not a defense against a complaint of hazing.

K. Failure to comply with directions of an MCC employee, or emergency or service personnel acting in performance of their official duties.

L. Failure to identify oneself to an MCC employee, or emergency or service personnel acting in performance of their official duties when requested to do so.

M. Unauthorized possession, duplication or use of keys, combinations, or access cards to any MCC premise, or unauthorized entry to or use of MCC property.

N. Violation of published MCC policies, rules, or regulations found in, but not limited to, the college catalog.

O. Use, possession, or distribution of illegal drugs, narcotics or other controlled substances, and drug-related paraphernalia, except as permitted by federal, state, and/or local law. (See the Drug-free Campus Policy.)

P. Public intoxication or the use, possession or distribution of alcoholic beverages except as expressly permitted by federal, state, and/or local law and MCC regulations (See the Drug-Free Campus Policy.)

Q. Possession of firearms, explosives, or other weapons, or unauthorized use of dangerous chemicals or substances on MCC premises. (See the Weapons Policy.)

R. Participation in a campus demonstration which disrupts the normal operations of MCC and infringes on the rights of other members of the MCC community; leading or inciting others to disrupt scheduled, and/or normal activities within any campus building or area.

S. Intentional obstruction of the free flow of pedestrian or vehicular traffic on MCC premises or at MCC sponsored or supervised functions.

T. Conduct which is disorderly, lewd, or indecent; a breach of peace; or aiding, abetting, or procuring another person to breach the peace on MCC premises or at functions sponsored by, or participated in, by MCC.

U. Theft or other abuse of computer resources, including, but not limited to:
   1. Commercially using computing resources
   2. Intercepting data
   3. Committing acts of forgery

4. Willfully engaging in practices that place undue burdens on MCC resources (spamming, for example)

5. Engaging in or disseminating defamatory, discriminating, embarrassing, fraudulent, harassing, illegal, intimidating, obscene, threatening, or unwelcome electronic communications

6. Copying, modifying, or destroying the MCC network or Internet-based files

7. Accessing or attempting to access the MCC network or Internet resources for which the user is not authorized or granted explicit permission

V. Abuse of the judicial system, including but not limited to:
   1. Failing to comply with the directive to appear before a disciplinary board or meeting with an administrator after having received appropriate notification of such directive
   2. Falsifying, distorting, or misrepresenting information before a hearing panel or at a disciplinary meeting with an administrator
   3. Disrupting or interfering with the orderly conduct of a judicial proceeding
   4. Knowingly instituting a judicial proceeding without cause
   5. Influencing or attempting to influence another person to commit an abuse of the judicial system
   6. Attempting to discourage an individual's proper participation in, or use of the judicial system
   7. Attempting to influence the impartiality of a member of a disciplinary board or a disciplinary administrator during the course of a judicial proceeding
   8. Harassing (verbal or physical) and/or intimidating any person involved in a judicial proceeding
   9. Failing to comply with a sanction imposed under the Student Rights and Responsibilities
   10. Failing to comply with an agreed upon informal resolution

W. Engaging in gambling activities defined as illegal by federal, state or local law and/or MCC regulations.

X. Engaging in behavior prohibited by federal, state, and/or local laws.

POLICIES & PROCEDURES

Article III: Disciplinary and Judicial Procedures

Student misconduct may be handled in one of two possible ways: counseling or disciplinary action. Counseling will occur when a student appears to have behavioral problems that stem from emotional or psychological difficulties. Disciplinary action may be taken immediately in an emergency situation by the Vice President for Student Services and Administration or designee if the welfare of the individual or others is endangered. Action taken should be documented to the President of MCC.

Section A:
Complaints and Hearings
A. Any member of the MCC community may file a complaint against a student for allegedly violating the code of conduct. The person who files the complaint shall be the complainant. The student alleged to have violated the code of conduct shall be the respondent.
B. All complaints shall be prepared in writing and directed to the Vice President for Student Services and Administration. A complaint shall contain:
   1. The identity of the complainant and the respondent;
   2. The specific element(s) of the code of conduct alleged to have been violated;
   3. The date, time, and place of the alleged violation(s); and
   4. The names of any witnesses.
C. Complaints should be submitted as soon as possible, but in no event later than 30 days, after the violation occurs. A complaint may be filed after 30 days only when the Vice President for Student Services and Administration finds special circumstances exist and warrants a late filing. Incident/security reports may be considered complaints and filed with the Vice President for Student Services and Administration, in which case MCC may be considered the complainant.
D. The Vice President for Student Services and Administration shall determine if the alleged conduct may constitute a violation of the code of conduct. If so, the case shall proceed for adjudication.

Section B:
Informal Resolution
A. Filing a complaint shall not always require a formal adjudication process. In the event that the Vice President for Student Services and Administration elects to seek an informal resolution, he/she may review all relevant information, interview pertinent witnesses and bring together the complainant and respondent, if desirable.
B. Resolution shall be achieved when the Vice President for Student Services and Administration, complainant, and respondent, are satisfied that the behavior at issue has been addressed and a mutually acceptable outcome has been achieved. The resolution shall be written by the Vice President for Student Services and Administration and mailed to the parties.
C. Respondent's failure to respond to a request by the Vice President for Student Services and Administration or designee's request to participate in an informal resolution may result in a letter to the respondent, warning the respondent that failure to respond may result in a referral of the complaint to the disciplinary board for a hearing.
D. If the Vice President for Student Services and Administration is unable to resolve the complaint to the mutual satisfaction of the complainant and the respondent, the Vice President for Student Services and Administration shall advise the complainant of his/her right to proceed formally.

Section C:
Formal Adjudication
A. If the complaint is to be adjudicated using formal procedures, the Vice President for Student Services and Administration shall convene the disciplinary board to act as the hearing panel.
B. All complaints to be adjudicated by the disciplinary board shall be presented to the respondent in written form.

C. No student may be found responsible for the alleged violation of the code of conduct solely because the student failed to appear before a hearing panel; however, the hearing will proceed as scheduled if the respondent fails to attend. In all cases, the evidence in support of the complaint shall be presented and considered.

D. As the disciplinary board does not meet during the summer months, all alleged violations of the code of conduct during that period shall be resolved by the Vice President for Student Services and Administration through informal resolutions. If informal resolution fails, the case will be referred to an alternate disciplinary board composed of faculty, staff, and students as available.

Section D:
Hearing Procedure

The following procedures apply when a complaint has been directed by the to the disciplinary board, which will serve as the hearing panel:

A. **Composition of the Disciplinary Board.** The board is composed of seven members, who serve for one year.
   1. Two administrators will be selected randomly from the staff.
   2. Three student members, in good standing, will be selected randomly from the student body.
   3. Two full-time faculty members will be selected randomly from the current faculty. The disciplinary board will be called into session by the Vice President for Student Services and Administration who will notify the student regarding the time and place of the hearing. One of the disciplinary board members will be selected to serve as a chairperson of that board. Decisions made by the disciplinary board will be given to the Vice President for Student Services and Administration who will have the responsibility of corresponding with the student, preparing the student's file, and notifying the student's instructor(s) of the student's enrollment. If any member of the disciplinary board is involved in any way regarding the problem, he/she will be replaced for that particular case.

B. **Advisors.** The complainant and respondent may be advised by a faculty or staff member of Muskegon Community College. Members of the disciplinary board and the Vice President for Student Services and Administration shall not serve as advisors. The student may not appear or be represented by an attorney. The advisor may be an attorney or member of the legal profession, as long as the individual acts only in the capacity of advisor and not in the capacity of attorney. The same rights and limits on participation that apply to advisors, generally, shall apply to an advisor who happens to be an attorney or member of the legal profession.

C. **Scheduling the Hearing.** Absent exigent circumstances, or unless the student and MCC otherwise agree in writing, a hearing shall be scheduled to take place not more than 15 business days after the respondent has been notified of the complaint.

D. **Attendance.** The hearing shall be closed and attendance shall be limited to members of the disciplinary board, the judicial advisor, the complainant, the respondent, their respective advisors, and any witnesses deemed necessary by the parties.

E. **Role of Panel Chair.** The chair of the hearing panel shall preside over the hearing. All procedural questions shall be subject to the final direction and discretion of the chair. The chair of the hearing panel shall introduce members of the hearing panel and ask all hearing participants to identify themselves. All testimony and questioning shall be at the direction and discretion of the chair. The chair may limit or exclude testimony or questioning of any hearing participant to the extent that such testimony or questioning is repetitive of matters previously presented or is not relevant to the incident in question. The chair may recess the hearing at any time.

F. **Role of Judicial Advisor.** The judicial advisor shall be available to the hearing panel for consultation regarding procedural elements any time during the hearing. The judicial advisor may request that the chair recess the hearing at any time. The judicial advisor will be the Vice President for Student Services and Administration or designee.

G. Hearing Procedure. All hearings shall contain the following elements:

1. The chair shall make opening remarks.
2. The complainant shall have the opportunity to present a statement about the incident in question. The respondent shall then have the opportunity to present a statement about the incident in question.
3. After the statements by the complainant and the respondent, members of the hearing panel shall have the opportunity to question both the complainant and the respondent. The complainant and the respondent shall have the opportunity to question each other. Only questions relevant to the alleged incident, and not repetitive to the questioning of the disciplinary board, shall be allowed.
4. Complainant shall be offered the opportunity to present relevant evidence and witnesses, one at a time. Members of the hearing panel shall have the opportunity to ask questions at the conclusion of each witness's testimony. The complainant and the respondent shall have the opportunity to question the witness at the conclusion of each witness's testimony. The chair shall permit witnesses to be present in the hearing room only during their testimony.
5. The respondent shall be offered the opportunity to present relevant evidence and witnesses, one at a time. Members of the hearing board panel shall have the opportunity to ask questions at the conclusion of each witness's testimony. The complainant and the respondent shall have the opportunity to question at the conclusion of each witness's testimony. The chair shall permit witnesses to be present in the hearing room only during their testimony.
6. Members of the hearing panel shall have the opportunity to ask final questions. Prior to deliberations, the complainant and the respondent shall be asked if they have any other testimony they wish to present.
7. After the presentation of all testimony, witnesses, and evidence, and after subsequent questioning, the chair shall call the board to deliberate. The complainant, the respondent, and their advisors shall be excused by the judicial advisor. The witnesses shall remain available at the hearing site until dismissed by the board.
8. A record of the proceedings shall be kept, including the evidence presented, documents and other exhibits, the names of the witnesses who testified, the final findings and recommendations of the disciplinary board, and the members' votes.

Section E:
Deliberations

Normally, deliberations shall be carried out and completed as soon as practical following the hearing. Deliberations shall take place in private with only the members of the hearing panel present. The judicial advisor shall be available to the hearing panel during the deliberations for consultation regarding the hearing procedure. During the sanctioning phase of the deliberations, the judicial advisor shall provide information regarding any previous judicial action involving the respondent.

Section F:
Findings of Fact and Recommendations

A. Upon hearing all testimony, witnesses, and evidence, and after deliberations, the hearing panel shall either dismiss the complaint or find that the respondent violated the code of conduct.
B. Findings that the respondent violated the code of conduct shall be made on the basis of whether it is more likely than not that the respondent violated the code of conduct.
C. The respondent shall be presumed not responsible for a violation of the code of conduct until it has been demonstrated through credible testimony and evidence that it is more likely than not that the student committed the violation.
D. If the disciplinary board determines that the respondent violated the code of conduct, it shall recommend to the Vice President for Student Services and Administration a sanction for the violation.

E. Prior to making a recommendation of sanction, the Vice President for Student Services and Administration shall advise the disciplinary board of any previous judicial action taken against the respondent. The hearing panel may recommend any level or combination of sanctions.

F. The findings of fact and recommendations shall reflect the majority opinion of the disciplinary board.

Section G:
Communication and Implementation of Findings of Fact and Recommendations

A. Under normal circumstances the written findings of fact and recommendations shall be forwarded to the Vice President for Student Services and Administration for action within two business days after the end of the hearing.

B. The Vice President for Student Services and Administration may accept, reject, or modify the recommended sanction. The sanctions, as determined by the Vice President for Student Services and Administration, shall be implemented unless an appeal is filed.

C. The Vice President for Student Services and Administration shall communicate his/her decision in writing to the respondent, the disciplinary board, the complainant (as appropriate with concern to the respondent's privacy rights) and any other appropriate MCC authorities. Under normal circumstances, the Vice President for Student Services and Administration shall communicate his/her decision within five days after receipt of the disciplinary board's recommendation.

Section H:
Appeal Procedure

A. The respondent may file a written appeal of the hearing panel's decision to the President of MCC not more than five business days after receiving notification of the decision. Filing shall mean received in the Office of the President.

B. In the written appeal, it shall be the responsibility of the appellant to provide evidence of one or more of the following grounds for appeal:
1. The original hearing was not conducted in conformity with prescribed procedures
2. Insufficiency of the evidence to reasonably support the decisions
3. The sanction imposed was unduly harsh for the violation committed
4. Availability of new evidence that was not available at the time of the hearing sufficient to alter the decision.

C. If an appeal is granted by the President, he/she shall have access to the hearing record, including all documentary evidence, the written findings, and any other pertinent written information. After receiving the materials, he/she shall proceed in one of the following manners:
1. The President may alter the recommended sanction by making it more severe, less severe, or otherwise indifferent; or
2. The manner may be remanded to the disciplinary board for re-opening of the hearing to allow reconsideration of the original determination and/or recommended sanction(s).

D. If an appeal is denied by the President, the decision of the hearing panel shall stand and the recommended sanction(s) shall be imposed.

E. The President shall provide written notification of the appeal decision to the disciplinary board, the complainant (when necessary and appropriate), the respondent, the judicial advisor/Vice President for Student Services and Administration, and any other appropriate MCC authorities.

F. Recommended sanctions shall not be imposed during the pendency of an appeal unless the nature of the conduct under review or the circumstances involved dictate otherwise.

POLICIES & PROCEDURES

Article IV: Sanctions

Section A:
Interim Suspension of Privileges

A. Faculty members retain the right to remove from the classroom (for the duration of that class period) any student demonstrating disruptive behavior. It is the responsibility of the faculty member to report the incident to the Vice President for Student Services and Administration and to indicate if they do not want the student to return to class (interim suspension) and the rationale for that request. This request will be acted upon by the Vice President for Student Services and Administration or designee prior to the next class session.

B. The Vice President for Student Services and Administration may issue an interim suspension of privileges for the following reasons:
   1. To insure the safety and well-being of members of the MCC community or to preserve MCC property;
   2. To insure a student's safety or well being; or
   3. If a student poses a threat of disruption or interference with the normal operations of MCC.

C. During the interim suspension, a student may be denied access to MCC activities, facilities, classes, or other privileges for which the student might otherwise be eligible, as the Vice President for Student Services and Administration may determine to be appropriate.

D. The decision to alter or suspend privileges for an interim period shall be communicated by the Vice President for Student Services and Administration in writing to the respondent and shall be effective immediately. Notification shall either be delivered by hand or sent by certified mail. Failure or refusal to take receipt of notification shall not negate or postpone said action. The appropriate MCC officials shall be notified of the interim suspension including those directly involved in the pending complaint.

E. The interim suspension or altered privileges shall remain in effect until a final decision has been made regarding pending complaints or until the Vice President for Student Services and Administration determines that the reason for imposing the interim suspension of privileges no longer exists. Absent exigent circumstances, or unless otherwise agreed to by both parties, an expedited hearing shall take place within 10 business days of notification of the interim suspension.

Section B:
Other Sanctions

A. The following sanctions may be imposed individually or in combination for any violation(s) of the code of conduct:

1. **Reprimand.** A verbal or written reprimand may be issued for minor forms of misbehavior. The reprimand will be recorded in the Office of the Vice President for Student Services and Administration but will not become part of the student's official record.

2. **Warning.** A written notice to the student, identifying the nature of the code of conduct violation(s). The warning shall be placed in the student's official record.

3. **Loss of privileges.** Revocation of specified privileges for a specified time period (use of MCC facilities, co-curricular activities, and work study, for example).

4. **Restitution.** Compensation for loss, damage, or injury. Restitution may be monetary, an appropriate form of service, or the replacement of specific materials, as dictated by the situation.

5. **Educational project.** Completion of a project specifically designed to help the student understand why the violation of the code of conduct was inappropriate.

6. **Probation.** A written reprimand for violation of a specified item in the code of conduct. Probation is for a designated period of time and includes the probability of more severe disciplinary sanctions if the student is found responsible for violating the code of conduct during the probationary period.

7. **Suspension.** Separation from MCC for a specified period of time after which the student is eligible to return or the organization may resume its activities.

8. **Permanent separation from MCC.**

B. The proper MCC authorities shall be notified of any sanction imposed.

C. Disciplinary sanctions shall be recorded in the student's official file and a record of it will be maintained in the office of the Vice President for Student Services and Administration. (Minor forms of misbehavior will not become part of the student's official record.)

D. The following sanctions may be imposed upon student clubs or organizations:

1. The sanctions are listed above in Section B: Other Sanctions, A, 1 – 8.

2. Deactivation or loss of recognition for a specified period of time.

Article V: Withdrawal and Readmission

The Vice President for Student Services and Administration shall be advised of any student who voluntarily withdraws from MCC while a complaint is pending. The student must present adequate evidence of permission to re-enroll. Permission for re-enrollment may be granted only after the complaint has been resolved, unless circumstances dictate otherwise. If the complaint cannot be resolved because the complainant, witnesses or evidence are not available, such permission may be denied by the Vice President for Student Services and Administration.

POLICIES & PROCEDURES

Financial Aid

Muskegon Community College, through its financial aid programs, attempts to assist students who would not otherwise be able to pursue their educational goals. Numerous federal and state programs, as well as College-sponsored and privately funded programs are available to assist qualified students. Most of these programs are described in the following paragraphs.

Students must meet the criteria for particular programs, be in good academic standing, and make normal progress toward a degree in order for funds to be awarded or renewed.

Federal regulations require that, in order for an award to be renewed under a federal program, the student must not owe a repayment on a previous loan or grant. The College also reserves the right to withhold all services—including the issuing of academic transcripts—from any students who have not met their financial obligations to the College.

Applications, Procedures and Deadlines

In order to be considered for financial assistance, students must do the following:

1. Be accepted for admission to the College as a regular student (new students must submit a completed Application for Admission online at www.muskegoncc.edu).

2. Complete and submit a FAFSA (Free Application For Federal Student Aid). Request that a copy be sent to Muskegon Community College (College Code #002297). This is required for all aid programs based on financial need. See www.fafsa.ed.gov for more information.

3. Immediately respond to any requests. Additional documentation, including signed copies of Federal tax returns, may be needed to complete your financial aid file.

In order to receive full consideration for financial assistance, completed applications must be on file at the College by the following dates:

for FALL SEMESTER .... May 1
for WINTER SEMESTER ....October 1
for SUMMER SESSION .... March 1

Applications received after these dates will be considered on a first-come, first-served basis, if funds are available.

Most financial aid is awarded for only one academic year at a time. Students must submit new applications in order to receive consideration in a subsequent year.

Financial Aid Contract

By accepting the financial assistance offered to me by Muskegon Community College, I agree to and accept responsibility for the following conditions:

A. I will use the financial aid awarded to me only for my educational expenses at Muskegon Community College, including tuition and fees, books and supplies, transportation, room and board, dependent childcare, and other similar costs of attendance.

B. If my financial aid awards are based on full time enrollment, the amount credited to my account may be reduced to reflect actual enrollment status. My enrollment status is determined no earlier than the College's census date, which is the end of the 15-week (12-week for summer) course add/drop refund period. In addition, classes added after the census date may not be considered for supplementary aid. Finally, if I never attend, cease to attend, drop, withdraw or receive all "E's", my financial aid may be reduced or canceled, and that I may be liable to repay any amount of assistance already received.

C. If I register for classes in any academic term, and then decide not to attend, I understand that it is my responsibility to drop those classes.

D. If I receive any additional financial awards from other sources, I will notify the Financial Aid Office in writing immediately. I understand that the financial aid offered by Muskegon Community College may have to be adjusted if I receive any other awards.

E. I understand that I must make normal progress towards the completion of my program, as set forth in the "Satisfactory Academic Progress (SAP) Policy for Financial Aid Recipients". Failure to make satisfactory progress may

result in my being ineligible for further aid. I understand that if a deferred payment is extended to me and I have pending grades from the current or prior semester, my financial aid may be canceled if I have not maintained SAP after grades are posted. I agree that I have read and understand the SAP policy in the Financial Aid Contract.

F.   If I borrow through the Federal Direct Loan Program, I understand that I must notify the Financial Aid Office at MCC and my lender immediately if I cease to be enrolled in at least 6 credit hours. I also understand that I must repay the loan when it is due, and that failure to repay my loan may result in my being ineligible for any further assistance at Muskegon Community College or any other school.

G.   I hereby authorize the College to release information concerning my academic progress and/or financial status to any agency or donor who contributes to my financial assistance, since this information may be essential for the continuation of such assistance.

H.   I understand that any violation of the regulations governing the financial aid programs is sufficient grounds for termination of my financial aid and referral for disciplinary action. Violations include, but are not limited to, falsification of any document used to obtain financial aid, using financial aid funds for non-educational purposes, and transfer of financial aid funds to others (e.g. using your book voucher to purchase items for others).

I.   I understand that if I fail to meet any or all of the above conditions, my financial aid may be canceled or revoked, and that I may be liable to repay any amount of assistance already received.

Ombudsman for students

The U.S. Department of Education provides an Office of the Ombudsman to help resolve loan disputes and problems. The following options are available for contacting the office: call toll free at (877) 557-2575, visit the Web site at www.fsahelp.ed.gov, or write to:

Office of the Ombudsman
Student Financial Assistance
U.S. Department of Education
Room 3012, ROB #3, 7th and D Streets, SW
Washington DC 20202-5144

Federal Programs

Pell Grant

PELL Program grants are available to students in financial need. Grants range from $602 to $5,730. The actual amount of each grant depends upon the student's eligibility number and the number of credit hours being carried each semester. A PELL award may be used during the Summer Semester as well as during the Fall and Winter Semesters. Awards are prorated according to the number of credit hours carried:

1-5 credits..less than1/2 time award
6-8 credits..1/2 time award
9-11 credits..3/4 time award
12+ credits..full-time award

Students apply for a PELL Grant by completing the Free Application for Federal Student Aid (FAFSA).

Supplemental Education Opportunity Grant (SEOG)

The SEOG Program funds are available to students with exceptional financial need which has not been met through other financial aid programs. Grants may range from $100-$4,000. Preference is given to full-time students who show exceptional financial need.

College Work-Study Program

The College Work Study Program provides part-time employment of up to 20 hours per week to students in financial need. Preference is given to full-time students who have no other source of employment, either on or off campus.

Student Employment

Part-time, on-campus employment opportunities are provided on a limited basis for students who do not qualify for the work-study program but possess required skills. Interested students should apply in the Financial Aid Office, Room 114. For more information, refer to MCC's website at: www.muskegoncc.edu

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Direct Loan

The Direct Loan Program provides long-term, low interest loans to students. Before applying for a loan, the student must first apply for the Federal Pell Grant Program. A student who demonstrates financial need based on federal guidelines may qualify for an interest-subsidized loan (i.e. the Federal Government pays the interest while the borrower is in school).

Students who do not show need may qualify for an unsubsidized loan, and pay the in-school interest themselves. Repayment of the principal of subsidized and unsubsidized loans does not begin until six months after the borrower ceases half-time attendance.

Parent Loan for Undergraduate Students (PLUS)

Parents of students under the age of 24 may borrow under this program. The PLUS Loan is not based on financial need, and neither the parent nor the student has to apply for any federal aid program before applying for a PLUS Loan.

Veterans Programs

Veterans, veteran dependents/survivors, and Reserve/National Guard personnel may be eligible to receive aid under one or more of the programs listed below. Applications for federal programs may be obtained from any regional Veterans Administration Office or at www.benefits.va.gov/gibill. Applications for the state program may be obtained by contacting the Michigan Veterans Trust Fund, Information and forms are also available from the College's Veterans Office. The Veterans Office will also assist students in completing forms for other veteran benefits.

Different Chapters and Eligibility Requirements

- CHAPTER 30 — This federal program provides educational benefits for veterans who entered military service after July 1, 1985. Veterans who entered military service before January 1, 1977 and served actively for at least two years after July 1, 1985 may also be eligible (Montgomery G.I. Bill).
- CHAPTER 31 — This federal program provides educational benefits to eligible disabled veterans (Veterans Vocational Rehabilitation) with at least a 10% service connected disability to be considered for Vocational Rehabilitation and Employment. To get more information regarding this program, please go to www.vetsuccess.gov.

- CHAPTER 32 — This federal program provides educational benefits on a matching fund basis to eligible veterans who contributed while in the service (V.E.A.P.).
- CHAPTER 33 — The Post-9/11 GI Bill is for individuals with at least 90 days of aggregate service on or after September 11, 2001, or individuals discharged with a service-connected disability after 30 days. You must have received an honorable discharge to be eligible for the Post-9/11 GI Bill.
- CHAPTER 35 (DEA) — This federal program provides educational benefits to children (between the ages of 18 and 26), spouses, and widows/widowers of totally disabled or certain deceased veterans.
- CHAPTER 1606 — This federal program provides educational benefits to persons who entered a six year Reserve or National Guard obligation after July 1, 1985 (Selected Reserve/National Guard G.I. Bill).
- CHAPTER 1607 — This is a new federal education program that provides up to 36 months of education benefits to members of the Selected Reserves, Individual Ready Reserve (IRR), and National Guard, who are called or ordered to active service in response to a war or national emergency, as declared by the President or Congress.

For more information regarding veteran benefits go to www.benefits.va.gov/gibill.

POLICIES & PROCEDURES

Michigan Veterans Trust Fund (MI PUBLIC ACT 248)

This state program provides benefits for children (between the ages of 16 - 26 years) of certain totally disabled or deceased Michigan veterans. Eligible students must enroll at least half-time, and may receive up to $2,800 per year for tuition and class fees. (Formerly, Children of Veterans Tuition Grant)

Reinstated Entitlement Program

This federal program provides benefits for some veteran dependents, while in school, who are no longer eligible for Social Security benefits (R.E.P.S.).

Death Indemnity Compensation

This federal program provides benefits, while in school, for certain children (under the age of 26) of certain deceased veterans (D.I.C.).

State Programs

Michigan Competitive Scholarship Program

The Michigan Competitive Scholarship Program provides tuition grants of up to $630 per academic year. Eligibility is based on both financial need and academic achievement. Students must take the ACT test no later than December of their senior year in high school, and complete their Free Application For Federal Student Aid (FAFSA) by the first of March. Students may receive up to ten full semesters of assistance, provided they renew their application each academic year. Further information may be obtained from the high school guidance office or the State of Michigan website (www.Michigan.gov).

Michigan Tuition Incentive Program (TIP)

The TIP Program provides grants to cover tuition and some fees for eligible low-income students who graduate from high school or complete a GED before their 20th birthday. The TIP Program may cover up to 24 credit hours per year, with a maximum of 80 credit hours. TIP students who complete an associate's degree or at least 56 credits at the community college level may be eligible for additional funding if they transfer to a four-year Michigan college or university.

Students apply for the TIP Program by submitting the "TIP Program Application" before graduating from high school. The application is sent to the student by the TIP office.

Other Federal and State Programs

Vocational Rehabilitation Service Program

This state program provides assistance to students who have physical, mental, or emotional disabilities. Information may be obtained by contacting any Michigan Department of Career Development Rehabilitation Services District Office.

Native American Tribal Scholarships

This federal program provides financial assistance for needy Native Americans. Applications may be obtained by contacting your tribal chairman. Students must also apply for financial aid through the College by submitting the FAFSA (Free Application for Federal Student Aid).

Michigan Indian Tuition Waiver

Contact your tribe or the Michigan Department of Civil Rights to determine if you qualify for the tuition waiver.

College Programs

MCC Board of Trustees Scholarship

This program provides tuition scholarships to high school graduates who have achieved a cumulative high school grade-point average of at least a 3.35. In addition, the student must meet the following criteria:

1. Be a legal resident of Muskegon County at the time of high school completion; OR, be a non-resident of Muskegon County at the time of high school graduation, but a legal resident of the State of Michigan, AND graduate from a Muskegon County high school.
2. Submit the "Board of Trustees Scholarship" application by the stated deadline.
3. Enroll as a full-time student (at least 12 credits per semester) no later than the Fall Semester following high school completion.

A student whose high school grade-point average is at least 3.35, or a Home-Schooled student whose ACT composite score is at least 24, is eligible for an award of $500 per year. This award is renewable for a second year, provided the student maintains a cumulative GPA of at least 3.35 at MCC.

Financial need is not a criterion for this award. Applications may be obtained from county high school counselors and are due March 1st of their senior year.

S.A.M. Tuition Waiver

Muskegon County Residents who are 60 years of age or older may enroll under the "Study Opportunities for Adult and Mature Citizens" (S.A.M.) program. This program waives tuition for both credit and audited courses. Financial need is not a criterion for this program. You must provide proof of eligibility at the main counter of the Student Welcome Center. You may still be eligible for Financial Aid.

Performance-Based Scholarships In Academic And Performance Areas

This program provides tuition grants to students who demonstrate a particular creative talent (for example: in art, music, drama, dance, creative writing, etc.) or a high level of achievement in a certain academic area. Students are nominated by the faculty of each academic department and each department sets its own guidelines for selection of students. Recipients are normally expected to participate in the activities of the department and/or maintain a specified level of academic achievement within their program of studies.

This program is not based on financial need. Grants may range up to full tuition, and may be renewed upon the recommendation of the department. Information may be obtained by contacting the Chairperson of the academic department in which the student is interested, or on MCC's website under scholarships.

Athletic Grants

These grants, ranging up to full tuition, are available to students who demonstrate collegiate-level athletic ability, carry a minimum of 12 credits per semester, and participate in one of the intercollegiate sports offered at MCC. Students must maintain academic eligibility in order to participate in intercollegiate athletics as well as to receive a grant. See the Athletics department to apply.

Local Community Programs

Many local clubs, businesses, and agencies sponsor scholarship programs. High school students should contact their guidance counselor for information on these sources of financial aid.

Many companies sponsor scholarships for their employees and/or children; students should check with the personnel offices of their own or their parents' employers.

Satisfactory Academic Progress (SAP) Policy for Financial Aid Recipients

To qualify for financial aid, a student must make satisfactory academic progress toward the completion of an eligible certificate or associate degree program. This policy applies to all students who apply for help from any federal or state financial aid program. It also applies to any other program administered by the College which requires satisfactory academic progress as a criterion for eligibility.

Standards for Eligibility

Students are making "Satisfactory Academic Progress" if they meet the following conditions:

A. Maintain a cumulative grade point average (GPA) of not less than the following:

Credit Hours Completed	Minimum GPA Required
1 – 11	1.50 cumulative
12 and above	2.00 cumulative

B. Complete with a passing grade (that is, an A, B, C, D, or P, including a grade with a "+" or "-") two-thirds of the cumulative hours attempted. All withdrawal grades, incompletes, no-credit grades, transfer credits and repeat classes are considered as hours attempted.

C. Complete their declared program within the maximum limit. For federal aid programs, once you have attempted 150% of the number of credits normally required to complete a degree or certificate, you will not be eligible for any additional federal aid at MCC. Transfer credits classes do not count in the calculation of the GPA, but are included in the calculation of the maximum limit.

Degree Type	Credits Required	150% limit
Regular ASA/AAS	62	93
Nursing	84	126
Respiratory Therapy	101	151

Additional Standards and Definitions

- Transfer credits, incompletes and withdrawal grades do not count in the calculation of the GPA.
- Repeating a class – a student may receive financial aid for a previously passed course only one additional time. You are allowed to repeat a failed or withdrawn course until it is passed, if otherwise maintaining SAP.
- Up to 30 remedial credits may be eligible for financial aid if they are required by the student's academic degree program provided the total doesn't exceed the maximum number of credits allowed by the maximum time frame standard.
- SAP calculations include all cumulative attempted credits (regardless who paid for them) registered for at the semester's or course's census date.
- Financial aid eligibility status - students are evaluated for SAP at the end of each semester enrolled. Eligibility status is categorized as Satisfactory, Warning or Suspension.
- The Pace of Progression is calculated by dividing the cumulative hours successfully completed by the cumulative hours attempted. Monitoring the pace of progression will ensure completion of the program within the maximum time frame.
- Only courses that apply to a student's declared program are eligible for financial aid.
- The financial aid SAP Policy is separate from the College's general probation/dismissal policy.

Explanation of Eligibility Status

1. **Satisfactory Status**: The student is in good standing and meets all conditions of the SAP policy standards.
2. **Warning Status**: The student has failed to meet one or more conditions of the SAP policy standards at the end of a semester. A student placed on warning will be allowed to receive aid for one additional semester.

3. **Suspension Status**: The student has failed to meet one or more conditions of the SAP policy standards after two consecutive semesters. A student placed on suspension is not eligible for additional aid until they 1) raise the cumulative GPA up to the minimum required, and/or 2) earn enough credits to meet the minimum cumulative completion rate required. The student would be responsible to pay for any additional classes needed to bring them back into good standing.
4. **Financial Aid Probation Status**: A student placed on probation has successfully appealed their suspension status by demonstrating that they have the ability to earn a cumulative 2.00 GPA and 67% completion rate by the end of their next semester. If after one semester on probation the student is not back to satisfactory status, they would not be eligible for future aid unless they were successfully following a Financial Aid Academic Plan.
5. **Financial Aid Academic Plan**: A student on suspension that cannot return to a satisfactory status within one additional semester must meet with an MCC counselor and develop a Financial Aid Academic Plan. The Plan must be strictly followed and the conditions set-forth must be met. The student will remain on the Plan until returning to a satisfactory status. If the conditions are not met, all future aid will be canceled. The student would be responsible to pay for any additional classes needed to bring them back into good standing.

Loss of Eligibility, Appeal, and Reinstatement

If you are denied aid under this Policy, you have the right to appeal. If you feel there are mitigating circumstances in your case, you must complete the "Appeal Form for Satisfactory Academic Progress (SAP) and Loan Denial". The appeal form must be submitted to the Student Welcome Center before the beginning of the semester you wish to attend. You must address the problem(s) of why you have been unsuccessful in the past and what has changed that will allow you to be successful in the future. The Committee will normally consider such things as illness, a change in job schedule, or other extenuating circumstances (which were beyond your reasonable control) as grounds for a successful appeal. Be sure to include documentation (for example, a doctor's statement) and a Financial Aid Academic Plan, if appropriate. To complete a Financial Aid Academic Plan, contact the Counseling and Advising Center at (231)777-0362.

Students that successfully appeal are placed on either Financial Aid Probation OR placed on a Financial Aid Academic Plan that ensures they will meet SAP standards by a specific point in time.

If you want federal aid to earn a second degree, you must appeal in writing, stating your academic goal, and provide a Financial Aid Academic Plan including documentation (such as a "graduation audit") of the classes needed to accomplish your goal.

This policy states the **minimum** required for most financial aid programs. However, some scholarship and loan programs require a **higher** standard (usually a higher GPA). Therefore, you may qualify for most aid programs by meeting the above conditions, but be denied a specific scholarship or loan unless you raise your GPA or pass additional credit hours.

Financial Aid Refunds

Financial Aid recipients who withdraw from classes will have their tuition accounts adjusted according to the College's regular tuition refund policy (see "Refund Policy"). If you find it necessary to withdraw during a semester, you should notify the Student Welcome Center in person as soon as you can.

Federal aid recipients who withdraw from ALL classes before they complete 60% of the semester may have to repay a prorated portion of the federal aid they received.

Transferring Credit to MCC

Transferring Guidelines

Muskegon Community College welcomes transfer students. We may award transfer credit for coursework from accredited institutions of higher education and the United States Military Service. Transfer credits may also be awarded for some Advanced Placement (AP), College Level Examination Program (CLEP) examinations and Life Experiential Learning (LEAP).

Muskegon Community College will award equivalent course credit when applicable, and when direct equivalencies are not available, elective credit in appropriate academic subjects may be awarded.

Transfer credit to MCC is determined on an individual basis using these guidelines:

- Apply Online for Admission to Muskegon Community College.
- Official Transcripts and Official Score Reports must be sent directly from each college or national testing service to:

  Transfer Evaluation, Room 100-J
  Muskegon Community College
  221 S. Quarterline Rd
  Muskegon, MI 49442

  We will only accept Official College transcripts and score reports by mail.

- **Regionally-accredited College or University** - Transfer credit must be from a regionally-accredited college or university.

- **Grades** - Only courses in which a student received a "C" or better will be considered for transfer credit.
  - Credits only, not grades are accepted in transfer. Grades are not entered on the official MCC transcript or calculated in the cumulative grade point average.
- **Residency Requirement** - A student may transfer any number of credits to MCC, however, a student must complete at least 30 credit hours, or the last 15 credit hours of a degree, at MCC in order to receive a Muskegon Community College degree.
- **Course Descriptions/Syllabi** - If a determination cannot be made on the credit a student should receive, the student may have to obtain a copy of course descriptions and/or course syllabi with objectives. The Office of the Registrar will contact the appropriate academic department for determination.
  - The total amount of transfer credit accepted from another institution will appear on the student's MCC transcript, but not the specific credit accepted.
  - Students who transfer a course which has a higher number of credit hours than the Muskegon Community College equivalent course may be awarded the "excess" credit.
- **Evaluation Time** - Transcripts will be evaluated within approximately four to six weeks. Transcripts older than five years or from out-of-state institutions may take an extended amount of time to be evaluated due to obtaining course descriptions and course syllabi.

Time Limits on Transfer Credits

In most cases, credits will be accepted without a time limit from any regionally-accredited institution. In certain courses, where a program or the academic department requires that current knowledge is essential, a time limit may be imposed on the applicability of earned credit toward satisfying a degree requirement. Such a time limit must be approved by the department. The following courses must have been taken within the time limits specified:

- Accounting Courses – Must have been taken within ten years prior to the evaluation.
- Information Technology/Computer Science Courses – Must have been taken within five years prior to the time of the evaluation.
- Nursing Courses -- All Nursing courses, as well as non-nursing courses required for nursing degrees, must be taken within eight years prior to the time of evaluation. If testing/coursework is over eight years old, competency must be validated on established examinations or by repeating the course.
- Liberal Arts – Liberal Arts courses generally don't have a time limit when used toward an Associate in Science and Arts Degree at Muskegon Community College.
- Technology and Technology-Related Courses - Technology courses such as Automotive, Electronics, Graphic Design, Machining, Materials Technology and Welding must have been taken within 10 years prior to the time of the evaluation.

Advanced Placement Credit (AP)

AP has enabled millions of students to take national standardized exams and earn college credit.

We only accept official score reports sent directly from College Board to MCC. Please contact AP Score Reporting Services at www.collegeboard.com.

Only scores of 3 or higher will be considered for credit.

College Level Examination Program (CLEP)

CLEP is a national standardized testing program which offers tests in various academic areas. Passing scores may be accepted for college credit. The acceptance and determination of minimum scores for the CLEP exams will be determined by the department authorizing credit for that subject. Students may earn a maximum of 30 semester hours of credit through the CLEP/DANTES examinations. For more information regarding CLEP, check their website at www.collegeboard.com.

Defense Activity for Non-Traditional Education Support (DANTES)

DANTES is a national standardized test in selected areas and is accepted for college credit. The acceptance and determination of minimum scores for DANTES examinations will be determined by the department authorizing credit for that subject. Students may earn a maximum of 30 semester hours of credit through the CLEP/DANTES examinations.

Military Credit

All veterans submitting a certified DD214 will be granted one credit of Physical Education Activity and one credit of Health elective credit.

Veterans may receive additional credit by submitting a copy of their Joint Military Transcript.

To expedite this process go to:
https://jst.doded.mil

The American Council on Education recommendations will be sent to the appropriate academic department for their review and possible approval.

Military transcripts will be evaluated within approximately six to eight weeks and may take an extended amount of time to be evaluated due to sending recommendations to departments for approval.

Muskegon Community College will try to award direct course equivalencies. When direct equivalencies are not available, an elective in an appropriate academic subject may be awarded. MCC is unable to grant credit for military specific credit.

Articulated Credit

Apply to Muskegon Community College online at www.muskegoncc.edu.

To receive articulated credit, the students should apply through their high school's counseling office. Students should list the course(s) they want to articulate on the Articulated Credit Application Form.

Submit official final high school transcripts to:

Enrollment Services
Muskegon Community College
221 S. Quarterline Road
Muskegon, MI 49442

Submit completed Articulated Credit Application form with signed competency checklists to:

Records Auditor, Room 100-H
Muskegon Community College
221 S. Quarterline Road
Muskegon, MI 49442

Enroll within 24 months following high school graduation.

To finalize your articulation credit, please contact the Records Auditor at (231) 777-0204 or email chris.nowak@muskegoncc.edu when at least six credit hours of 100 level courses or above have been completed with a cumulative 2.0 GPA at Muskegon Community College.

Students may earn a maximum of 15 credit hours toward a certificate program and 30 credit hours for an Associate degree program.

Michigan Transfer Network

The Michigan Transfer Network at www.michigantransfernetwork.org is a valuable "single source" website that students, counselors and the public may use to check transfer equivalencies for courses among colleges and universities in Michigan. It is sponsored by the Michigan Association of Collegiate Registrars and Admissions Officers in partnership with Michigan State University.

Non-Conventional Credit

Some course requirements may be met by methods other than completing courses. Students may wish to explore with a counselor the following options:

- **Life Experiential Learning** - Credit may also be granted to students who are unusually well-prepared in a particular discipline if they can demonstrate that preparation through a process called the Life Experience Assessment Program (LEAP). Consult a counselor for information. Applications are available on MCC's website at www.muskegoncc.edu/pages/2671.asp. There is a $100 fee for every eight credit hours attempted.

- **Proficiency Examination** - Credit may be granted for students seeking credit by departmental examination. Applications are available from department chairpersons and the Academic Affairs Office. The $10 test fee is applicable toward credit tuition.

Individual Study Courses

Students may work with a faculty member in designing special courses to meet their individual needs. A form is available from the Academic Affairs Office to apply for such an individual study course. The criteria for approval are also available in that office. A student should not begin work on such a course until all approvals are completed and tuition has been paid.

A student may take, as part of his or her regular program, a maximum of ten (10) credit hours in "individual study." The application of these credits towards a given major or minor will be judged by the institution accepting these credits. Each Individual Study Course will carry variable credit (1/2 – 5) as contracted between the faculty member and the student.

Individual study course options are available to replace existing coursework for the purpose of meeting graduation requirements, to provide additional opportunities within a discipline to a student who has taken all available courses or their equivalent in a subject area, or to supplement transfer credit to meet program requirements.

POLICIES & PROCEDURES

Transcripts

www.muskegoncc.edu/pages/487.asp

Transcript request forms are available from the Student Welcome Center. There is no charge for transcripts. Transcript requests are normally processed within one week, but may require more time to process at the end of a semester. Your signature is required before we can release your transcript. Transcripts may be requested in person, by mail, or by fax. Transcripts that are released to the student are unofficial. Official transcripts must be sent directly to a college/university or business. "Sealed transcripts" are available but are "issued to student." Transcript copies will not be furnished if you have delinquent accounts at the College.

Unofficial transcripts may be printed online using the MyMCC Portal.

OR

Official transcripts are issued DIRECTLY to an institution or place of business with the official college seal and registrar's signature. They are used for college or university transfers, job applications, scholarships, etc. Official transcripts are issued only after students have fulfilled all financial obligations to the College. If a transcript request is for pick up or mailed directly to the student, it will be unofficial.

To request an official transcript, please use one of the following methods:

- **ON CAMPUS** - Transcript Request Forms are available at the Student Welcome Center.
- **BY MAIL** - Send the completed Transcript Request Form to: Muskegon Community College, TRANSCRIPT Office, 221 S. Quarterline Road, Room100-J, Muskegon MI 49442.
- **BY FAX** - You can FAX your completed Transcript Request Form to (231)777-0209.

Confidentiality of Records

Notification to Students of Rights Under FERPA

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records. They are:

The **right** to inspect and review the student's education records within 45 days of the day the College receives a request for access. Students should submit to the Dean of Academic Services and Registrar a written request that identifies the record(s) they wish to inspect. The College will make arrangements for access and notify the student of the time and place where the records may be inspected.

The **right** to request the amendment of the student's education record that the student believes is inaccurate or misleading. Students may ask the College to amend a record that they believe is inaccurate or misleading. Student should submit to the Dean of Academic Services and Registrar a written request, clearly identifying the part of the record(s) they want changed, and specify why it is inaccurate or misleading. If the College decides not to amend the record as requested by the student, the College will notify the student of the decision and advise the student of his or her right to a hearing regarding the request for amendment. Additional information regarding the hearing procedures will be provided to the student when notified of the right to a hearing.

The **right** to consent to disclosures of personally identifiable information contained in the student's education records except to the extent that FERPA authorizes disclosure without consent. One exception, which permits disclosure without consent, is disclosure to school officials with legitimate educational interests. A school official is a person employed by the College in an administrative, supervisory, academic, research, or support staff position; a person or company with whom the College has contracted (such as an attorney, auditor, or collection agency); a person serving on the Board of Trustees; or a student serving on an official committee, such as a disciplinary or grievance committee, or assisting another school official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an education record in order to fulfill his or her professional responsibility.

The **right** to file a complaint with the U.S. Department of Education concerning alleged failures by Muskegon Community College to comply with the requirements of FERPA. The name and address of the Office that administers FERPA is:

Family Policy Compliance Office
U.S. Department of Education
400 Maryland Avenue SW
Washington, DC 20202-4605

Disclosure of Educational Records

Muskegon Community College will not disclose student records to anyone other than the student (including the student's parents), without the student's written permission. However, FERPA does establish several exceptions that allow the institution to disclose student records without the student's prior written consent. Some of these exceptions are:

1. To other school officials with a legitimate educational interest.
2. To officials of other schools in which the student seeks to enroll.
3. In connection with a student's application for, or receipt of financial aid, as necessary to determine the eligibility, amount or conditions of the financial aid, or to enforce the terms and conditions of the aid.
4. If disclosure is necessary to protect the health or safety of the student or other persons in a health or safety issue.
5. To comply with a judicial order or to respond to a lawfully issued subpoena, provided the College first make a reasonable attempt to notify the student.
6. Directory information as defined by Muskegon Community College. You should always contact the Dean of Academic Services and Registrar before releasing student records to a third party, even if you think one of these exceptions applies.

7. To certain officials of the U.S. Department of Education, the Controller General, and the state or federally supported education programs.
8. To organizations conducting certain studies for or on behalf of the College.
9. To accrediting organizations to carry out their accrediting functions.
10. To parents of an eligible student who claim the student as a dependent for income tax purposes – IRS Code of 1986, Section 152.
11. To an alleged victim of any crime of violence of the results of any institutional disciplinary proceeding against the alleged perpetrator of that crime with respect to that crime.
12. Veterans Administration Officials in response to requests related to VA programs.
13. Representative of the Immigration and Naturalization Services (INS) for purposes of the coordinated interagency partnership regulating international students (SEVIS).
14. As of January 3, 2012, the U.S. Department of Education's FERPA regulations expand the circumstances under which your education records and personally identifiable information (PII) contained in such records – including your Social Security Number, grades, or other private information – may be accessed without your consent. First, the U.S. Comptroller General, the U.S. Attorney General, the U.S. Secretary of Education, or

state and local education authorities ("Federal and State Authorities") may allow access to your records and PII without your consent to any third party designated by a Federal or State Authority to evaluate a federal – or state-supported education program. The evaluation may relate to any program that is "principally engaged in the provision of education," such as early childhood education and job training, as well as any program that is administered by an education agency or institution. Second, Federal and State Authorities may allow access to your education records and PII without your consent to researchers performing certain types of studies, in certain cases even when we object to or do not request such research. Federal and State Authorities must obtain certain use-restriction and data security promises from the entities that they authorize to receive your PII, but the Authorities need not maintain direct control over such entities. In addition, in connection with Statewide Longitudinal Data Systems, State Authorities may collect, compile, permanently retain, and share without your consent PII from your education records, and they may track your participation in education and other programs by linking such PII to other personal information about you that they obtain from other Federal or State data sources, including workforce development, unemployment insurance, child welfare, juvenile justice, military service, and migrant student records systems.

Directory Information

The College designates certain information as "directory information." This may be disclosed without violating FERPA. It includes:
1. Student's name
2. Major field of study
3. Weight and height of athletes
4. Participation in officially recognized activities and sports
5. Dates of attendance, degrees, date of graduation and awards
6. Photographs

Directory information does not include student identification numbers, Social Security numbers, or other personally identifiable information.

Non-Disclosure Form

Students wishing the College to withhold directory information on them may do so during the first week of classes by submitting the Non-Disclosure form to the Dean of Academic Services and Registrar. Forms are available online or at the counter in the Student Welcome Center.

Right-to-Know

Legal completion persistence rates

For the latest graduation rate and other performance-related data of MCC, please see the college dashboard at

www.muskegoncc.edu/dashboard.

To get more information on MCC's tuition and price of attendance relative to other colleges, you can visit the College Affordability and Transparency Center of the US Department of Education at

collegecost.ed.gov/catc.

Institutional Governance for Internal Communication

The board has established permanent advisory councils, representatives of the major service functions of the College:

- Student Services Council
- Instructional Affairs Council
- Business Administration Council
- Information Technology Council
- Coordinating Council

These councils, in conjunction with the Faculty Association, Student Government, Maintenance/ Custodial Association, MCC Educational Support Staff Unit, and Administrative/Professional Support Staff provide the structure for seeking opinions, expressing ideas, and developing recommendations. Individuals who have proposals for consideration should forward such items to the appropriate council through the Council Chairperson. For more information, contact the office of the Vice President for Student Services and Administration at (231) 777-0266.

These councils may identify, investigate, review, and recommend policy and procedural matters to the Coordinating Council. The Coordinating Council will review and expedite the recommendations of the other councils by forwarding advisory recommendations, when appropriate, to the President.

Procedural Guidelines for All Councils

A. Each Council will act to adopt its agenda as the first order of business.
B. Councils will take action by consensus rule or vote, as determined by individual councils.
C. Council meetings will be scheduled at least monthly.
D. Representatives are expected to attend all meetings.
E. A quorum will consist of a simple majority of voting membership.
F. Term of membership will be one (1) academic year and is renewable. Vacancies will be filled through appointments by the respective group.
G. Chairperson is to be elected by the membership at the first meeting each September.
H. Chairperson's Duties:
   1. Presiding Officer
   2. Appoint Chairperson and members of sub-committees
   3. Ex-officio member of all sub-committees
   4. Council representative to Coordinating Council
I. Members of Ad-hoc committees or sub-committees need not be members of any Council.
J. Each Council shall decide their own voting membership.

POLICIES & PROCEDURES

Petitions Committee

The Petitions Committee, a standing committee of the Student Services Council, is composed of faculty members, staff, and students. The Committee exists to consider the appeals of students with respect to any MCC rule, regulation, or grade. All appeals must be received no later than one year from the last date of the semester being appealed or one year from the date the grade was officially recorded. Forms are available online at the links listed within the descriptions below or at the Student Welcome Center. All appeals must be submitted at least one week prior to the scheduled meeting to be reviewed. The Committee meets on the third Tuesday of each month to consider requests submitted. MCC Board of Trustees policy has empowered the Petitions Committee to take direct action in the following:

Final Grade/Attendance Appeals
Form available at the Student Welcome Center or at www.muskegoncc.edu/pages/2686.asp.

If a student chooses to appeal a grade, he/she must complete a Final Grade Appeal form and follow the steps outlined on the form to attempt to resolve the complaint (also listed below). The appeal MUST include a typed letter of explanation of what is being appealed, why it is being appealed and the requested outcome. Any documentation that is pertinent to the appeal should be included.

Steps of the Final Grade Appeal Process:

1. CONSULT WITH INSTRUCTOR to see if an understanding can be reached. If the instructor denies the request, ask the instructor to provide a written response by completing step one on the back of the Final Grade Appeal form. The instructor's response should include a copy of the course syllabus along with an explanation of how the grade was determined.

2. CONSULT WITH DEPARTMENT CHAIRPERSON if step one is denied by the instructor. Continue the appeal by consult with the Department Chairperson in which the course was offered. The Department Chairperson should provide a written opinion of the appeal along with any additional pertinent information.

3. CONSULT WITH THE VICE PRESIDENT FOR ACADEMIC AFFAIRS AND FINANCE or designee if step two is denied by the Department Chairperson to continue the appeal. The Vice President for Academic Affairs and Finance or designee will provide a written opinion of the appeal along with any additional pertinent information.

4. FINAL GRADE APPEAL REVIEWED BY PETITIONS COMMITTEE If not satisfied with the outcome of the previous decisions, submit the written appeal with Steps 1-3 completed, the typed letter of explanation of what is being appealed and why, along with any pertinent documents attached to the Student Welcome Center.

5. Once a completed Final Grade Appeal is received at the Student Welcome Center, the Petitions Committee will review the appeal at the next scheduled meeting. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to the meeting. The student will be notified of the meeting location, date and time by the Director of Registration upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.

Residency Change Appeals

Form available at the Student Welcome Center or at www.muskegoncc.edu/pages/941.asp.

MCC Board Policy states a student must live within the confines of Muskegon County for at least six months prior to the start of the semester in order to receive In-County Tuition or within the confines of the State Michigan in order to receive Out-of-County Tuition. If a student has proper documentation, but requests the change after the start of the semester, a Tuition Refund Appeal for Residency Change must be completed with the following requirements:

1. A complete Student Personal Data Change Request form with proof of residency (see form for allowable documents) for at least six months prior to the start of the semester being appealed.
2. If the student received financial aid for the semester being appealed, the appeal must first be reviewed by a Financial Aid representative.
3. Once a completed Tuition Refund Appeal is received at the Student Welcome Center, the Petitions Committee will review the appeal at the next scheduled meeting. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to the meeting. The student will be notified of the meeting location, date and time by the Director of Registration upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.

Tuition Refund Appeals Due to Course Related Issues

Form available at the Student Welcome Center or at www.muskegoncc.edu/pages/941.asp.

If a student withdraws from a class after the refund period has ended due to a Course Related Issue, he/she can appeal for a refund. A Tuition Refund Appeal form must be completed. The appeal MUST include a typed letter of explanation of what is being appealed, the reason for the appeal, and any specific remedy being requested. Any documentation that is pertinent to the appeal should be included.

1. Discuss the issue with the instructor to see if an understanding can be reached. If an agreement cannot be reached, ask the instructor to provide a written response.
2. To continue the appeal, consult with the Department Chairperson in which the course was offered. Ask the Department Chairperson to provide a written opinion of the appeal along with any additional pertinent information.
3. If step two does not resolve the issue, consult with the Vice President for Academic Affairs and Finance or designee to continue the appeal. Ask the Vice President for Academic Affairs and Finance or designee to provide a written opinion of the appeal along with any additional pertinent information.
4. If not satisfied with the outcome of the previous discussions, submit the written appeal with Steps 1-4 completed, a typed letter of explanation of what is being appealed, the reason for appeal, and the requested remedy, along with any pertinent documents attached to the Student Welcome Counter. Note: If the student received financial aid for the semester being appealed, the appeal must first be reviewed by a Financial Aid representative before being submitted to the Student Welcome Center.
5. Once a completed Tuition Refund Appeal is received at the Student Welcome Center, the Petitions Committee will review the appeal at the next scheduled meeting. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to the meeting. The student will be notified of the meeting location, date and time by the Director of Registration upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.

POLICIES & PROCEDURES

Tuition Refund Appeals Due to Verifiable Error of MCC

Form available at the Student Welcome Center or at www.muskegoncc.edu/pages/941.asp.

Students may appeal for a tuition refund due to a Verifiable Error of MCC when information was given to the student by a MCC staff member that was incorrect. A Tuition Refund Appeal form with the steps outlined on the form in an attempt to resolve the complaint (also listed below) must be completed. Any documentation that is pertinent to the appeal should be included.

1. The appeal MUST include a typed letter of explanation of what is being appealed, the reason for the appeal, and any specific remedy being requested.
2. A detailed account of the problem and relevant documents on College letterhead from the College Office involved or advisor indicating that incorrect information was given by a College representative.
3. If the student received financial aid for the class(es) being appealed, the appeal must first be reviewed by a Financial Aid representative.

4. Once a completed Tuition Refund Appeal is received at the Student Welcome Center, the Petitions Committee will review the appeal at the next scheduled meeting. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to the meeting. The student will be notified of the meeting location, date and time by the Director of Registration upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.

Tuition Refund Appeal and Withdrawal Illness (WI)

Form available at the Student Welcome Center or at www.muskegoncc.edu/pages/941.asp.

Students may request to have a grade changed to Withdrawal Illness (WI) due to an illness or injury of the student or a close family member in addition to requesting a refund/credit for amount due. In the case of a death of a close family member, students can also appeal for a Withdrawal Illness (WI) due to bereavement. The Tuition Refund Appeal must be completed with the following requirements:

1. The appeal MUST include a typed letter of explanation of what is being appealed, the reason for the appeal, and any specific remedy being requested.
2. FOR ILLNESS/INJURY – A signed statement on letterhead from the health care provider must describe in writing the medical condition (whether injury or illness), how it has incapacitated the student, and recommending withdrawal of all classes or specific classes and why. Excuse slips, copies of invoices, appointment confirmations, statements of insurance payments, etc. are not acceptable documentation.

   FOR BEREAVEMENT - Documentation that clearly indicates the name and date of the deceased and includes the name of the student

and the relationship. The relationship must be clearly indicated within the documents. Example: Death certificate of deceased parent and birth certificate of student should show the relationship.

3. If the student received financial aid for the class(es) being appealed, the appeal must first be reviewed by a Financial Aid representative.
4. Once a completed Tuition Refund Appeal is received at the Student Welcome Center, the Petitions Committee will review the appeal at the next scheduled meeting. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to the meeting. The student will be notified of the meeting location, date and time by the Director of Registration upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.

Tuition Refund Appeal and Withdrawal Military (WM)

Form available at the Student Welcome Center or at www.muskegoncc.edu/pages/941.asp.

Students may request to have a grade changed to Withdrawal Military (WM) due to induction into the US Military. The Tuition Refund Appeal must be completed with the following requirements:

1. The appeal MUST include a typed letter of explanation of what is being appealed, the reason for the appeal, and any specific remedy being requested.
2. An induction letter or orders from the US Military including the date of induction or call up.
3. If the student received financial aid for the class(es) being appealed, the appeal must first be reviewed by a Financial Aid representative.
4. Once a completed Tuition Refund Appeal is received at the Student Welcome Center, the Petitions Committee will review the appeal at the next scheduled meeting. The student has the option to attend the meeting to provide verbal explanation. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to the meeting. The student will be notified of the meeting location, date and time by the Director of Registration upon receipt of the completed appeal. Only the student submitting the appeal will be allowed to attend the review meeting. The student will be notified of the outcome by mail. The determination of the Petitions Committee is final. No further appeal will be considered.

POLICIES & PROCEDURES

RESOURCES
AT MCC

Your Destination for
Higher Education
muskegoncc.edu

Admissions

As an "open door" institution, Muskegon Community College welcomes applications from all who wish to attend. The information requested on the application is used solely to help us serve your educational needs more effectively.

Admission to the College does not guarantee admission to all courses and programs within the College. The special admission requirements to certain courses and programs may be obtained from appropriate sections of this catalog or by inquiring at the departmental office in question.

Students wishing to enter the Nursing or Respiratory Therapy programs must submit additional applications. Applications for these programs may be obtained through meeting with an MCC counselor.

New Student Orientation
New student orientation is available to all new MCC students. Studies have shown that students who attend orientation attain higher GPAs and successfully complete more credit hours that those who choose not to attend.

During this session you will learn about the registration and financial aid processes, what resources are available to you and how to take advantage of those, your rights and responsibilities as a student, and where you can find answers to any questions you have later on. You may tour the campus including the library, Student Life, Bookstore, College Success Center, and more. We'll also show you how to utilize technology here at MCC-student email, wireless internet, printing, and your personal file storage space on MCC's server.

NOTE: You must make a reservation to attend New Student Orientation. Call the Enrollment Services Office at (231) 777-0454 to sign up.

Change of Name or Address
You should promptly notify the Student Welcome Center of any change in name or address that occurs while you are enrolled at the College. Name changes must be made in person. Legal proof of name change is required (drivers license, marriage license, social security card, voter registration card).

Student ID/My MCC OneCard
After a student registers for the first time, they should have their picture taken in the Information Commons, located on the second floor of the Hendrik Meijer Library and Information Technology Center. This photo will be on their My MCC OneCard which they should receive in the mail.

The My MCC OneCard serves as the student's official student ID, library card and method for receiving an electronic disbursement of financial aid and tuition refunds. The student has the option of having their refund deposited in an existing account at a bank of their own choosing or the student can have their refund deposited in a OneAccount with Higher One, the company that we have partnered with to process our refunds. If the student chooses to have their refund deposited into their own bank account, then the card only acts as a student ID and library card. If the student chooses to open a OneAccount then the My MCC OneCard will act as a debit card (it is NOT a credit card). For more information on the "My MCC OneCard" visit www.mymcconecard.com.

Full-time Student
If you are enrolled for 12 or more credit hours per semester, you are considered a full-time student. Note, however, earning the associate degree (62 credits) in four semesters will mean carrying an average of 15 ½ credit hours per semester. If you wish to graduate in two years you must carry more than the 12 credit hours each semester or plan on attending Summer sessions.

Part-time Student
If you are carrying fewer than 12 credit hours per semester you will be a part-time student. If you are enrolled for 9-11 credit hours per semester, you are classified as "three-quarter" time, and six–eight credit hours per semester you are a "half-time" student. If you are applying for financial aid as a part-time student, you should consult the Financial Aid Office for details on just how much help is available to you each semester.

Regular Admission

If you are seeking admission to Muskegon Community College, applications are available online at www.muskegoncc.edu. Submit official high school or GED transcript and include ACT and/or MME scores. There is no charge to file the admissions application.

Apprentice Students

Apprentice students also use the regular application form. Regulation of the number of apprentices in any trade is a negotiated item in labor contracts or is set by the Bureau of Apprenticeship and Training. It is not a decision of the College.

High School Guests/
Dual Enrollment Admission

High school students may be permitted to enroll as guests while still enrolled in high school. They must first submit an MCC online application identifying themselves as a high school guest, send a high school transcript with ACT and/or MME scores to MCC's Enrollment Services Office, and then complete an Early Admission/Dual Enrollment form

www.muskegoncc.edu/dualenrollment.

A dual-enrolled student may have to complete COMPASS testing. Please call the Testing Center at (231) 777-0394 to see if this applies to you.

Local school districts can use funds from State School Audit Act 148, Section 216 to pay the tuition and fees of a high school student attending a public or private degree-granting post-secondary institution when certain conditions are met. Interested students should contact their high school principal or counselor for further information.

College Guest Admission

If you are a student enrolled in other colleges within the state, you may be admitted as a guest by filing a Michigan Uniform Guest Application, which can be obtained from your home institution. You should develop a program of study with an advisor at your home institution to insure proper course selection and credit transfer.

Community Guest Admission

If you have not completed high school or the GED, or wish to take selected courses without the intent of earning a degree, diploma, or certificate, you may be admitted as a Guest (non-degree) applicant. As a Guest student you will be eligible to change to regular admission status upon submitting your high school transcript, GED test scores or appropriate test results to the Enrollment Services Office. It is your responsibility to initiate the change to regular admission status.

Re-Admission

Regular admission to the College is a one-time activity once you have registered for a class. You may register for additional classes without repeating the admission process. If you have not attended within the past five years, please submit a Readmit Form to update your records. You are also encouraged to consult with a counselor to discuss course selection.

Residency Policy

Determination of residency status is governed by the following:

- To qualify as an in-district resident, you must have lived within the confines of Muskegon County for six consecutive months prior to the first day of classes for any semester.
- To qualify as an out-of-district resident, you must have lived within the confines of the State of Michigan for six consecutive months prior to the first day of classes for any semester. If you have previously registered as a non-resident you may change to in-district resident status upon satisfying the requirements above. When recently married you shall be deemed an in-district or Michigan resident if your spouse satisfies the requirements above. Initial residency status shall be determined by the Enrollment Services Office.

RESOURCES AT MCC

It is your responsibility to notify the Student Welcome Center, prior to the first day of classes for any semester, of any change in residence that would affect your residency classification. THE BURDEN OF PROOF LIES WITH YOU, THE STUDENT. The above applies only to American citizens, permanent residents and refugees. Required documentation is listed below. All documentation must have the address and required dates listed.

- Michigan Driver's License
  OR
- State-issued I.D.
  AND
- One of the following:
  - Voter's registration
  - Vehicle registration
  - Vehicle insurance
  - Property tax receipt
  - Property lease
  - Utility bill
  - Notarized verification from an in-district or Michigan resident stating that you have resided with him/her/them for at least six months prior to the start of the semester.

Residency Status for Military Personnel and Dependents

Residency is based on the location of the present domicile of the applicant with the six-month requirement waived if the applicant can provide any of the following documents. *This waiver is extended to the dependents (spouse and children) of the person named on the Department of Defense 214 or 899 who reside at the same address.*

- Department of Defense 214, Separation from Active Duty Form, showing separation date within 120 days from the first day of the semester;
- Department of Defense 899, Change of Station Form, showing the Muskegon area as the duty station;
- Department of Defense 899, Change of Station Form, showing a change of duty station for the head-of-household to an overseas destination or as the result of an emergency mobilization.

International Student Admission

International student applicants (F-1) must file a separate International Student Application, which may be obtained at muskegoncc.edu or from the Enrollment Services Office, Room 108. Official translated high school transcripts, financial statements, and T.O.E.F.L. scores must be submitted with an International Student Application before an admission decision can be rendered. Additional information can be obtained from the Enrollment Services Office or by calling (231) 777-0230.

S.A.M. Tuition Waiver

(Study Opportunities for Adults and Mature Citizens)

Any legal resident of Muskegon County, 60 years of age or older before the first day of the semester in which admission is sought, is eligible to receive a S.A.M. tuition waiver. If you qualify, you may register for college credit or continuing education classes which are eligible for state reimbursement. You may be degree or non-degree seeking.

The S.A.M. waiver does not cover registration fees or any special class fees which are charged in addition to, or in place of the tuition charge, nor does it cover the cost of books, supplies, or other instructional materials not included in the tuition charge. The S.A.M. waiver is not retroactive. Presentation of proof of age and residency to the Student Welcome Center prior to registration will establish your eligibility for the program. Additional information and validation of residency/age can be obtained at the Student Welcome Center. S.A.M. students must meet the prerequisite requirements which may include placement testing.

Resources

Your Educational Success

The goal in higher education is not only what you learn, but how you learn it – to go beyond rote memorization and into a full understanding of the subject at hand. To help in this process, MCC has a multitude of resources including academic, career, and personal counseling; tutoring; College Success Center; services for students with special needs; career assessments and many others. Take advantage of any or all of these services to make sure your education is well-rounded and successful.

There are many ways to maximize your learning potential as you start your college education. MCC recommends the "College Success Seminar (CSS 100A)" as a start-up course to help you develop the necessary skills, abilities, attitudes and behaviors that provide academic and personal success.

Counseling and Advising Center

Room 101 ▪ www.muskegoncc.edu/counseling

Counseling is available in the Counseling and Advising Center, Room 101. Muskegon Community College's counseling staff offers a wide variety of educational, vocational, and personal counseling services. Academic advising provided by MCC counselors is especially important as you work through various degree and program requirements to reach your educational and vocational goals. Career counseling, using a variety of assessment tools, is available as well. Educational and personal counseling can help you adjust to a new academic environment and resolve problems that may interfere with classes, jobs, and personal relationships.

Counselors are available, by appointment, Monday through Friday, days and evenings. Appointments may be made in Room 101 or by calling (231) 777-0362.

Walk-in counseling is available Monday through Friday. Contact the Counseling and Advising Center for hours. Walk-in counseling is intended for immediate concerns rather than academic advising. If you need to see a counselor for academic advising and course planning, you must make a counseling appointment.

Testing Center

Room 134 ▪ www.muskegoncc.edu/testing

The Testing Center provides testing services for students, faculty and guests. This office coordinates and administers placement tests, Compass, make-up, online tests, and independent study examinations. We provide a proctoring service for distance learning programs. The Testing Center is located in Room 134 or you may call (231) 777-0394.

External Testing Fees

Any student who does not have an MCC Student ID number will be charged $25.00 to take the COMPASS Placement Test. (Students testing in their high school are exempt from this charge.) A student wishing to waive the $25.00 charge must have already completed the MCC Application for Admission first and have their MCC Student ID number.

Placement Guidelines Using COMPASS, ACT and MME

Placement tests are required to facilitate placement in classes and/or programs. Such tests are intended not to prevent participation but to help students make appropriate choices. The College also offers a basic computer competency test which may exempt you from the computer skills requirement. The Chemistry placement test is also available for students who wish to test out of basic chemistry. Students interested in the Nursing Program will need to take the MATH-035F-Metrics test. Please note that ACT scores are based on individual sub-scores and not the ACT composite score.

Placement Testing

MCC would like all of its students to be successful; consequently, we test students in order to place them in coursework that is challenging but not beyond one's skill level. Therefore, to help you plan and be successful in your classes, MCC requires that you complete placement tests before registering for classes. Please note, if you have a proficiency level of 1 or 2 on the high school MME reading and writing tests, or ACT scores of 19 or greater in English and Reading and 20 or higher in Math, and provide MCC with proof of scores, some placement tests may be waived.

Placement Tests Are Very Important

Students with low scores are required to complete refresher courses before enrolling in College-level courses. Many courses have skill level prerequisites; meet with a counselor to be sure you are enrolling in the appropriate class.

READY TO SUCCEED

Before enrolling in many courses, you must meet the READY TO SUCCEED reading competency requirement by test scores or course completion.

COMPASS	Reading score of 76 or higher *(Not valid after 5 years)*
ACT	Reading score of 19 or higher
MME	1 or 2 on both Reading and Writing
College Credits	15 College credits (100-level or higher) with cumulative 2.0 or higher GPA
Reading Course	Earning a "C" grade or better in Reading 040 or Reading 050

READING

COMPASS Reading	ACT Reading	MME	Placement
76-100	19 or higher	Level 1 or 2 on Reading & Writing	No Reading course required. *(**Ready to Succeed** requirement has been met.)*
56-75	18	N/A	RDG 050
11-55	12-17	N/A	RDG 040
0-10	N/A	N/A	See a Counselor

*Note: **COMPASS** test scores are not valid after **5 years**.*

WRITING

COMPASS Writing	ACT Writing	MME	Placement
80-100	19 or higher	Level 1 or 2 on Reading & Writing	ENG 101 or BCOM 101 *(**Ready to Succeed** requirement must still be met.)*
69-79	18	N/A	ENG 101 or BCOM 101 and ENG 114 *(**Ready to Succeed** requirement must still be met.)*
31-68	N/A	N/A	ENG 091
11-30	N/A	N/A	ENG 085 or ENG 089
0-10	N/A	N/A	See a Counselor

*Note: **COMPASS** test scores are not valid after **5 years**.*

RESOURCES AT MCC

MATH

Before enrolling in math courses numbered MATH 100A (formerly MATH 050) or higher, you must meet the READY TO SUCCEED requirement.

COMPASS Pre-Algebra	ACT Math	Placement
0-39	N/A	MATH 036FT* and MATH 038FT* MATH 036A or BUS 126
40-49	N/A	MATH 038 or TMAT 101A
50-100	N/A	MATH 040 or TMAT 102A

Option available for students who score 30-39 on Compass Pre-Algebra and meet Ready to Succeed requirement.

COMPASS Algebra	ACT Math	Placement
0-24	N/A	MATH 038 or TMAT 101A
25-45	N/A	MATH 040 or TMAT 102A
46-65	20-21	MATH 100A *(formerly MATH 050)* or MATH 107A or TMAT 201
66-100	22-24	MATH 105 or MATH 109 or MATH 111 or MATH 115

COMPASS College Algebra	ACT Math	Placement
0-45	22-24	MATH 105 or MATH 109 or MATH 111 or MATH 115
46-100	25-27	MATH 112 or MATH 151

COMPASS Trigonometry	ACT Math	Placement
0-45	25-27	MATH 112 or MATH 151
46-100	28 or above	MATH 161

Note: **COMPASS** *test scores are not valid after* **5 years**.
ACT MATH *test score is not valid after* **3 years**.

Parking Permits

Register your vehicle at the Student Welcome Center.

Parking permit decals are required on all vehicles. Protect your vehicle. You may get a parking sticker at the Student Welcome Center or in Room 1107.

Restricted parking areas are few, but they are well marked. Roadways are considered emergency vehicle areas and should never be blocked. Citations are written, ranging from $3.00 to $25.00 for violations. Excessive violations will result in loss of parking privileges or cars being towed at the owner's expense.

All applicable City of Muskegon ordinances are enforced in MCC parking areas.

Report any accidents or incidents to the Physical Plant (Room 1107) immediately or call Security at either (231) 777-0545 or their cell phone at (231) 557-5648.

Prevent problems by keeping your vehicle locked and taking valuables with you.

International Study Programs

For information on the international programs at MCC, visit www.muskegoncc.edu. The MCC website offers information on two travel study classes - the German Exchange program to Stuttgart, Germany exploring International Business and German Culture, and the Belize Field Studies to Belize in Central America investigating Ancient Mayan Civilization and Rainforest Ecology. International programs also include a national celebration of International Education Week in November, Global Awareness Festival in February, travelogues, International Newsletter, and much more. For further information, call the International Coordinator at (231) 777-0376.

Honors Program

Room 156

Muskegon Community College offers Honors credits to eligible students in an attempt to add an extra dimension to the education of academically motivated students.

Honors options will permit you, if eligible, to earn an additional credit in certain MCC courses. To earn this additional credit, you must complete the requirements outlined by the instructor.

The basic purpose of honors options is to enable instructors to make challenging and enriching assignments which will enable capable students to gain a more sophisticated knowledge of the discipline, and which will also be academically beneficial to the student. The additional work required on the student's part should typically require an average of two to three hours per week during the semester.

To be eligible to take an honors option you must meet one of these three requirements: have completed 12 or more credits of 100-level or higher coursework at MCC with a cumulative 3.25 GPA or better, have an ACT composite score of 24 or better, or earn Compass scores of 93 on Reading, 93 on Writing, and 49 on Algebra.

You may register for honors options in the same manner as you register for a regular course, except that registration for the honors options can take place up to two weeks after the semester begins to allow time for you to meet with your instructor to discuss the requirements of your Honors coursework.

You will receive separate grades on your transcript for the regular course and for the one credit honors option. Honors options are designated on your transcript as "HON" after the course number.

For additional information about honors options, contact Jenny Klingenberg in the English Department.

Phi Theta Kappa

Room 101

Phi Theta Kappa is the international honor society for community college students. Students are eligible to join after earning twelve or more credits at the 100-level or higher with a minimum of a 3.5 cumulative grade point average. Contact advisor Kelley Conrad at (231)777-0362 for more information.

College Success Center

Room 401

The College Success Center helps students realize their full educational potential at MCC. Services provided include the Writing Center; one-on-one and small-group instruction; and fundamental courses in writing, math, reading, and study skills.

CSC course offerings range from basic skills and college success courses to those that address the writing of research papers. They are taught either in a traditional classroom setting, in small groups, or on a one-to-one basis. In some cases specific assignments may be designed to meet the academic needs of each individual student.

Students in CSC courses should expect to receive additional support outside of class with paraprofessionals, who provide constant monitoring of skill development. The College Success Center is open approximately 55 hours a week so that students may use it during their free time.

Tutoring Center

Room 204 ▪ www.muskegoncc.edu/tutoring

If you are having difficulty in your class, we suggest you first talk to your instructor. The MCC faculty enjoy interacting with students and are easy to approach. A benefit for you at a community college is the availability of instructors to students.

Approach your instructor before you fall far behind. Ask him/her if you could sit down and talk about your situation. A tutor may work with you independently to help you better understand the course material.

Peer Tutoring

If assistance is needed in a specific course, a student must apply online. Student tutors, recommended by instructors, are available to any student on campus. The number of hours per week of free tutoring available to students varies with the number of credits being taken. The Tutoring Center website is available to any student who has Internet access.

Supplemental Instruction (SI)

Supplemental Instruction is a small group academic assistance program which has shown an increase in student performance. It is offered only in specific introductory classes. Check with your counselor or the Tutoring Center and SI Supervisor for more information.

Online Tutoring

Do you need tutoring help from home or work? Online Tutoring is available to all students. Students can receive one-on-one help directly from a tutor in any subject. In addition, students may post questions on the Online Tutoring Shell to be answered within 24 hours by a qualified tutor. Please call 231-777-0393 for access to the Online Tutoring Shell.

Referral Tutoring

If peer tutoring is not appropriate or available, any student, parent, or concerned adult may contact the tutoring center to request help in finding a tutor. The Tutoring Center does not pay for such tutoring, however. Those who prefer referral tutoring must pay the tutor themselves after each session, unless other arrangements are made.

Walk-in Tutoring

Walk-in Tutoring is a set schedule of times when a tutor will be available to assist with problems without an appointment.

Becoming a Tutor

Students who wish to become tutors should contact an instructor for a written recommendation, and then report to the Tutoring Center.

Special Services

Room 206

Special Services is an important part of the broad range of services offered at Muskegon Community College. Its goal is to provide effective services, materials, and resources which enable members of the Special Populations to be successful.

Special Populations

- Individuals with disabilities
- Individuals from economically disadvantaged families including foster children
- Nontraditional training and employment participants
- Single parents including single, pregnant women
- Displaced homemakers
- Individuals with other barriers to educational achievement including individuals with limited English proficiency

Support Services

- Attendance costs
- Assistance with testing
- Classroom accommodations
- Professional instructor assistance
- Note takers
- Readers
- Writers
- Instructional aides
- Specialized occupational tools
- Sign language interpreter
- Support for students with limited English proficiency

For more information on these services, call (231)777-0309, visit the Special Services Office in Room 206, or visit us on the web at

www. muskegoncc.edu/page.516.asp.

Facilities and services for mobility limited students

Recent building alterations comply with federal guidelines and MCC's commitment to provide barrier-free access to students who may be disabled. To obtain more information on barrier-free accessibility visit the Special Services Office in Room 206, or call (231)777-0309 or (231)777-0404 to request the Special Services Handbook.

Employment Resource Center

Room 103

MCC has an Employment Resource Center to help with your employment needs while you are enrolled and after you graduate. Assistance is provided for students with part-time, seasonal, and temporary employment to help with college expenses.

The service is free and available to MCC students and also to the community. You may want to maintain close ties with instructors who keep abreast of the job market and may have other leads.

You can link to the center from MCC's home page by selecting Employment Resources from the Quicklinks menu.

Resource available to help you in the employment process
- Full- and part-time employment listings on College Matrix

Employers can post and maintain job postings, students can post their resume and search for jobs.

To access College Matrix
- www.mcc.collegematrix.com

Employers:
- Click on Employer on the site
- Sign Up
- Create a new Account for MCC

Fill out information on the page then submit. Once the application is approved you can post job(s).

Students:
- Click on Job Seeker on the site
- Sign Up
- Create a new Account for MCC

Fill out information on the page then submit. Once the application is approved put your resume into the system. *(To do a job search you need a resume posted.)* Once your resume is approved you can start your job search.

Internship Program

MCC realizes that there are important elements of business and industry which cannot adequately be taught within the confines of the laboratory or classroom walls of MCC, and therefore, has developed an internship program. The goal of the internship program is to provide the student with on-the-job experiences supervised by successful, experienced professionals. This experience shall directly support the development of a student's technical skills, knowledge, and career path. The employer shall gain a reliable, flexible, and enthusiastic potential employee while assisting in the student's career preparation goals. For more information, visit the internship page on the MyMCC Portal, contact the Internship Coordinator in Room 103, or call (231)777-0216.

Student Housing Resources

www.muskegoncc.edu/housing

Although Muskegon Community College does not provide on-campus housing for students, the Student Life Office does offer a student housing resource listing on our website at www.muskegoncc.edu/housing. There is also a bulletin board in the Student Union where those that have rentals available or those who are looking for roommates can post flyers.

MCC students, staff, and community members may also list properties free of charge on our student bulletin board on the north end of the Student Union. For more information regarding the housing listing process visit www.muskegoncc.edu/housing, or call the Student Life Office at (231)777-0216.

Non-Traditional Student Support Center

Room 103

Our mission is to encourage and support student success. Our goals are to:

- Maintain a visible, accessible, supportive environment, where students are encouraged to engage in dialogue, exchange ideas, and connect with other students.
- Provide information for on campus resources and off campus services that may assist students with various issues (i.e.) economic hardship, healthcare, family counseling, continuing education.

- Encourage those who are considering returning to school because of life's circumstances. We understand that many students have family responsibilities and jobs that make college a difficult undertaking.
- Ease your transition into college.

For more information stop by Room 103 or call (231)777-0216.

Hendrik Meijer Library and Information Technology Center

Room L165

Formerly the Allen G. Umbreit Library, the Hendrik Meijer LIT Center continues to provide instructional materials and information services to support the curricula offered by the College and to meet the informational needs of students, faculty, staff and administration. The library extends these services to the community and serves as a catalyst in the lifelong learning goals of the citizens of Muskegon County and the greater West Michigan area.

Public Services Desk

The My MCC OneCard is used as a library card. To activate it as a library card, students must bring their My MCC OneCard to the library along with a valid Michigan driver's license or identification card. You must present your card to check out materials.

Most materials may be renewed at the public services desk. You may renew these materials over the telephone by calling (231)777-0270. If a book you want is already checked out, you may place a hold on it. Holds may be placed at the public services desk. Ask at this desk for print periodicals, newspapers, CDs, and DVDs.

Textbooks and "instructor reserved" items are also at the public services desk. These materials have varying check-out periods or may be limited to library use only. Also, you may reserve a group study room at this desk.

Reference Area

The reference librarians are eager to assist you in learning how to locate and use materials in the library. They can help you select materials, evaluate sources, and properly document your sources. This area contains reference material in print form and also on electronic databases. Ask a reference librarian for assistance in using these tools.

Library Catalog

All books, instructor reserved materials, print periodical subscriptions, video cassettes, DVDs and CDs are listed in WebCat, the online catalog. WebCat provides location information which enables users to quickly determine where the material is located and if it is available. WebCat is also available off campus. If you need assistance in finding materials, ask at the reference desk or the public services desk.

Classification System

A collection of approximately 60,000 volumes is shelved in the library using the Library of Congress classification system. Subject divisions can be used for general browsing. For more specific searching, check the online catalog first or see a reference librarian.

Research Databases

Use the research databases to locate articles, reports, and online books. Many articles may be printed directly from the computers using InfoTrac, FirstSearch, EBSCOhost, the newspaper databases, and many other databases. Most of these databases are also available off campus. See the MCC library website for login information. The majority of our periodicals are available only in electronic format via our numerous databases.

Interlibrary Loan

Books and magazines not available at the MCC library may be requested through Interlibrary Loan.

Archives

The Archive is a collection of historical material about Muskegon Community College. For access to this material, ask a reference librarian.

Group Study Rooms

These six rooms are reserved for groups of two or more involved in collaborative study or for viewing academic or reserved videocassettes or DVDs. Sign up at the Public Services desk to use one of the rooms.

Quiet Reading Room

The quiet reading room is intended for quiet study.

Computers for Student Use

For students who desire research assistance, there are computers near the reference desk on the first floor.

Student ID/My MCC OneCard

After a student registers for the first time, they should have their picture taken in the Information Commons, located on the second floor of the Hendrik Meijer Library and Information Technology Center. This photo will be on their My MCC OneCard which they should receive in the mail.

Information Commons

The Information Commons, located on the second floor, contains personal computers, Macintosh computers, scanners, and additional study tables. This area is staffed with personnel with technology expertise. If research assistance is needed in this area, a librarian from the first floor will be called to assist you.

Special Facilities

- Wheelchair accessible stations are available for viewing the online catalog.
- Book drops are located in various places throughout the campus:
  - At the public services/circulation desks
  - In the hall outside the front door of the library
  - In a drive-up outside the library in the circle drive
- A microfilm/microfiche reader is located on the first floor near the reference desk.
- Kurzweil software that converts scanned text into audio is available on all library computers.

For more information regarding library services, contact:

- Library Information at (231) 777-0269
- Reference Services at (231) 777-0326
- Circulation/Public Services at (231) 777-0270
- Interlibrary Loan at (231)777-0205

Office of Information Technology

Room 136

MCC students should call the Student Technology Helpdesk at (866) 718-5170 for all technology-related issues. The technicians at the Student Helpdesk are specially trained to work with students' technology needs and are available 24/7/365.

Food Services

Bookside Bistro
(Adjacent to the MCC Bookstore)
The Bookside Bistro offers a variety of foods for breakfast, lunch or a snack throughout the day for college students, staff, and the general public. Prices on our menu are very competitive and we serve major brand foods. Get a Mugg's coffee and grab a fresh salad, a flatbread pizza, a hot bowl of soup, a specialty sandwich, or a tasty dessert and enjoy the company of your fellow students, friends or colleagues. The menu is available online at
www.muskegoncc.edu/pages/2463.asp.

Jayhawk Grill
(Located in the Student Union)
The Jayhawk Grill offers fresh, cooked to order fast food items. Enjoy a burger, hot dog, fries or any other of the variety of foods that we serve while you relax and study or chat with friends while in the Student Union. Our prices are very competitive and our staff is friendly and fast. The menu is available online at
www.muskegoncc.edu/pages/2462.asp.

Creative Catering
A full-service catering is also available on campus to serve the students, faculty and staff, community and also private functions. The menu is available online at
www.muskegoncc.edu/pages/463.asp.

Conference services and pricing are also located online at
www.muskegoncc.edu/catering.

Muskegon Community College Bookstore

muskegoncc.bncollege.com
(231)777-0235

■ Textbooks ■ Art Supplies ■ School Supplies ■ Health and Beauty Aids
■ MCC Clothing and Gifts ■ Backpacks ■ Coca-Cola ■ Snacks
■ Magazines ■ Prepaid Phone Cards ■ Barnes and Noble Gift Cards

b&ncollege

- ■ Rent your textbooks from us and save 50%.
- ■ Buy used and save 25% (when available).
- ■ Your best source for new and used textbooks.
- ■ Bring in your course schedule and MCC photo ID and get the books you need.
- ■ Pre-order your textbooks online at muskegoncc.bncollege.com.
- ■ Course textbooks are available at the beginning of each semester and session.
- ■ All students need a MCC ID card to purchase their textbooks on student financial aid.

Sell Your Used Books for Cash

- ■ We buy used books all year long.
- ■ Sell your books for up to 50% of original purchase price.
- ■ Exam week is the best time to sell back your books.
- ■ We cannot guarantee the purchase of all available books.
- ■ We reserve the right to refuse purchase of damaged or out-of-print books.
- ■ All Students need MCC ID card to sell back books.

Check Out the Bookstore for Other Great Items

Textbook Return Policy
- ■ All refunds must be accompanied by the original sales receipt.
- ■ Refunds will be issued in the original form of payment.
- ■ Textbooks may be returned within the first full week of class.
  (Date provided on sales receipt)
- ■ With proof of a schedule change *(cancelled course, drop/add)*,
  textbooks may be returned within 14 days of class.
  See back of receipt for details on our Return Policy.

Veterans Office

Room 103

Muskegon Community College maintains a full-time veterans office. The office provides veterans, Reserve/National Guard personnel, and eligible dependents and survivors with current VA benefit information, and provides assistance in completing and processing VA forms for educational benefits. The MCC Veterans Office also provides support for the Student Veteran Organization. The manager of Student Success and Veterans Affairs can be reached at (231) 777-0342.

Muskegon Community College is a proud member of the Servicemembers Opportunity Colleges (SOC). As a SOC member we agree to a reasonable transfer of your military credits from your training.

Our mission:
- Help clear up any uncertainties about VA's current chapters.
- Aid in applying for your educational benefits through VA.
- Help with certification requests to activate your aid for the desired semester attending.
- Aid with the Military Tuition Assistance programs for active duty and reserve personnel.

Veterans Responsibilities

United States Department of Veterans Affairs (VA) offers educational benefits to qualified veteran students and/or their dependents provided the beneficiary meets guidelines put forth by the VA and the College. To use VA educational benefits, student veterans, dependents of veterans, and student military personnel (reservists) must fulfill the responsibilities below.

1. Complete a **Certification Request for VA Educational Benefits** online for every semester you wish to draw VA Educational Benefits. It is recommended this be done in March for the following Summer session, in May for the following Fall semester, and in October for the following Winter semester.

2. Keep your program of study up to date, and if appropriate, officially change your program of study at the Counseling and Advising Center. Only courses outlined in your approved program of study will be certified for payment, if the courses are within VA guidelines.

3. Maintain a cumulative 2.0 GPA and meet the MCC Standards of Academic Progress (SAP). See detailed SAP requirements on page 269.

4. A VA beneficiary student who allows his/her cumulative GPA to fall below 2.0 and/or does not meet Standards of Academic Progress will be placed on probation and be allowed one semester to bring his/her GPA back into good standing. If the veteran/dependent fails to do so, the VA will be notified of unsatisfactory progress.

5. Contact the Veterans Office before repeating classes.

6. If you withdraw officially or unofficially from any class(es), report the last date of attendance in writing to the Veterans Office. If this is not done, MCC will report the last date of attendance as the first date of that class. Overpayment conditions could be created and debts could be established in the student's name.

7. Maintain responsible communication to inform the Veterans Office of any updates or correspondence pertaining to my VA educational benefits, to ensure accuracy and efficiency.

8. Request official transcripts from all previously attended institutions, including the Sailor/Marine American Council on Education Registry Transcript (SMART), be sent to the MCC Records Office for evaluation.

For additional information regarding VA, certification, paperwork, or general information please visit the MCC Veteran website at
www.muskegoncc.edu/veterans.

Student Life

Room 103

The Office of Student Life brings you services, resources, activities, and events from the non-academic side of college life. We are committed to constantly evolving. We strive to be open-minded and flexible by responding to the needs of the campus and our community. Our staff and our programs aim to encourage the development of leadership skills, values, friendships, and the opportunity to make a difference. Student Life oversees Clubs and Organizations, Employment Resource Center, Internship Programs, and Student Activities.

Registered Student Organizations (RSO)

The College provides opportunities for students to participate in a variety of clubs and organizations which encourage intellectual, social, cultural and leadership development. In many cases these organizations enable students to work on projects related to the classroom experience. Current information on such activities is publicized on campus each semester. If you have a common interest with other students and would like to form a club, check the MCC website, or stop by the Student Life Office. *Full-time faculty advisors oversee each club. Members must be enrolled as students at MCC.*

CURRENTLY SANCTIONED CLUBS AT MCC

Amateur Film Club	Hockey Club
American Foundry Society Club	International Student Club
Anime & Asian Culture Club	MCC Campus Republicans
Art and Graphic Design Club	Motorsports Club
The Bay Window	Nature Club
Black Student Alliance	Respiratory Therapy Club
Business Leaders of the 21st Century	ROTARACT Club
Christian Fellowship Club	Social Science Association
Computing and Technology Club	S.T.E.M. Club
Gaming Club	Student Nurses
Garden Club	Student Government Association
Gay Straight Alliance	Student Veteran Organization
Geography Club	Teachers of Tomorrows Students (TOTS)
Health PreProfessionals	US Green Building Council Club
Hispanic Student Organization	Writing Club

Posting and Distributing Literature

Any pamphlet, handbill, newspaper, or other form of literature to be distributed in the institution by anyone must be approved by the Dean of Student Success and Campus Life, in Room 103. Postings will be done on appropriate bulletin boards furnished for this purpose.

Student Government Association (SGA)

Room 103

SGA serves as the official representative body for MCC students. It provides a forum for expression on matters of concern to the student body, and presents opportunities for the development of student leadership.

Goals of SGA:
- To ensure the conveyance of the student voice to the administration and Board of Trustees.
- To provide for discussion, investigation and resolution of student problems, concerns and ideas.
- To retain sole authority to appoint and remove student representatives to the College's Council System and designated committees.
- To promote the interests of the College's student community.
- To protect and uphold student's rights.
- To plan, encourage and promote participation in College events and community service activities.

Special Events

Special Events presents special programs to the MCC community, often in cooperation with the various divisions and departments of MCC. Wild Wacky Wednesday features noon time entertainment and fun activities.

Carr-Fles Planetarium

The Carr-Fles Planetarium has been in operation since 1972. Four different planetarium programs are shown throughout the year, September through June, on Tuesday and Thursday evenings at 7:00 p.m. A complete planetarium schedules available for specific days and time.

Admission to the planetarium is free with a seating capacity of 44. The programs consist of a combination of digital sky movies and the use of our star machine, a Spitz SciDome, which projects the stars, planets, and constellations, on the 7.3 M dome ceiling of the planetarium. Since a degree of prior knowledge is necessary for understanding, it is suggested that the regular public programs on Tuesdays and Thursdays at 7:00 p.m. are not suitable for preschool children.

Private shows, groups of 15 or more during the day, and 20 or more during the evening may be reserved by calling (231)777-0289. Teachers or group chaperones are encouraged to select one of the appropriate titles and schedule your visit two to three weeks in advance.

Community Observatory

Although primarily for MCC's Astronomy and Cosmology students, the observatory hosts free public open houses at various times throughout the year along with the Muskegon Astronomical Society. The observatory is located at the property of the Muskegon County Wastewater System, 8301 White Road, Muskegon.

The facility can be best accessed by Muskegon travelers by turning north off Apple Avenue on to Maple Island Road, and driving approximately 2.1 miles. Turn right, or east, into the Wastewater Management System facility property and continue about 2.1 miles to the MCC observatory on the right side of the road.

MCC Jayhawk Athletics

Bartels-Rode Gymnasium

MCC has maintained a program of intercollegiate athletics for both men and women for many years, while attempting to maintain teams in a wide variety of competitive fields. MCC is a member of the Michigan Community College Athletic Association, Region 12, and the National Junior College Athletic Association. Men's sports include baseball, basketball, golf, cross country, bowling, soccer, and wrestling. Women's sports include basketball, softball, cross country, bowling, soccer, and volleyball. Call (231) 777-0381 or (231) 777-0462 for information.

Questions about eligibility should be directed to the Athletic Director. Transfer students should secure a transcript from any college previously attended and have it placed on file in the Office of the Registrar to aid in the determination of eligibility. Athletic grants-in-aid are available for tuition only in all sports sponsored by the College.

All regular season home contests and games are currently free to the public. Home contests and games that are indoors are held in the MCC Bartels-Rode Gymnasium. Home baseball and softball games are played on the baseball/softball fields which are south of the gymnasium.

Please check www.muskegoncc.edu and click on "Athletics" for up-to-date schedules and other information.

MCC Recreation

MCC is committed to providing activities that match the interests and skills of the College community. Students, faculty and staff are encouraged to recreate in the outdoors as well as semi-competitive sport environments at the College and in the Muskegon area. Activities may include:

Basketball	Golf	Luge
Bowling	Jayhawk 5K	Tennis
Disc Golf	Kayaking	Volleyball

Athletic Director

Marty McDermott
(231)777-0462

Head Coaches

Cap Pohlman	Ben Ritsema
Men's Baseball	*Men's Soccer*
Dave Schlump	Josh Watson
Men's Basketball	*Women's Soccer*
Rob Recknagel	Ryan Schalk
Women's Basketball	*Women's Softball*
Bill Bowen	Rick Rykse
Men & Women's Bowling	*Women's Volleyball*
Dan Fishel	Mark Brunger
Men & Women's Cross Country	*Men's Wrestling*
Marty McDermott	
Men's Golf	

RESOURCES AT MCC

Campus Facilities

Applied Technology Center

This building houses classrooms and laboratories for automotive mechanics, electronics, welding, and metallurgy, as well as machining and foundry facilities, also equipped for their separate disciplines.

ATM Machine

For your convenience, an ATM is located outside the Bookside Bistro. Students who open a Higher One account with their My MCC OneCard should use the Higher One ATM across from the PNC ATM.

Bartels-Rode Gymnasium

The Bartels-Rode Gymnasium is a separate building, south of the main parking lot. In addition to housing a large, multipurpose gymnasium, this building also houses the physical education and athletic offices, a fitness center and several teaching stations. The baseball and softball fields are located south of the gymnasium.

Collegiate Hall

Collegiate Hall is located on the second floor. It offers students a quiet place to study where they may also eat. On occasion, this space may be utilized for conferences and workshops. When this occurs, students should use the first-floor hallway as an alternate route to classrooms.

Classrooms

More than 70 classrooms and laboratories are available on campus, completely furnished to meet the needs of their particular disciplines. Additional classrooms, labs and conference facilities are located in the Stevenson Center for Higher Education which is attached to the main academic complex on the east side of the building. Three drafting (CAD) classrooms are located in the Academic Complex, and Graphic Design facilities are located in the Stevenson Center for Higher Education complex.

Duplicating Services

A coin-operated copy machine is located in the library.

Elevators

Elevators are located in the lobby of the Hendrik Meijer Library and Information Technology Center, at the Stevenson Center for Higher Education, on the first floor near the main entrance, at the northwest corner of the main building near the English department, and in the Overbrook Theater lobby.

Frauenthal Foundation Fine Arts Center

At the heart of the Fine Arts Center is the 300-seat Overbrook Theater and adjacent art gallery, where works by students, faculty, and guest artists are exhibited. The Center also includes a large rehearsal room for band, orchestra, and chorus, practice rooms, and a listening library where students may enjoy recordings. The Center also has 12 electronic pianos for instruction and practice.

Lost and Found

Found items can be turned in at the Security Desks, located in the Main Lobby or the Stevenson Center. Lost items can be reported at either location or you can call (231) 777-0545.

Gerber Lounge

Gerber Lounge is located on the first floor directly across from the main entrance of MCC. It serves as a meeting place, study area, and rest stop for students and visitors. As a courtesy to all, there are some restrictions on the use of the lounge. No card playing, no food or beverages, and no loud or boisterous behavior are allowed in the Gerber Lounge.

Kasey Hartz Natural Area

The diversity of the wooded forest immediately north of the Muskegon Community College campus provides an ideal setting for our educational Natural Area. The Natural Area and associated nature trail are suitable for all ages. Reservations for group tours with guides need to be at least two weeks in advance, and can be made by calling the Life Science Department at (231)777-0273. Spring tours are available starting mid-April through June, and Fall tours are September through October, depending on weather. Individuals are free to explore on their own.

Lockers

Lockers for students' use are available in the Student Union. Lockers are free. Students may purchase locks in the Bookstore. Please place valuables in the lockers. At the conclusion of each semester all items and locks must be removed.

Overbrook Gallery

Overbrook Gallery, located in the Frauenthal Fine Arts Center on the campus of Muskegon Community College, exhibits work by local, Michigan, and out-of-state artists and MCC art students in a variety of solo, group, and thematic shows throughout the year. Exhibits are always free and open to the public. Visiting artist presentations are scheduled in connection with shows. Gallery hours are 9:00-4:00 weekdays with special weekend and evening hours during theater performances, receptions, and gallery talks. Call (231)777-0324 for details.

Parking

Two large parking lots serve the campus. The main lot is located south of the Main Building, and may be entered from Marquette Avenue or from Quarterline Road. The back lot is located north of the James L. Stevenson Center for Higher Education, and may be entered from Quarterline Road or Stebbins Road.

Parking - Handicapped

Handicapped parking spaces are available near all main entrances. Students needing special parking are urged to apply for a reserved space in this area through the Physical Plant Office, Room 1107.

Room Numbers

Entering the main building, the rooms are numbered in the 100's, with even numbered rooms on the east side of the building and odd numbered rooms on the west. Stairs or elevators will take you DOWN one level to rooms numbered in the 200's. The bottom level is below this with rooms numbered in the 300's. Rooms in the College Success Center are numbered in the 400's. The rooms in the Applied Technology Center are numbered in the 500's and rooms in Overbrook Theater are numbered in the 600's.

Any room with a four-digit number is located in the Stevenson Center for Higher Education. The numbering strategy is similar to the main complex with rooms on the top level numbered in the 1100's, second floor rooms in the 1200's, and third floor (bottom) rooms numbered in the 1300's. The main entrance to the Center for Higher Education can best be accessed by utilizing the north parking lots (second entrance off of Quarterline Road).

Stevenson Center for Higher Education

Named for MCC's 8th president James L. Stevenson this 93,500 square foot building, constructed contiguous to the main academic facility on campus, houses a unique academic consortium comprised of Muskegon Community College, Ferris State University, Grand Valley State University, and Western Michigan University. The Center contains 40 classrooms/conference rooms including computer classrooms, a large conference room, a large lecture hall, and a science room. The Stevenson Center is also the home of MCC TV.

A catering kitchen on the second level accommodates food service needs for banquets, meetings, conferences, and receptions. Technology advancements allow for a variety of instructional delivery systems. Each room in the facility is wired for voice, video and data transmission. Teleconferencing and integrated distance learning technology is available as well.

Vending Machines

There are vending machines in the Student Union and other convenient locations throughout the campus. Snacks are available at the Bookstore as well.

Services for the Community

The College offers courses, workshops, seminars, and special events to meet the lifelong learning needs of the community. These non-credit educational offerings emphasize career development, personal growth, cultural enrichment, and the solution of community problems.

Alumni Relations

MCC is very interested in maintaining life-long relationships with Alumni. Former students are encouraged to keep Alumni Relations informed as they earn additional degrees, move, accept new jobs, get married, or reach other milestones. Updates can be sent to Alumni Relations in the Office of Community Outreach at (231) 777-0461 or alumnirelations@muskegoncc.edu. Alumni and other community members are invited to receive a free subscription to Reflections Magazine; simply contact the Office of Community Outreach to be included in the mailing list.

Each year the MCC Alumni Relations Committee selects a Distinguished Alumni Award recipient, which is the highest honor that Muskegon Community College bestows upon an alum. The award salutes the achievements of outstanding alumni whose personal lives, professional achievements, and community service exemplify the objectives of their alma mater.

Award recipients are selected based on the following criteria:

- **MCC College Career** - The nominee must have earned an associate's degree, certificate, or completed a minimum of 50 credit hours at Muskegon Community College and have demonstrated a record of excellence in academics and extracurricular participation.
- **Professional Achievement** - The nominee must have distinguished himself or herself through achievement or advancement in his or her career, earned degrees, professional training, professional recognition and/or outstanding contributions to his or her field.
- **Service to the Community** - The nominee shall have demonstrated a record of community participation and involvement.
- **Advocacy of Higher Education** and/or support of MCC - The nominee shall have a successful record in one or both of these areas.
- **Availability** - In addition to the above criteria, the nominee must be available to attend the Distinguished Alumni Award dinner and participate in the commencement ceremony.

For more information about the Distinguished Alumni Award, Reflections, or other aspects of Alumni Relations, call (231) 777-0461 or visit www.muskegoncc.edu/alumni.

Center for Theater

The Center for Theater operates with the Arts and Humanities Department. It provides theater classes for MCC students as well as a diversified schedule of performances. Performances are presented on the Overbrook Theater stage and include a season of plays produced by the Overbrook Players, music and dance concerts by the MCC Music and Dance Departments, and various lectures, speakers, and performers. The Center for Theater offers something for every MCC student, whether it be the development of artistic talents, investigation of a career in professional theater, or simply the enjoyment and excitement of a live performance. All MCC students are encouraged to participate in the activities of the Center.

Community Outreach

The Office of Community Outreach was created to stay connected to our students, parents, and our servicing communities. MCC provides an excellent agenda for credit and non-credit academic classes, programs, activities, and events. We believe that remaining sensitive to the realities that our communities face is equally important. Our goal is to continue developing strong relationships with those we serve.

RESOURCES AT MCC

Continuing Education

The Continuing Education Office provides lifelong short-term learning opportunities to meet the needs of the community. These non-credit educational classes emphasize career development, personal growth and cultural enrichment.

- **Continuing Education Courses**: Selected courses developed, offered on campus, as well as online to enrich your skills, learn new information, or earn a certificate of completion in a high-demand career program.

- **Continuing Education Unit credits (CEUs)** may be offered for professions that require regular upgrading for certification. Special seminars to meet the training needs of specific organizations can be arranged by calling the Continuing Education Office at (231) 777-0348.

Information about courses, workshops, seminars, and special events is published twice each year in the OPTIONS Continuing Education Schedule of Classes. Copies are distributed to the public and are available at the college. You can also view the listing on the website at www.muskegoncc/ce.

Lakeshore Business and Industrial Service Center

The Lakeshore Business and Industrial Service Center provides customized instruction in virtually every area for local business and industry through workshops, seminars, college classes and consulting services. Training may be held on campus or at the workplace, depending on the particular needs of the company. Instructors and trainers are selected from the College faculty, area working professionals and specialty consultants. Training may be for either college credit or non-credit. Staff members from the Lakeshore Business and Industrial Service Center is available to help design specialized courses and provide resources and materials for your business needs. For more information call (231) 777-0569 or visit the website at
www.muskegoncc.edu/businesstraining.

MCCTV Community Programming

MCC TV is an educational channel that markets educational, cultural, and informative programs that advance the mission of the College.

MCC TV can be viewed in Muskegon County and Newaygo County on Comcast Channels 44-5 and 902, and in Ottawa County, Oceana County, northern Muskeon County and northern Allegan County on Charter Channel 994.

The Foundation for Muskegon Community College

The Foundation for Muskegon Community College helps Muskegon Community College (MCC) achieve its mission by devoting financial resources to strengthen the high quality education that benefits every MCC student. Contributions allow us to build and renovate facilities, expand academic programs, purchase instructional equipment, provide scholarships, and overall advance the mission of Muskegon Community College. For more information about the Foundation, joining the Foundation Board, or supporting our fundraising efforts, please contact Tina Dee at (231) 777-0660, email tina.dee@muskegoncc.edu, or visit www.muskegoncc.edu/foundation.

Institutional Research and Grants

The Office of Institutional Research and Grants' primary purpose is to facilitate the collection, analysis, and interpretation of institutional data and provide information to support planning and decisionmaking. IRG provides a variety of research services to the college, including submitting official enrollment, graduation, and employment reports to external agencies; responding to research requests from college staff; and administering surveys to current and former students. IRG staff members also work with faculty and staff to seek external grant funding for the college.

About Us

History of Muskegon Community College

Muskegon Junior College was established by the Muskegon Board of Education in 1926 and was housed on the third floor of what was then the new Muskegon Senior High School. It was a pioneering effort, since only three other two-year institutions existed in Michigan at the time.

By 1934, enrollment of both the College and the high school had grown beyond the capacity of a single building. The Junior College, therefore, moved into the former Hackley School in downtown Muskegon across from Hackley Park.

It was appropriate that the College should occupy the old Hackley building, which had been presented to the public schools of Muskegon by Charles H. Hackley after fire had destroyed the original Central School. The city's First Citizen believed that a community was obliged to offer its youth the kind of training which would enable them to earn a good livelihood and at the same time contribute to the well-being of the community.

At the time of its move into this facility and for 17 years after, Muskegon Junior College was primarily geared to those students intending to complete at least four years of college. Muskegon's reputation in this field of the "college transfer" program was an enviable one, and continues to be so today.

Then in June of 1951, after an enabling act by the Michigan Legislature, the name and educational scope of the College was changed. "Muskegon Junior College" became "Muskegon Community College," thereby reflecting the expanded nature of the College's programs.

They were broadened to serve a larger number of students with a wider variety of interests. Courses were added in retailing, the vocations, the technical fields, public health, and the trades. These courses enabled young men and women to prepare themselves for a specific field of employment in two years of training beyond high school. There was no shrinking of the transfer program, only an expanded curriculum to serve a larger segment of the community.

In the years after World War II, enrollment climbed quickly and the Community College campus had to grow accordingly. The Muskegon Board of Education, which still operated the College, utilized available space in many of its buildings, and rented other community facilities when enrollment exceeded the capacities of those buildings.

By the early 1960s, enrollment had topped 2,000 and the College was operating full-time at Hackley, Vanderlaan, and Wilson schools and part-time at eight other locations. The time had come for another step in the development of the College.

The Board of Education formed a Special Citizens Committee to study the entire program and make recommendations. The Committee proposed that: the College be separated from the public school system; a county-wide community college district be created; a board of trustees be elected to plan, build, and operate the school; and a millage be voted in sufficient amount and for enough years to build and operate the College.

In April of 1963, the county overwhelmingly approved the recommendations of the committee and elected the first Board of Trustees. The board went to work immediately and by September of that year had purchased the tract of land upon which the College exists today.

Alden B. Dow and Associates was named architect and by the summer of 1965 drawings were completed and construction begun. The Vocational-Technical Wing was completed and occupied in the fall of 1966. The following September the entire complex was placed in service. Formal dedication ceremonies were held October 22, 1967, with Dr. Ashley Montagu, one of the world's foremost anthropologists, delivering the dedicatory address.

The first addition to the new campus was the Frauenthal Foundation Fine Arts Center, completed in 1968 and named for A. Harold Frauenthal, the Muskegon industrialist whose gift had made the Center possible.

RESOURCES AT MCC

When the new district was created, the name of the College was changed to Muskegon County Community College. In the spring of 1969 and at the request of the Board of Trustees, the State Board of Education approved changing the name once again to Muskegon Community College. With an enrollment of nearly 5,000 students, the College exists today in its eighth decade of service to area citizens.

In January 1995, a new era of educational opportunity opened with the completion of the Muskegon Center for Higher Education on the campus of Muskegon Community College. The Center houses upper-level courses and programs offered by Ferris State, Grand Valley State, and Western Michigan universities. These institutions, along with Muskegon Community College, have formed a "consortium" to coordinate offerings to meet the needs of West Michigan residents.

Attached to the main building near the Applied Technology Center, the 90,000 square foot facility represents about one-third the size of the main building and was constructed to complement existing architecture. The facility is named in honor of former MCC President James L. Stevenson and contains the latest in communication technology with all of its 35 rooms connected via fiber optics for voice, video and data transmission. In addition to housing the educational programs of the consortium member institutions, the Center is also the home for MCC's Media Center and Graphic Design program.

Opened in January 2006, the Hendrik Meijer Library Information Technology Center offers students and the community the latest in communication capabilities, including wireless internet access, state-of-the-art library facilities/technologies and classrooms, and an internet café. The 40,000 square foot facility has three levels overlooking the woods and creek, and offers special services including both group and individual orientations, interlibrary loan, a photocopy machine, group study rooms, and a quiet reading room.

Governance

MCC is governed by a seven-member Board of Trustees who are elected for six-year terms on an "at large" basis from throughout the district (Muskegon County). The College's chief executive is the President, appointed by the Board of Trustees. Serving the institution at the 2014 printing of this catalog are the following persons:

Muskegon Community College
Board of Trustees

Faculty

AL-SAJI, AMER K
Economics
  BS Bagdad University
  MA Central Michigan University
  PhD Northern Illinois University

BARRETO, ADOLFO
Criminal Justice
  BS Bemidji State University
  MS Trinity College and University

BATES, KATHLEEN
Nursing, RN, CNE
  BSN Grand Valley State University
  MSN Michigan State University

BENSON, HOLLIE
College Success Center - Reading
  BA University of Michigan
  MEd Grand Valley State University

BRIGGS-ERICKSON, CAROL A
Librarian and Coordinator for Library Services
  AA Muskegon Community College
  BS Grand Valley State University
  MLIS University of Michigan

BROWN, PAMELA K
Director of Nursing, APRN, CNE, FNP
  Diploma in Nursing RN
  Bronson Methodist School of Nursing
  BSN University of Michigan
  MSN Michigan State University

BUDIMIR, NICHOLAS
Sociology
  BA University of Michigan
  MA Wayne State University

BURRELL, KARIN
Mathematics
  BS, MA Western Michigan University

CASEY, DIANA L
Geography
  BA Western Michigan University
  MS Eastern Michigan University

CENGIZ, PAMELA J
Nursing, RN, CNE
  ADN Southwestern Michigan College
  BS Utah State University
  MSN Michigan State University

CHANDLER, SHERRI A DEBOEF
Psychology/Sociology
  BS Central Michigan University
  MA Western Michigan University
  PhD Capella University

CHURCH, IRENE
Business Communication
  BA MA Central Michigan University

CLINE, GRETCHEN S
English
  BA Kenyon College
  MA, PhD Ohio State University

CONRAD, KELLEY L
Counselor, LPC
  BA Alma College
  MA Western Michigan University

COOPER-KUIPER, JEANNE
English
  BA, MA Michigan State University

DATTA, ARUN K
Chemistry
  BS University of Utah
  MS Auburn University
  PhD University of Utah

DEVRIES, DALE M
Respiratory Therapy
  BS, MA University of Michigan

DONLEY, CHRISTINA L
Nursing, APRN, CNE, FNP
  ADN Muskegon Community College
  BSN Ferris State University
  MSN Michigan State University

DYKE, MARY E
Nursing, RN, CNE
  ADN North Dakota State University
  BSN Moorhead State University
  MSN University of Kentucky

ENRÍQUEZ, ISMAEL
Spanish
  BA Grand Valley State University
  MA University of Toledo

EVANS, REBECCA L
English
  BA, MA Western Michigan University

FRAZIER, SUSAN
Nursing, RN, CNE
  Diploma Harper-Grace School of Nursing
  BSN, MSN Ferris State University

KILEY, DAVID L
Accounting/Business
  BS Findlay University
  MS Western Michigan University
  MBA Central Michigan University

GOUDIE, BARBARA
Nursing, RN, CNE
  RN Queen Elizabeth School of Nursing
  BA Open University Great Britain
  MSN Grand Valley State University

GRAF, JESSICA
Physical Education/Recreation
  BS, MS Indiana University of Pennsylvania

GRIFFITH, CHARLOTTE L
Librarian and Faculty Liaison
  BA University of Texas at Austin
  MLIS Wayne State University

GRONER, THOMAS W
Machine Technology
  BS Ferris State Unversity
  MA Central Michigan University

GRUBE, DEBRA
Respiratory Therapy
  BSRT University of South Alabama
  MSM Cornerstone University

HARRYMAN, THOMAS A
Theater
  BPh Grand Valley State University
  MA Antioch University McGregor

HAYES, SYLVIA M
Counseling, LPC, NCC
  BA Western Michigan University
  MA Michigan State University

HOFFMAN, ERIN E
Art
  BFA University of Northern Iowa
  MFA University of Georgia

HOWELL, DEBRA S
Biology
  BS Ferris State University
  MS Grand Valley State University

JEWELL, RONNIE D JR
English
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