

# Start. Stay. **Succeed.**

2015-2016 COURSE CATALOG



**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](http://www.muskegoncc.edu)**

### **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.

This catalog is for informational purposes only and is not to be considered a binding contract between Muskegon Community College and individual students.

Information in this catalog was accurate as of February 2015 and is subject to change without notice. This publication - which details policies, procedures, rights, responsibilities, programs and course descriptions - is intended to be used along with WebAdvisor and the schedule that is published each semester to provide current information on registration and course offerings.



**Muskegon Community College**

# Hello and Welcome to Your MCC!

Welcome to Muskegon Community College, a dynamic institution serving Muskegon, Newaygo, Oceana, and Ottawa counties, as well as students online around the state, nation, and world. We continually strive to be a higher education leader in student success, community engagement, and innovative academic programming.

Muskegon Community College is on the move. Thanks to the generosity of the Muskegon County residents and supporters statewide, our campus is experiencing its most significant facilities upgrade since the construction of our current site in 1967. We are completing our new science center, which will be open by August 2015. We are also designing our new applied technology center in downtown Muskegon to open in January 2016, planning for the expansion of our health/fitness center opening in August 2016, and completing the details of our arts center, expected to be open by December 2016. These exciting campus renovations and additions enhance MCC's focused efforts to remain nationally and internationally competitive, by connecting our exceptional faculty and staff with new state-of-the-art facilities.



We are dedicated to serving you. We recently redesigned our MCC website, allowing better navigation to explore the many educational resources available to you at our institution. We encourage you to visit and explore all MCC has to offer.

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. Whether you are here taking courses to transfer toward a higher educational degree or to retrain for the jobs of tomorrow, our credits will help you achieve your goals.

Take the first step today by calling us at (866) 711-4622, or by visiting [www.muskegoncc.edu](http://www.muskegoncc.edu).

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

Regards,

A handwritten signature in black ink, appearing to read "Dale K. Nesbary". The signature is fluid and cursive, with a large initial "D" and a long, sweeping tail.

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.

## 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.

## 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](mailto:info@hlcommission.org). They may also be contacted online at [www.ncahlc.org](http://www.ncahlc.org). Any interested persons may review a copy of the accreditation documents online at [www.muskegoncc.edu/hlc](http://www.muskegoncc.edu/hlc).

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# RESOURCES AT MCC

# 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 mandatory for all new MCC students seeking to earn credentials. Studies have shown that students who attend orientation attain higher GPAs and successfully complete more credit hours than those who do not 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. Make an appointment online at [www.muskegoncc.edu/orientation](http://www.muskegoncc.edu/orientation).*

## 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 Orientation Room (116) located on the first floor of the main campus building. 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](http://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](http://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](http://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, or were previously a dual enrolled student at MCC, 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.

*Continued on Next Page*

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.

*Residency Policies for veterans and eligible dependents are currently being revised. Please refer to the [www.muskegoncc.edu](http://www.muskegoncc.edu) for the most up to date policy.*

### **International Student Admission**

International student applicants (F-1) must file a separate International Student Application, which may be obtained at [muskegoncc.edu](http://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

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### 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

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Room 101 ▪ [www.muskegoncc.edu/counseling](http://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](http://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. 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, Reading and 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.

## Developmental Courses

Students testing into two or more developmental courses must complete the following before being allowed to enroll in their second semester:

- See a MCC Counselor to create an academic plan
- Enroll in CSS 100A.

The following is the priority sequence for completion of assigned developmental courses:

1. Reading
2. CSS 100A
3. MATH 036A
4. ENG 085 or 089, 091
5. Math 038 and 040 may be deferred until the second semester.

It is understood that part time students may not be able to take all courses at once.

## READY TO SUCCEED

Before enrolling in many courses, you must meet the READY TO SUCCEED reading competency requirement by test scores or course completion. All placement test scores are not valid after 3 years.

COMPASS	Reading score of 76 or higher
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

COMPASS Reading	ACT Reading	MME	Placement
76-100	19 or higher	Level 1 or 2 on Reading & Writing	No Reading course required. <i>(Ready to Succeed requirement has been met.)</i>
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: All placement test scores are not valid after 3 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 <i>(Ready to Succeed requirement must still be met.)</i>
69-79	18	N/A	ENG 101 or BCOM 101 and ENG 114 <i>(Ready to Succeed requirement must still be met.)</i>
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: All placement test scores are not valid after 3 years.*



## 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	19-21	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: All placement test scores are 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](http://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 Karin Burrell in the Math/Physical Science 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](http://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 on TutorTrac. 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. The schedule is available on TutorTrac.

## 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](http://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.

## 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

## To access College Matrix

- ♦ [www.mcc.collegematrix.com](http://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.

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](http://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](http://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](http://www.muskegoncc.edu/housing), or call the Student Life Office at (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. Access the library databases via the MyMCC portal page. 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.

*Continued on Next Page*

### Computers for Student Use

For students who desire research assistance, there are computers, including one MAC, 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 Orientation Room (116) located on the first floor of the main campus building. 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 and for computer use.
- ♦ 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

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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

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### **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](http://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](http://www.muskegoncc.edu/pages/463.asp).

Conference services and pricing are also located online at

[www.muskegoncc.edu/catering](http://www.muskegoncc.edu/catering).



# Muskegon Community College Bookstore

[muskegoncc.bncollege.com](http://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](http://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.***

# MCC Bookstore

## 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 immediately after registering for courses 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 your 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](http://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 and Clubs

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	MCC Campus Republicans
American Foundry Society Club	MCC Track & Field Club
Anime & Asian Culture Club	Motorsports Club
Art and Graphic Design Club	Nature Club
The Bay Window	Philosophy Club
Black Student Alliance	Respiratory Therapy Club
Christian Fellowship Club	ROTARACT Club
Computing and Technology Club	Social Science Association
Gaming Club	S.T.E.M. Club
Garden Club	Student Nurses Club
Gay Straight Alliance	Student Government Association
Geography Club	Student Veterans Organization
Health PreProfessionals	Teachers of Tomorrows Students (TOTS)
Hispanic Student Organization	US Green Building Council Club
Hockey Club	Writing Club
International Student 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 convey 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](http://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

<p>Cap Pohlman <i>Men's Baseball</i></p> <p>Dave Schlump <i>Men's Basketball</i></p> <p>Rob Recknagel <i>Women's Basketball</i></p> <p>Bill Bowen <i>Men &amp; Women's Bowling</i></p> <p>Dan Fishel <i>Men &amp; Women's Cross Country</i></p> <p>Marty McDermott <i>Men's Golf</i></p>	<p>Ben Ritsema <i>Men's Soccer</i></p> <p>Josh Watson <i>Women's Soccer</i></p> <p>Ryan Schalk <i>Women's Softball</i></p> <p>Rick Rykse <i>Women's Volleyball</i></p> <p>James Tietema <i>Men's Wrestling</i></p>
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# 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 Barnes and Noble Bookstore. 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 Hendrick 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](mailto: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](http://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.



## 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.edu](http://www.muskegoncc.edu).

## 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](http://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 Muskegon 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](mailto:tina.dee@muskegoncc.edu), or visit [www.muskegoncc.edu/foundation](http://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

The fourth oldest community college in Michigan, Muskegon Junior College was established in 1926 by the Muskegon Board of Education. Originally housed on the third floor of then-new Muskegon Senior High School, the College as well as the high school enrollment had grown beyond the capacity of a single building by 1934.

The Junior College moved into the former Hackley School in downtown Muskegon across from Hackley Park. The building was presented to Muskegon Public Schools by local businessman and Charles H. Hackley after fire had destroyed the original Central School. He 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.

Until June 1951, the 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. 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.

The College now served 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.

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.

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.

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,

*Continued on Next Page*

along with Muskegon Community College, have formed a “consortium” to coordinate offerings to meet the needs of West Michigan residents.

The 90,000 square foot facility, named in honor of former MCC President James L. Stevenson, represents about one-third the size of the main building and was constructed to complement existing architecture. The houses the Media Center and Graphic Design program.

Opened in January 2006, the 40,000 square foot 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.

Building up its two decades of offering classes in Grand Haven, MCC opened its Ottawa County Center in 2012 in the Grand Haven Community Center.

MCC and the Muskegon Area Intermediate School District (MAISD) launched the Early College of Muskegon County in 2012 offering select high school students an intense five-year program leading to both a high school diploma and an associate’s degree. The concept was expanded and MCC offered Early College of Newaygo County, North Ottawa County Early College and South Ottawa Early College.

In November 2013, Muskegon voters approved \$24 million to support MCC facilities expansion, which includes construction of a new Science Center, the addition of a Health Center, the purchase of the former Muskegon Chronicle building for technology and entrepreneurial programs in downtown Muskegon, and the renovation of campus facilities for creative and performing arts.

## 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



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Trustee



**Roy Portenga**  
Trustee



**Dale Nesbary, Ph.D.**  
President

# Faculty

## **AL-SAJI, AMER K**

### *Economics*

*BS Bagdad University  
MA Central Michigan University  
PhD Northern Illinois University*

## **AMMOND, CHARLES**

### *Electronics*

*MBA Grand Valley State University  
BSEE University of Michigan*

## **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*

## **BENANDER, MATTHEW**

### *Mathematics*

*MS University of Kentucky  
BS Central Michigan 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*

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### *Sociology*

*BA University of Michigan  
MA Wayne State University*

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### *Mathematics*

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## **CASEY, DIANA L**

### *Geography*

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MS Eastern Michigan University*

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PhD Capella University*

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### *Business Communication*

*BA MA Central Michigan University*

## **CLINE, GRETCHEN S**

### *English*

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MA, PhD Ohio State University*

## **COLLINS, SHAE**

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BSN Ferris State University  
MSN Ferris State University*

## **CONRAD, KELLEY L**

### *Counselor, LPC*

*BA Alma College  
MA Western Michigan University*

## **COOPER-KUIPER, JEANNE**

### *English*

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## **DATTA, ARUN K**

### *Chemistry*

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MS Auburn University  
PhD University of Utah*

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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 University**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***JEWELL, RONNIE D JR***English**BA High Point University**MA Western Michigan University***JOHNSON, JOHN J***Computer Information Systems**BS Ferris State College**MEd Ferris State University***JOHNSON, MICHAEL C***English**BA Michigan State University**MA Western Michigan University***JOHNSTON, JEFFERY***Computer Aided Design**BS MS Michigan State University***KENDALL, SCOTT***Biology**MS University of Georgia**BS Central Michigan University***KLINGENBERG, JENNIFER L***English**BA Lake Superior State University**MA Northern Michigan University***KNUE, DANIEL***Respiratory Therapy, CRTT, RTT**AS Washtenaw Community College**BS Western Michigan University**MM Aquinas College***KROLL, ELIZABETH***Nursing, CMSRN**BSN Wayne State University**MSN Michigan State University***KUMPF, AMBER***Geology**BS Michigan Technological University**MS University of Rhode Island***LANDES, JAMES C***Computer Information Systems (Game Design)**BS Southern Oregon University***LANS, TONIA J***Counseling, LPC, NCC**BA Michigan State University**MA Western Michigan University***LIEFER, KATHLEEN***Advanced Technology**BS Michigan State University**MS Western Michigan University***LOREY, HAROLD (MIKE)***Welding**BS Bowling Green State University**MA Western Michigan University***MACAULEY, SHAWN P***Biology**BS, MS, PhD University of Florida***MANIATES, GEORGE***History**BA University of Wisconsin - Madison**MA DePaul University***MARCZAK, GREGORY***Chemistry**BA University of Michigan**MA Western Michigan University***MARTIN, THOMAS L***Manufacturing**BS, MA Western Michigan University***MATTON, DARREN C***Biology**BS, MEd Aquinas College**MS Columbia University, M.Ed. Aquinas College***MEEUWENBERG, JON B***College Success Center Math**AS Muskegon Community College**BS, MEd Grand Valley State University*

**MEYERS, DANIEL M***Music/Humanities**BA University of Michigan**MA Central Michigan University***MILLER, GREGORY S***Computer Information Systems**BBA Grand Valley State University***MINOTT, RENICA L***Counseling, LPC, NCC**BS Grand Valley State University**MA Western Michigan University***MOLESKI, TOBIAS B***Physics**BS Grand Valley State University**MS Oregon State University***N'JAI, PAPA***Anthropology/Geography**BA University of Sierra Leone**Dual MA Western Michigan University***NONNEMACHER, GARY S***Mathematics**BA Cedarville University**MS Miami University**MEd Ohio State University***NORRIS, TIMOTHY***Art**BA, MA, MFA Northern Illinois University***OSBORNE, SANDRA L***Nursing, RN, CNE**BSN Northern Michigan University**MSN Grand Valley State University***PARKER, CHARLYNE***Computer Information Systems**BS Aquinas College**MA Western Michigan University***PASSAGE, DENISE S***Business Technology**BS, MEd Grand Valley State University***PATTERSON CHRIS***Nursing, RN, CNE**ADN, BSN Angelo State University**MSN University of Phoenix***POLLOCK, KATHY R***Biology**BS Oakland University**MS, MA Michigan State University***RODDY, CONOR***Philosophy**BA Trinity College**MA University of Hawaii at Manoa**PhD University of Texas at Austin***RUSCO, CATHERINE***College Success Center Writing**BA Alma College**MA Central Michigan University***RYPMA, DAN E***Physical Education/Recreation**BS, MS Grand Valley State University***SPANIOLO-DEPOUW, ANGELA***Psychology**BS, MA Central Michigan University***STRADAL, DAVID***Entrepreneurial Studies**Marketing & Management**BS Lehigh University**MBA University of Connecticut***SWISHER, LARRY D***Accounting**BS Michigan State University**MS Western Michigan University***THOMAS, ALLEN J***Automotive**AAS Muskegon Community College**BS, MS Ferris State University***TOKARZ, WILLIAM P***Electronics**AA Muskegon Community College**BS Western Michigan University***TOSA, KATHERINE M***History/German**BA Southern Illinois University**MA Southern Illinois University***TROUTMAN, KURT***Political Science**BA Saginaw Valley State University**MA University of Colorado**MA American Military University***TRUAX, JONATHAN C***Astronomy/Mathematics**BS Grand Valley State University**MS Michigan State University***TYLER, MARY E***English**BA University of Michigan**MA Western Michigan University***VANDERLAAN, ROBERT***Cataloger/Librarian**BA Western Michigan University***VANDERZANDEN, HEATHER***Nursing, RN**ADN Westshore Community College**BSN University of Phoenix**MSN Michigan State University*

**VAN OOSTERHOUT, CHRISTOPHER T***Computer Information Systems**BSBA, MBA Cornerstone University***VAN VEELLEN, THERESA E***Biology**BS Grand Valley State University**MS Michigan State University***VISCONTI, LAURENCE***Counselor, LPC**BS Grand Valley State University**MA Western Michigan University***VOLKERS, JENNIFER***Education**BBL Baker College**MEd Grand Valley State University***WAHAMAKI, SHEILA KULP***Theater**BFA West Virginia University**MA Indiana State University***WIBLE, ANDREW D***Philosophy**BA Hanover College**MA Ohio University**PhD Wayne State University***WIGGINS, DAVID L***Physics Engineering Math**BS Michigan Technological University**MS Michigan State University***WILSON, KAREN S***Chemistry/Mathematics**BS, MS Ohio State University***WOLTERS, THOMAS L***Mathematics**BS Grand Valley State University**MA Western Michigan University***YORK, SETH***Counselor LLPC**BA Aquinas College**MA Western Michigan University***YOUNG, CLIFFTON***English/Communications**BA, MA Grand Valley State University***ZAROWITZ, JAY N***Political Science**AA Long Beach City College**BA, MA Washington State University***ZEMKE, SUSAN J***Nursing, RN, CNE**Diploma St Luke's Hospital School of Nursing**BSN Ferris State University**MSN Michigan State University*

## Administration - President's Cabinet

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*BA University of North Dakota*

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*BA Michigan State University*

*MA Grand Valley State University*

### CHIEF INFORMATION OFFICER

#### (ELLUCIAN HIGHER EDUCATION

#### MANAGED SERVICES)

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#### CAMPUS LIFE

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*AA Kellogg Community College*

*State of Michigan Licensed Mechanical*

*Journeyman Plumber*

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*MPA Western Michigan University*

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*AA Muskegon Community College*

*BS Michigan Technological University*

### DIRECTOR OF FINANCE

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*BBA Western Michigan University*

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#### TALENT DEVELOPMENT

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*MPA Grand Valley State University*

### DEAN OF INSTRUCTION AND ASSESSMENT

*Breitenbach, Edward*

*BA Cornerstone University*

*MEd Grand Valley State University*

*PhD Western Michigan University*





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# 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) Associate in Applied Science (AAS) and Associate in General Studies (AGS) 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 18-credit hour Automotive Technician Certificate to the 39-credit Electronics Technology Certificate.

PROGRAMS

### 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](http://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](http://www.muskegoncc.edu/internships) for more information.

# MCC ACADEMIC DEGREES AND CERTIFICATES

## 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](http://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.

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 chosen 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.

## 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.

## Associate in General Studies Degree

This degree is designed for students interested in self-enrichment who are not following a specific occupational or transfer program. Courses may be selected to suit the individual student's goals. All students must meet with a counselor prior to enrolling in this program.

## 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 (ASA)

## with the Michigan Transfer Agreement

The Michigan Transfer Agreement Associate in Science and Arts (ASA) degrees are effective as of fall 2014.

- A minimum of 62 credit hours, with a minimum cumulative grade point average of 2.0, is required for the ASA Degree.
- MCC and the Michigan Transfer Agreement require a “C” or better in individual courses used to meet ASA and MTA requirements. These courses are shown in bold type below.
- Courses numbered below 100 do not count toward the ASA.
- Any course can be used only ONCE in any category.

PROGRAMS

<b>General Education Requirements</b>	
<b>Minimum – 35 credits</b>	
<b>Communication</b> – 6 credits with grades of “C” or better	<b>Western Culture</b> -3 credits with grades of “C” or better
<b>English</b> – 101, 102	<b>Art</b> - 198, 199, 202 <b>English</b> - 200, 201, 204, 205, 206, 210, 213, 225, 226, 227, 228, 231
<b>Science</b> – 6 credits with grades of “C” or better Courses must be in two or more disciplines (subjects). <i>Must include at least one lab science</i>	<b>History</b> - 101, 102, 204 <b>Humanities</b> - 195 <b>Political Science</b> - 203 <b>Theater</b> - 201
<b>Lab classes:</b> <b>Biology</b> – any MCC Biology course with a lab <b>Chemistry</b> – any MCC Chemistry course with a lab <b>Geography</b> - 101A, 215 <b>Geology</b> - 101A, 102 <b>Physical Science</b> - 101A <b>Physics</b> - 201L&L, 202L&L, 203L&L, 204L&L	<b>American Culture</b> – 3 credits with grades of “C” or better <b>Art</b> - 213 <b>History</b> - 201, 202, 207, 211, 212A, 214, 220 <b>Political Science</b> - 111, 205, 220
<b>Non-Lab:</b> <b>Anthropology</b> - 105D <b>Astronomy</b> - 101, 105A <b>Biology</b> - 101BEL, 200, 207 – lecture only <b>Geology</b> - 201	<b>International Culture</b> – 3 credits with grades of “C” or better <b>Anthropology</b> - 103, 110 <b>Chinese</b> - 101 <b>English</b> - 207, 211, 218 <b>French</b> - 101, 102, 201, 202 <b>Geography</b> - 104, 105 <b>German</b> - 101, 102, 201, 202 <b>History</b> - 150, 151, 216 <b>International Cultural Studies</b> - 101BEL (Belize) <b>Philosophy</b> - 203, 210 <b>Political Science</b> - 202, 210, 211 <b>Spanish</b> - 101, 102, 201, 202
<b>Math</b> – 3 credits with grades of “C” or better	<b>Aesthetic Values</b> – 3 credits
<b>Math</b> - 105, 107A, 109, 111, 112, 115 (or BUS 105), 151, 161, 162, 215, 276, 283, 295	<b>Art</b> - <b>100A</b> , 101, 104, 105B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 211, 220 <b>Dance</b> - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D <b>English</b> - <b>208 (Communications 203), 223</b> Music classes numbered 100 and above except Music 240 <b>Music</b> - <b>100, 101, 102, 103, 192, 194, 195, 201, 202</b> <b>Theater</b> - <b>101, 102, 108, 120, 141, 142, 144, 145, 147, 148, 160, 202, 203, 210, 212, 217, 260</b>
<b>Ethics and Logic</b> – 3 credits with grades of “C” or better	<b>Physical Education</b> – 2 credits <i>One credit must be from:</i> <b>Physical Education</b> - 101A, 103, 104A, 118, 201 <i>One credit from:</i> any Physical Education or Dance course
<b>Philosophy</b> - 101, 102, 104, 202, 204, 205, 207	
<b>Social Relationships</b> – 3 credits with grades of “C” or better	
<b>Economics</b> - 101A, 102A (formerly 101, 102) <b>English</b> - 130 (Women’s Studies 101) <b>Psychology</b> - 102, 201, 202, 203, 207, 208, 209, 210 (Sociology 210) <b>Sociology</b> - 101, 102A, 202A, 203, 206, 210 (Psychology 210) <b>Women’s Studies</b> - 101 (English 130)	
<b>Computer Competency</b>	
<b>Pass MCC’s Computer Competency test, or pass any CIS course with a grade of “C” or better.</b>	
<b>Electives</b> – Minimum 27 credits, chosen from courses above, or others reflecting your major or personal interests.	

# Michigan Transfer Agreement

The Michigan Transfer Agreement Associate in Science and Arts (ASA) degrees are effective as of fall 2014.

- The following courses may be taken at Muskegon Community College to fulfill the basic general education requirements at four-year colleges that participate in the Michigan Transfer Agreement (MTA).
- A grade of “C” or better is required in each course used to fulfill requirements of the Agreement.
- A minimum of one credit hour must be completed at Muskegon Community College.
- This list reflects only current classes; the Registrar’s Office maintains a historical listing of courses that are accepted as part of the Michigan Transfer Agreement.

<p><b>English/Communication – 2 courses</b></p>	<p><b>Humanities and Fine Arts - 2 courses</b> Courses must be in two or more disciplines (subjects).</p>
<p>English – 101 One course from: English 102; Communications 101, 107, 201</p>	<p>Art - 100A, 189, 199, 202, 213 English - 200, 201, 204, 205, 206, 207, 208, (or Communications 203), 210, 211, 213, 218, 223, 225, 226, 227, 228, 231</p>
<p><b>Natural Science – 2 courses</b> Courses must be in two or more disciplines (subjects). <i>Must include at least one lab science</i></p>	<p>Foreign Language (all foreign languages count as one subject) Chinese - 101 French - 101, 102, 201, 202 German - 101, 102, 201, 202 Spanish - 101, 102, 201, 202</p>
<p><b>Lab classes:</b> Biology – any MCC Biology course with a lab Chemistry – any MCC Chemistry course with a lab Geography - 101A, 215 Geology - 101A, 102 Physical Science - 101A Physics - 201L&amp;L, 202L&amp;L, 203L&amp;L, 204L&amp;L</p> <p><b>Non-Lab:</b> Anthropology - 105D Astronomy - 101, 105A Biology - 101BEL, 200, 207 – lecture only Geology - 201</p>	<p>History - 101, 102, 150, 151, 204, 216 Humanities - 195 International Cultural Studies - 101BEL (Belize) Music - 100, 101, 102, 103, 192, 194, 195, 201, 202 Philosophy - 101, 102, 104, 202, 203, 204, 205, 207, 210 Political Science - 203 Theater - 101, 102, 108, 120, 160, 201, 202, 203, 204, 205, 217</p>
<p><b>Math – 1 course</b></p> <p>Math - 105, 107A, 109, 111, 112, 115 (or BUS 105), 151, 161, 162, 215, 276, 283, 295</p>	<p><b>Thirty credits are required for the MTA – if courses selected do not total 30 credit hours (or more), additional courses must be taken from the MTA categories on this page.</b></p> <p><b>A grade of “C” or better is required in each course used to fulfill the requirements of this Agreement.</b></p>
<p><b>Social Sciences - 2 courses</b></p> <p>Anthropology 103, 110 Economics - 101A, 102A (formerly 101, 102) English - 130 (Women’s Studies 101) Geography - 104, 105 History – 201, 202, 207, 211, 212A, 214, 220 Political Science – 111, 112A, 202, 205, 210, 211, 220 Psychology - 102, 201, 202, 203, 207, 208, 209, 210 (Sociology 210) Sociology - 101, 102A, 202A, 203, 205, 206, 210 (Psychology 210) Women’s Studies - 101 (English 130)</p>	

PROGRAMS

# Associate in Science and Arts (ASA) in Broadcasting and Multimedia/Performance with Michigan Transfer Agreement

The Michigan Transfer Agreement Associate in Science and Arts (ASA) degrees are effective as of fall 2014. A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree.

Courses numbered below 100 do not count toward the ASA.

MCC and the Michigan Transfer Agreement require a "C" or better in courses used to meet ASA and MTA requirements. Groups of courses requiring grades of "C" or better are noted on this guide. Individual courses within other groups may also require a "C" or better; these courses are noted by **boldface** type.

<b>General Education Requirements Minimum – 35 credits</b>	
<b>Communication</b> – 6 credits with grades of "C" or better	<b>Western Culture</b> - 3 credits with grades of "C" or better
<b>English</b> – 101, 102	<b>Art</b> - 198, 199, 202 <b>English</b> - 200, 201, 204, 205, 206, 210, 213, 225, 226, 227, 228, 231
<b>Science</b> – 6 credits with grades of "C" or better Courses must be in two or more disciplines (subjects). <i>Must include at least one lab science</i>	<b>History</b> - 101, 102, 204 <b>Humanities</b> - 195 <b>Political Science</b> - 203 <b>Theater</b> - 201
<b>Lab classes:</b> <b>Biology</b> – any MCC Biology course with a lab <b>Chemistry</b> – any MCC Chemistry course with a lab <b>Geography</b> - 101A, 215 <b>Geology</b> - 101A, 102 <b>Physical Science</b> - 101A <b>Physics</b> - 201L&L, 202L&L, 203L&L, 204L&L	<b>American Culture</b> – 3 credits with grades of "C" or better <b>Art</b> - 213 <b>History</b> - 201, 202, 207, 211, 212A, 214, 220 <b>Political Science</b> - 111, 205, 220
<b>Non-Lab:</b> <b>Anthropology</b> - 105D <b>Astronomy</b> - 101, 105A <b>Biology</b> - 101BEL, 200, 207 – lecture only <b>Geology</b> - 201	<b>International Culture</b> – 3 credits with grades of "C" or better <b>Anthropology</b> - 103, 110 <b>Chinese</b> - 101 <b>English</b> - 207, 211, 218 <b>French</b> - 101, 102, 201, 202 <b>Geography</b> - 104, 105 <b>German</b> - 101, 102, 201, 202 <b>History</b> - 150, 151, 216 <b>International Cultural Studies</b> - 101BEL (Belize) <b>Philosophy</b> - 203, 210 <b>Political Science</b> - 202, 210, 211 <b>Spanish</b> - 101, 102, 201, 202
<b>Math</b> – 3 credits with grades of "C" or better	<b>Aesthetic Values</b> – 3 credits with a grade of "C" or better
<b>Math</b> - 105, 107A, 109, 111, 112, 115 (or BUS 105), 151, 161, 162, 215, 276, 283, 295	<b>Theater</b> - 160
<b>Ethics and Logic</b> – 3 credits with grades of "C" or better	<b>Physical Education and Health</b> – 2 credits
<b>Philosophy</b> - 101, 102, 104, 202, 204, 205, 207	<i>One credit must be from:</i> Physical Education - 101A, 103, 104A, 118, 201 <i>One credit from:</i> any Physical Education or Dance course
<b>Social Relationships</b> – 3 credits with grades of "C" or better	
<b>Economics</b> - 101A, 102A (formerly 101, 102) <b>English</b> - 130 (Women's Studies 101) <b>Psychology</b> - 102, 201, 202, 203, 207, 208, 209, 210 (Sociology 210) <b>Sociology</b> - 101, 102A, 202A, 203, 206, 210 (Psychology 210) <b>Women's Studies</b> - 101 (English 130)	

**Broadcasting & Multimedia/Performance Requirements - 25 credits**

COM 101 – Oral Communications  
COM 102 – Mass Media  
COM 107 – Introduction to Journalism  
COM 112 – Audio Production  
COM 113 – Practical Radio  
COM 201 – Public Speaking  
COM 212 – Television Production

Choose one from the following (must complete with a grade of “C” or better):

**CIS 110** - Computer Concepts

**CIS 120A** - Intro to Computer Information Systems

Choose one from:

TH102 - Introduction to Acting

TH203 - Readers Theater

**Recommended Electives - Minimum 2 credits**

BUS 263 – Advertising Dynamics  
CIS 119PP – Introduction to Presentation Graphics  
CIS 167/GRD 167A – Intro to Internet Animation  
CIS 177DW – Introduction to HTML Editors  
CIS 187 – Multimedia Digitizing

CIS 287 – Personal Computer Digital Video Editing

COM 203/ENG 208 – Introduction to Cinema

COM 290CI – Cooperative Internship

ENG 222 – Creative Writing

GRD 120 – Introduction to Graphic Design

# Associate in Science and Arts (ASA) in Criminal Justice/Corrections with Michigan Transfer Agreement

The Michigan Transfer Agreement Associate in Science and Arts (ASA) degrees are effective as of fall 2014.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree.

Courses numbered below 100 do not count toward the ASA.

MCC and the Michigan Transfer Agreement require a "C" or better in courses used to meet ASA and MTA requirements. Groups of courses requiring grades of "C" or better are noted on this guide. Individual courses within other groups may also require a "C" or better; these courses are noted by **boldface** type.

PROGRAMS

<b>General Education Requirements Minimum – 35 credits</b>	
<b>Communication</b> – 6 credits with grades of "C" or better	<b>Western Culture</b> - 3 credits with grades of "C" or better
<b>English</b> – 101, 102	<b>Art</b> - 198, 199, 202 <b>English</b> - 200, 201, 204, 205, 206, 210, 213, 225, 226, 227, 228, 231 <b>History</b> - 101, 102, 204 <b>Humanities</b> - 195 <b>Political Science</b> - 203 <b>Theater</b> - 201
<b>Science</b> – 6 credits with grades of "C" or better Courses must be in two or more disciplines (subjects). <i>Must include at least one lab science</i>	<b>American Culture</b> – 3 credits with grades of "C" or better
<b>Lab classes:</b> <b>Biology</b> – any MCC Biology course with a lab <b>Chemistry</b> – any MCC Chemistry course with a lab <b>Geography</b> - 101A, 215 <b>Geology</b> - 101A, 102 <b>Physical Science</b> - 101A <b>Physics</b> - 201L&L, 202L&L, 203L&L, 204L&L	<b>Art</b> - 213 <b>History</b> - 201, 202, 207, 211, 212A, 214, 220 <b>Political Science</b> - 111, 205, 220
<b>Non-Lab:</b> <b>Anthropology</b> - 105D <b>Astronomy</b> - 101, 105A <b>Biology</b> - 101BEL, 200, 207 – lecture only <b>Geology</b> - 201	<b>International Culture</b> – 3 credits with grades of "C" or better <b>Anthropology</b> - 103, 110 <b>Chinese</b> - 101 <b>English</b> - 207, 211, 218 <b>French</b> - 101, 102, 201, 202 <b>Geography</b> - 104, 105 <b>German</b> - 101, 102, 201, 202 <b>History</b> - 150, 151, 216
<b>Math</b> – 3 credits with grades of "C" or better	<b>International Cultural Studies</b> - 101BEL (Belize) <b>Philosophy</b> - 203, 210 <b>Political Science</b> - 202, 210, 211 <b>Spanish</b> - 101, 102, 201, 202
<b>Math</b> - 105, 107A, 109, 111, 112, 115 (or BUS 105), 151, 161, 162, 215, 276, 283, 295	<b>Aesthetic Values</b> – 3 credits (those courses requiring a "C" or better are in bold)
<b>Ethics and Logic</b> – 3 credits with grades of "C" or better	<b>Art</b> - <b>100A</b> , 101, 104, 105B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 211, 220 <b>Dance</b> - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D <b>English</b> - <b>208 (Communications 203), 223</b> Music classes numbered 100 and above except Music 240 <b>Music</b> - <b>100, 101, 102, 103, 192, 194, 195, 201, 202</b> <b>Theater</b> - <b>101, 102, 108, 120</b> , 141, 142, 144, 145, 147, 148, <b>160, 202, 203, 210, 212, 217, 260</b>
<b>Philosophy</b> 101, 102, 104, 202, 204, 205, 207	<b>Physical Education</b> – 2 credits <u>One credit must be from:</u> <b>Physical Education</b> - 101A, 103, 104A, 118, 201 <u>One credit from:</u> any Physical Education or Dance course
<b>Social Relationships</b> – 3 credits with grades of "C" or better	
<b>Economics</b> - 101A, 102A (formerly 101, 102) <b>English</b> - 130 (Women's Studies 101) <b>Psychology</b> - 102, 201, 202, 203, 207, 208, 209, 210 (Sociology 210) <b>Sociology</b> - 101, 102A, 202A, 203, 206, 210 (Psychology 210) <b>Women's Studies</b> - 101 (English 130)	

<b>Computer Competency</b>	
Pass MCC's Computer Competency test, or pass any CIS course with a grade of "C" or better.	
<b>Criminal Justice Requirements - 15 credits Must complete all with a grade of "C" or better</b>	
CJ 101 - Introduction to Law Enforcement CJ 102 - Police Administration I CJ 104 - Criminology	CJ 109 - Crime prevention and Juvenile Delinquency CJ 201 - Criminal Law
<b>Criminal Justice Recommended Electives - 12 credits Select four classes from the following. Must complete all with a "C" or better</b>	
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

# Associate in Science and Arts (ASA) in Criminal Justice/Geospatial Technology with Michigan Transfer Agreement

The Michigan Transfer Agreement Associate in Science and Arts (ASA) degrees are effective as of fall 2014.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree.

Courses numbered below 100 do not count toward the ASA.

MCC and the Michigan Transfer Agreement require a "C" or better in courses used to meet ASA and MTA requirements. Groups of courses requiring grades of "C" or better are noted on this guide. Individual courses within other groups may also require a "C" or better; these courses are noted by **boldface** type.

<b>General Education Requirements</b> <b>Minimum – 35 credits</b>	
<b>Communication</b> – 6 credits with grades of "C" or better	<b>Western Culture</b> -3 credits with grades of "C" or better
<b>English</b> – 101, 102	<b>Art</b> - 198, 199, 202 <b>English</b> - 200, 201, 204, 205, 206, 210, 213, 225, 226, 227, 228, 231
<b>Science</b> – 6 credits with grades of "C" or better Courses must be in two or more disciplines (subjects). <i>Must include at least one lab science</i>	<b>History</b> - 101, 102, 204 <b>Humanities</b> - 195 <b>Political Science</b> - 203 <b>Theater</b> - 201
<b>Lab classes:</b>	<b>American Culture</b> – 3 credits with grades of "C" or better
<b>Biology</b> – any MCC Biology course with a lab	<b>Art</b> - 213
<b>Chemistry</b> – any MCC Chemistry course with a lab	<b>History</b> - 201, 202, 207, 211, 212A, 214, 220
<b>Geography</b> - 101A, 215	<b>Political Science</b> - 111, 205, 220
<b>Geology</b> - 101A, 102	<b>International Culture</b> – 3 credits with grades of "C" or better
<b>Physical Science</b> - 101A	<b>Anthropology</b> - 103, 110
<b>Physics</b> - 201L&L, 202L&L, 203L&L, 204L&L	<b>Chinese</b> - 101
<b>Non-Lab:</b>	<b>English</b> - 207, 211, 218
<b>Anthropology</b> - 105D	<b>French</b> - 101, 102, 201, 202
<b>Astronomy</b> - 101, 105A	<b>Geography</b> - 104, 105
<b>Biology</b> - 101BEL, 200, 207 – lecture only	<b>German</b> - 101, 102, 201, 202
<b>Geology</b> - 201	<b>History</b> - 150, 151, 216
<b>Math</b> – 3 credits with grades of "C" or better	<b>International Cultural Studies</b> - 101BEL (Belize)
<b>Math</b> - 105, 107A, 109, 111, 112, 115 (or BUS 105), 151, 161, 162, 215, 276, 283, 295	<b>Philosophy</b> - 203, 210
<b>Ethics and Logic</b> – 3 credits with grades of "C" or better	<b>Political Science</b> - 202, 210, 211
<b>Philosophy</b> - 101, 102, 104, 202, 204, 205, 207	<b>Spanish</b> - 101, 102, 201, 202
<b>Social Relationships</b> – 3 credits with grades of "C" or better	<b>Aesthetic Values</b> – 3 credits (those courses requiring a "C" or better are in bold)
<b>Economics</b> - 101A, 102A (formerly 101, 102)	<b>Art</b> - <b>100A</b> , 101, 104, 105B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 211, 220
<b>English</b> - 130 (Women's Studies 101)	<b>Dance</b> - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D
<b>Psychology</b> - 102, 201, 202, 203, 207, 208, 209, 210 (Sociology 210)	<b>English</b> - <b>208 (Communications 203), 223</b> Music classes numbered 100 and above except Music 240
<b>Sociology</b> - 101, 102A, 202A, 203, 206, 210 (Psychology 210)	<b>Music</b> - <b>100, 101, 102, 103, 192, 194, 195, 201, 202</b>
<b>Women's Studies</b> - 101 (English 130)	<b>Theater</b> - <b>101, 102, 108, 120, 141, 142, 144, 145, 147, 148, 160, 202, 203, 210, 212, 217, 260</b>
	<b>Physical Education and Health</b> – 2 credits
	<u>One credit must be from:</u> Physical Education - 101A, 103, 104A, 118, 201
	<u>One credit from:</u> any Physical Education or Dance course or HE 100A

<b>Computer Competency</b>	
<b>Pass MCC's Computer Competency test, or pass any CIS course with a grade of "C" or better.</b>	
<b>Criminal Justice – Geospatial Technology Requirements– Minimum 27 credits Must complete all with grades of "C" or better</b>	
CJ 101 – Introduction to Law Enforcement CJ 102 – Police Administration I CJ 104 – Criminology CJ 109 – Crime Prevention and Juvenile Delinquency	CJ 201 – Criminal Law GEOG 230 – Elements of Map Design GEOG 232 – Applications of Geographic Information Systems
<b>Criminal Justice – Geospatial Technology Approved Electives – Minimum 6 credits Must complete all with grades of "C" or better</b>	
MATH 215 – Probability and Statistics CIS 253A – Database Design and Implementation GEOG 101A – Physical Geography	GEOG 215 – Introduction to Weather and Climate GEOG 290CI – GIS Internship GRD 120 – Introduction to Graphic Design



# Associate in Science and Arts (ASA) in Criminal Justice/Law Enforcement with Michigan Transfer Agreement

The Michigan Transfer Agreement Associate in Science and Arts (ASA) degrees are effective as of fall 2014.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree.

Courses numbered below 100 do not count toward the ASA.

MCC and the Michigan Transfer Agreement require a “C” or better in courses used to meet ASA and MTA requirements. Groups of courses requiring grades of “C” or better are noted on this guide. Individual courses within other groups may also require a “C” or better; these courses are noted by **boldface** type.

PROGRAMS

<b>General Education Requirements Minimum – 35 credits</b>	
<b>Communication</b> – 6 credits with grades of “C” or better	<b>Western Culture</b> -3 credits with grades of “C” or better
<b>English</b> – 101, 102	<b>Art</b> - 198, 199, 202 <b>English</b> - 200, 201, 204, 205, 206, 210, 213, 225, 226, 227, 228, 231
<b>Science</b> – 6 credits with grades of “C” or better Courses must be in two or more disciplines (subjects). <i>Must include at least one lab science</i>	<b>History</b> - 101, 102, 204 <b>Humanities</b> - 195 <b>Political Science</b> - 203 <b>Theater</b> - 201
<b>Lab classes:</b>	<b>American Culture</b> – 3 credits with grades of “C” or better
<b>Biology</b> – any MCC Biology course with a lab	<b>Art</b> - 213
<b>Chemistry</b> – any MCC Chemistry course with a lab	<b>History</b> - 201, 202, 207, 211, 212A, 214, 220
<b>Geography</b> - 101A, 215	<b>Political Science</b> - 111, 205, 220
<b>Geology</b> - 101A, 102	<b>International Culture</b> – 3 credits with grades of “C” or better
<b>Physical Science</b> - 101A	<b>Anthropology</b> - 103, 110
<b>Physics</b> - 201L&L, 202L&L, 203L&L, 204L&L	<b>Chinese</b> - 101
<b>Non-Lab:</b>	<b>English</b> - 207, 211, 218
<b>Anthropology</b> - 105D	<b>French</b> - 101, 102, 201, 202
<b>Astronomy</b> - 101, 105A	<b>Geography</b> - 104, 105
<b>Biology</b> - 101BEL, 200, 207 – lecture only	<b>German</b> - 101, 102, 201, 202
<b>Geology</b> - 201	<b>History</b> - 150, 151, 216
<b>Math</b> – 3 credits with grades of “C” or better	<b>International Cultural Studies</b> - 101BEL (Belize)
<b>Math</b> - 105, 107A, 109, 111, 112, 115 (or BUS 105), 151, 161, 162, 215, 276, 283, 295	<b>Philosophy</b> - 203, 210
<b>Ethics and Logic</b> – 3 credits with grades of “C” or better	<b>Political Science</b> - 202, 210, 211
<b>Philosophy</b> - 101, 102, 104, 202, 204, 205, 207	<b>Spanish</b> - 101, 102, 201, 202
<b>Social Relationships</b> – 3 credits with grades of “C” or better	<b>Aesthetic Values</b> – 3 credits (those courses requiring a “C” or better are in bold)
<b>Economics</b> - 101A, 102A (formerly 101, 102)	<b>Art</b> - <b>100A</b> , 101, 104, 105B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 211, 220
<b>English</b> - 130 (Women’s Studies 101)	<b>Dance</b> - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D
<b>Psychology</b> - 102, 201, 202, 203, 207, 208, 209, 210 (Sociology 210)	<b>English - 208 (Communications 203), 223</b>
<b>Sociology</b> - 101, 102A, 202A, 203, 206, 210 (Psychology 210)	Music classes numbered 100 and above except Music 240
<b>Women’s Studies</b> - 101 (English 130)	<b>Music</b> - <b>100, 101, 102, 103, 192, 194, 195, 201, 202</b>
	<b>Theater</b> - <b>101, 102, 108, 120</b> , 141, 142, 144, 145, 147, 148, <b>160, 202</b> , 203, 210, 212, 217, 260
	<b>Physical Education and Health</b> – 2 credits
	<u>One credit must be from:</u>
	<b>Physical Education</b> - 101A, 103, 104A, 118, 201
	<u>One credit from:</u> any Physical Education or Dance course or HE 100A

**Computer Competency**

**Pass MCC's Computer Competency test, or pass any CIS class with a grade of "C" or better.**

**Criminal Justice - Law Enforcement Requirements – 15 Credits**

**Must complete all with grades of "C" or better**

CJ 101 – Introduction to Law Enforcement  
CJ 102 – Police Administration I  
CJ 104 – Criminology

CJ 109 – Crime Prevention and Juvenile Delinquency  
CJ 201 – Criminal Law

**Criminal Justice - Law Enforcement Approved Electives**

**Minimum – 12 Credits**

**Must complete all with grades of "C" or better**

CJ 202 – Police Administration II  
CJ 204 – Criminal Investigation  
CJ 205 – Interrogation and Case Preparation

CJ 206 – Evidence and Criminal Procedure  
CJ 207 – Police and Community Relations  
CJ 208 – Police Science Laboratory I

# Associate in Science and Arts (ASA) in Early Childhood Education with Michigan Transfer Agreement

The Michigan Transfer Agreement Associate in Science and Arts (ASA) degrees are effective as of fall 2014.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree.

Courses numbered below 100 do not count toward the ASA.

MCC and the Michigan Transfer Agreement require a “C” or better in courses used to meet ASA and MTA requirements. Groups of courses requiring grades of “C” or better are noted on this guide. Individual courses within other groups may also require a “C” or better; these courses are noted by **boldface** type.

PROGRAMS

<b>General Education Requirements Minimum – 36 credits</b>	
<b>Communication</b> – 6 credits with grades of “C” or better	<b>Western Culture</b> -3 credits with grades of “C” or better
<b>English</b> – 101, 102	<b>Art</b> - 198, 199, 202 <b>English</b> – 200, 201, 204, 205, 206, 210, 213, 225, 226, 227, 228, 231
<b>Science</b> – 6 credits with grades of “C” or better Courses must be in two or more disciplines (subjects). <i>Must include at least one lab science</i>	<b>History</b> - 101, 102, 204 <b>Humanities</b> - 195 <b>Political Science</b> - 203 <b>Theater</b> - 201
<b>Lab classes:</b> <b>Biology</b> – any MCC Biology course with a lab <b>Chemistry</b> – any MCC Chemistry course with a lab <b>Geography</b> - 101A, 215 <b>Geology</b> - 101A, 102 <b>Physical Science</b> - 101A <b>Physics</b> - 201L&L, 202L&L, 203L&L, 204L&L	<b>American Culture</b> – 3 credits with grades of “C” or better <b>Art</b> - 213 <b>History</b> - 201, 202, 207, 211, 212A, 214, 220 <b>Political Science</b> - 111, 205, 220
<b>Non-Lab:</b> <b>Anthropology</b> - 105D <b>Astronomy</b> - 101, 105A <b>Biology</b> - 101BEL, 200, 207 – lecture only <b>Geology</b> - 201	<b>International Culture</b> – 3 credits with grades of “C” or better <b>Anthropology</b> - 103, 110 <b>Chinese</b> - 101 <b>English</b> - 207, 211, 218 <b>French</b> - 101, 102, 201, 202 <b>Geography</b> - 104, 105 <b>German</b> - 101, 102, 201, 202 <b>History</b> - 150, 151, 216 <b>International Cultural Studies</b> - 101BEL (Belize) <b>Philosophy</b> - 203, 210 <b>Political Science</b> - 202, 210, 211 <b>Spanish</b> - 101, 102, 201, 202
<b>Math</b> – 3 credits with grades of “C” or better	<b>Aesthetic Values</b> – 3 credits (those courses requiring a “C” or better are in bold)
<b>Math</b> - 105, 107A, 109, 111, 112, 115 (or BUS 105), 151, 161, 162, 215, 276, 283, 295	<b>Art</b> - <b>100A</b> , 104, 105B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 211, 220 <b>Dance</b> - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D <b>English</b> - <b>208 (Communications 203), 223</b> Music classes numbered 100 and above except Music 240 <b>Music</b> - <b>100, 101, 102, 103, 192, 194, 195, 201, 202</b> <b>Theater</b> - <b>101, 102, 108, 120, 141, 142, 144, 145, 147, 148, 160, 202, 203, 210, 212, 217, 260</b>
<b>Ethics and Logic</b> – 3 credits with grades of “C” or better	<b>Physical Education and Health</b> – 3 credits
<b>Philosophy</b> - 101, 102, 104, 202, 204, 205, 207	HE 100A - Community First Aid and Safety <u>One credit must be from:</u> Physical Education - 101A, 103, 104A, 118, 201
<b>Social Relationships</b> – 3 credits with grades of “C” or better	
<b>Economics</b> - 101A, 102A (formerly 101, 102) <b>English</b> - 130 (Women’s Studies 101) <b>Psychology</b> - 102, 201, 202, 203, 207, 208, 209, 210 (Sociology 210) <b>Sociology</b> - 101, 102A, 202A, 203, 206, 210 (Psychology 210) <b>Women’s Studies</b> - 101 (English 130)	

### Computer Competency

Pass MCC's Computer Competency test, or pass any CIS class with a grade of "C" or better.

### Early Childhood Education Requirements 26 Credits

Must complete all with grades of "C" or better

ED 109 – Parent-Child Connection  
ED 111 – Introduction to Education of Young Children  
ED 120B – Early Childhood Education  
ED 211 – Behavior Management  
ED 220A – Early Childhood Assessment

ED 230 – Children's Literature  
One of the following:  
ED 225 – Child Development (Age 0-8)  
250 – Human Growth and Learning  
ED 210 – Child Care and Guidance  
ED 252A – Child Development Practicum

### Suggested Electives - 3 Credits

HE 100A  
PEA - 101A, 103, 104A, 118, 201  
Choice of any ED course

# Associate in Science and Arts (ASA) in Engineering with Michigan Transfer Agreement

The Michigan Transfer Agreement Associate in Science and Arts (ASA) degrees are effective as of fall 2014.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree.

Courses numbered below 100 do not count toward the ASA.

MCC and the Michigan Transfer Agreement require a “C” or better in courses used to meet ASA and MTA requirements. Groups of courses requiring grades of “C” or better are noted on this guide. Individual courses within other groups may also require a “C” or better; these courses are noted by boldface type.

PROGRAMS

<b>General Education Requirements Minimum – 35 credits</b>	
<b>Communication</b> – 6 credits with grades of “C” or better	<b>Western Culture</b> - 3 credits with grades of “C” or better
<b>English</b> – 101, 102	<b>Art</b> - 198, 199, 202 <b>English</b> - 200, 201, 210, 213, 225, 226, 227, 228, 231
<b>Science</b> – 6 credits with grades of “C” or better Courses must be in two or more disciplines (subjects). Must include <b>Physics 203L&amp;L</b> and at least on of the following: <b>Lab classes:</b> <b>Biology</b> – any MCC Biology course with a lab <b>Chemistry</b> – any MCC Chemistry course with a lab <b>Geography</b> - 101A, 215 <b>Geology</b> - 101A, 102 <b>Physical Science</b> - 101A	<b>History</b> - 101, 102, 204 <b>Humanities</b> - 195 <b>Political Science</b> - 203 <b>Theater</b> - 201
<b>Non-Lab:</b> <b>Anthropology</b> - 105D <b>Astronomy</b> - 101, 105A <b>Biology</b> - 101BEL, 200, 207 – lecture only <b>Geology</b> - 201	<b>American Culture</b> – 3 credits with grades of “C” or better <b>Art</b> - 213 <b>History</b> - 201, 202, 207, 211, 212A, 214, 220 <b>Political Science</b> - 111, 205, 220
<b>Math</b> – 3 credits with grades of “C” or better	<b>International Culture</b> – 3 credits with grades of “C” or better
<b>Math</b> - 162 or higher	<b>Anthropology</b> - 103, 110 <b>Chinese</b> - 101 <b>English</b> - 207, 211, 218 <b>French</b> - 101, 102, 201, 202 <b>History</b> - 150, 151, 216 <b>International Cultural Studies</b> - 101BEL (Belize)
<b>Ethics and Logic</b> – 3 credits with grades of “C” or better	<b>Philosophy</b> - 203, 210 <b>Political Science</b> - 202, 210, 211 <b>Spanish</b> - 101, 102, 201, 202
<b>Philosophy</b> - 101, 102, 104, 202, 204, 205, 207	<b>Aesthetic Values</b> – 3 credits (those courses requiring a “C” or better are in bold)
<b>Social Relationships</b> – 3 credits with grades of “C” or better	<b>Art</b> - <b>100A</b> , 104, 105B, 107, 108, 109, 117, 204B, 207, 208, 209, 211, 220 <b>English</b> - <b>208 (Communications 203), 223</b> <b>Theater</b> - <b>101, 102, 108, 120, 141, 142, 144, 145, 147, 148, 160, 202, 203, 210, 212, 217, 260</b>
<b>Economics</b> - 101A, 102A (formerly 101, 102) <b>English</b> - 130 (Women’s Studies 101) <b>Psychology</b> - 102, 201, 210 (Sociology 210) <b>Sociology</b> - 101, 102A, 203, 210 (Psychology 210) <b>Women’s Studies</b> - 101 (English 130)	<b>Physical Education and Health</b> – 2 credits <u>One credit must be from:</u> Physical Education - 101A, 103, 104A, 118, 201 <u>One credit from:</u> any Physical Education or Dance course or Health Education course

## Computer Competency

**Pass MCC's Computer Competency test, or pass any CIS class with a grade of "C" or better.**

### Engineering Requirements – 19 Credits

**Must complete all with grades of "C" or better**

MATH 283 – Calculus III

ENGR 202 – Statics

MATH 295 – Differential Equations

ENGR 204 – Engineering Dynamics

PHYS 204L&L – Engineering Physics II

### Engineering Electives - Minimum 27 credits

**Must complete all with grades of "C" or better**

CAD 110 – Intro to Computer-Aided Drafting

CIS 162 – Visual C# Programming

CHEM 101A and CHEM 101LEC – General and Inorganic  
Chemistry

ENGR 105 – Introduction to Engineering

MATH 215 – Probability and Statistics for Engineering

CHEM 102A and CHEM 102LEC – General and Inorganic  
Chemistry

GEOL 101A – Intro to Physical Geology

GEOL 102 – Intro to Earth History

# Associate in Science and Arts (ASA) in Health Science with Michigan Transfer Agreement

The Michigan Transfer Agreement Associate in Science and Arts (ASA) degrees are effective as of fall 2014.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree.

Courses numbered below 100 do not count toward the ASA.

MCC and the Michigan Transfer Agreement require a "C" or better in courses used to meet ASA and MTA requirements. Groups of courses requiring grades of "C" or better are noted on this guide.

PROGRAMS

<b>General Education Requirements Minimum – 35 credits</b>	
<b>Communication</b> – 6 credits with grades of "C" or better	<b>American Culture</b> – 3 credits with grades of "C" or better
<b>English</b> – 101, 102	<b>History</b> - 201, 202, 207, 211, 212A, 214, 220 <b>Political Science</b> - 111, 205, 220
<b>Science</b> – 17 credits with grades of "C" or better Courses must be in two or more disciplines (subjects). <i>Must include at least one lab science</i>	<b>International Culture</b> – 3 credits with grades of "C" or better
<b>Lab classes:</b> <b>Biology</b> – 105L&L, 106L&L, 207LEC and 207A <b>Choose one:</b> <b>Chemistry</b> 100LEC and 100A <b>Chemistry</b> 109LEC and 109A	<b>Anthropology</b> - 103, 110 <b>Chinese</b> - 101 <b>English</b> - 207, 211, 218 <b>French</b> - 101, 102, 201, 202 <b>Geography</b> - 104, 105 <b>German</b> - 101, 102, 201, 202 <b>History</b> - 150, 151, 216 <b>International Cultural Studies</b> - 101BEL (Belize)
<b>Math</b> – 3 credits with grades of "C" or better	<b>Philosophy</b> - 203, 210 <b>Political Science</b> - 202, 210, 211 <b>Spanish</b> - 101, 102, 201, 202
<b>Math</b> - 105, 107A, 109, 111, 112, 115 (or BUS 105), 151, 161, 162, 215, 276, 283, 295	<b>Aesthetic Values</b> – 3 credits
<b>Ethics and Logic</b> – 3 credits with grades of "C" or better	<b>Art</b> - 100A, 101, 104, 105B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 211, 220 <b>Dance</b> - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D <b>English</b> - 208 (Communications 203), 223 Music classes numbered 100 and above except Music 240 <b>Music</b> - 100, 101, 102, 103, 192, 194, 195, 201, 202 <b>Theater</b> - 101, 102, 108, 120, 141, 142, 144, 145, 147, 148, 160, 202, 203, 210, 212, 217, 260
<b>Philosophy</b> - 204	<b>Physical Education and Health</b> – 2 credits <b>Physical Education</b> - 101A and one credit from any Physical Education or Dance course
<b>Social Relationships</b> – 3 credits with grades of "C" or better	
<b>Psychology</b> - 201	
<b>Western Culture</b> - 3 credits with grades of "C" or better	
<b>Art</b> - 198, 199, 202 <b>English</b> - 200, 201, 204, 205, 206, 210, 213, 225, 226, 227, 228, 231 <b>History</b> - 101, 102, 204 <b>Humanities</b> - 195 <b>Political Science</b> - 203 <b>Theater</b> - 201	
<b>Computer Competency</b>	
Pass MCC's Computer Competency test, or pass any CIS course with a grade of "C" or better.	
<b>Electives - Minimum 15 credits</b>	
Choose additional courses from General Education courses listed above, or other courses related to your health science major.	

# Associate in Science and Arts (ASA) in Interactive Media and Game Design with Michigan Transfer Agreement

The Michigan Transfer Agreement Associate in Science and Arts (ASA) degrees are effective as of fall 2014.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the ASA Degree.

Courses numbered below 100 do not count toward the ASA.

MCC and the Michigan Transfer Agreement require a “C” or better in courses used to meet ASA and MTA requirements. Groups of courses requiring grades of “C” or better are noted on this guide. Individual courses within other groups may also require a “C” or better; these courses are noted by boldface type.

<b>General Education Requirements Minimum – 35 credits</b>	
<b>Communication</b> – 6 credits with grades of “C” or better	<b>Social Relationships</b> – 3 credits with grades of “C” or better
<b>English</b> – 101, 102	Economics – 101A, 102A (formerly 101, 102) Psychology – 102, 201 Sociology – 101
<b>Science</b> – 6 credits with grades of “C” or better Courses must be in two or more disciplines (subjects). <i>Must include at least one lab science</i>	<b>Western Culture</b> - 3 credits with grades of “C” or better
<b>Lab classes:</b> <b>Biology</b> – any MCC Biology course with a lab <b>Chemistry</b> – any MCC Chemistry course with a lab <b>Geography</b> - 101A, 215 <b>Geology</b> - 101A, 102 <b>Physical Science</b> - 101A <b>Physics</b> - 201L&L, 202L&L, 203L&L, 204L&L	<b>Art</b> – 198 <b>English</b> – 200, 204 <b>History</b> – 101, 102 <b>Humanities</b> – 195 <b>Political Science</b> – 203
<b>Non-Lab:</b> <b>Anthropology</b> - 105D <b>Astronomy</b> - 101, 105A <b>Biology</b> - 101BEL, 200, 207 – lecture only <b>Geology</b> - 201	<b>American Culture</b> – 3 credits with grades of “C” or better <b>Art</b> - 213 <b>History</b> - 201, 202 <b>Political Science</b> - 111
<b>Math</b> – 3 credits with grades of “C” or better	<b>International Culture</b> – 3 credits with grades of “C” or better
<b>Math</b> - 115	<b>Geography</b> – 104, 105 <b>History</b> – 150, 151 <b>Philosophy</b> – 203, 210 <b>Political Science</b> – 211
<b>Ethics and Logic</b> – 3 credits with grades of “C” or better	<b>Aesthetic Values</b> – 3 credits
<b>Philosophy</b> - 104, 202	<b>English</b> - 208 (Communications 203) <b>Theater</b> - 101, 102, 160
<b>Computer Competency</b>	
Pass MCC’s Computer Competency test, or pass CIS 120A with a grade of “C” or better.	
<b>Interactive Media and Game Design Requirements –24 credits</b>	
ART 198 – Art History I BUS 127 – Human Relations CIS 124 – Intro to Game Development CIS 284 – Interactive Media and Game Design One of the following: ENG 211 – World Mythology ENG 218 – Popular Literary Genres: Horror, Fantasy and Science Fiction	ENG 222 – Creative Writing One of the following: GEOG 105 – World Regional Geography GEOG 230 – Elements of Map Design GRD 120 – Introduction to Graphic Design
<b>Electives – Minimum 2 credits</b>	
Choose additional course(s) from General Education courses listed above, or other course(s) related to your major.	



# 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20-22 CR. HRS.</b>	
BCOM 101		3	COM 113 .....2
<i>BUSINESS &amp; TECHNICAL COMMUNICATIONS</i>			<i>PRACTICAL RADIO</i>
BCOM 102		3	COM 212 .....3
<i>ADVANCED BUS &amp; TECH COMMUNICATIONS</i>			<i>TELEVISION PRODUCTION</i>
Choose One (1) Course From:		3-4	COM 290CI* .....3
BUS 126	BUSINESS MATH		<i>COOPERATIVE INTERNSHIP</i>
MATH 109	COLLEGE ALGEBRA WITH APPLICATIONS		GR 160 .....3
Choose One (1) Course From:		3	<i>DIGITAL IMAGING</i>
BUS 127	HUMAN RELATIONS		GRD 120 .....3
BUS 166	QUALITY CUSTOMER SERVICE		<i>INTRODUCTION TO GRAPHIC DESIGN</i>
Choose One (1) Course From:		3	TH 120 .....3
CIS 110	COMPUTER CONCEPTS		<i>TECHNICAL THEATER I</i>
CIS 120A	INTRO TO COMPUTER INFORMATION SYSTEMS		
Choose One (1) Course From:		3-4	<b>RECOMMENDED ELECTIVES</b> <b>5-7 CR. HRS.</b>
GEOG 104	CULTURAL GEOGRAPHY		BUS 200 .....3
PHIL 205	BUSINESS ETHICS		<i>INTERNATIONAL BUSINESS</i>
PSCI 111	INTRO TO AMERICAN GOVERNMENT		BUS 263 .....3
PSCI 211	COMPARATIVE GOVERNMENTS		<i>ADVERTISING DYNAMICS</i>
PSYC 102	APPLIED PSYCHOLOGY		COM 107 .....3
PSYC 201	GENERAL PSYCHOLOGY		<i>INTRODUCTION TO JOURNALISM</i>
PEA/DNC		2	COM 201 .....3
<i>ONE CREDIT HOUR FROM PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT OF CHOICE</i>			<i>PUBLIC SPEAKING</i>
			COM 202 .....3
			<i>HUMAN COMMUNICATION</i>
			COM 203/ENG 208 .....3
			<i>INTRODUCTION TO CINEMA</i>
			ENG 221 .....3
			<i>ADVANCED WRITING</i>
			ENG 222 .....3
			<i>CREATIVE WRITING</i>
			<b>TOTAL 65</b>
<b>BROADCASTING AND MULTIMEDIA/TECHNICAL CORE REQUIREMENTS</b>		<b>38 CR. HRS.</b>	
CIS 109		3	
<i>PERSONAL COMPUTER MAINTENANCE</i>			
CIS 143		3	
<i>INTRODUCTION TO LOCAL AREA NETWORKS</i>			
CIS 177DW		1	
<i>INTRODUCTION TO HTML EDITORS</i>			
CIS 187		3	
<i>MULTIMEDIA DIGITIZING</i>			
CIS 287		3	
<i>PERSONAL COMPUTER DIGITAL VIDEO EDITING</i>			
COM 101		3	
<i>ORAL COMMUNICATIONS</i>			
COM 102		3	
<i>MASS MEDIA</i>			
COM 112		2	
<i>AUDIO PRODUCTION</i>			

\*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.

<b>CERTIFICATE REQUIREMENTS</b>	<b>17 CR. HRS.</b>
CIS 187 .....3	3
<i>MULTIMEDIA DIGITIZING</i>	
CIS 287 .....3	3
<i>PERSONAL COMPUTER DIGITAL VIDEO EDITING</i>	
COM 112.....2	2
<i>AUDIO PRODUCTION</i>	
COM 212 .....3	3
<i>TELEVISION PRODUCTION</i>	
GR 160 .....3	3
<i>DIGITAL IMAGING</i>	
Choose One (1) Course From:.....3	3
CIS 110 <i>COMPUTER CONCEPTS</i>	
CIS 120A <i>INTRO TO COMPUTER</i>	
<i>INFORMATION SYSTEMS</i>	
<b>TOTAL 17</b>	

## How much will this program cost me?\*

**Tuition and fees: \$2,547**  
**Books and supplies: \$645**  
**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 2013-2014, \*% finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*%.**

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

[www.muskegoncc.edu/Include/GE/Automotive\\_Technician\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Automotive_Technician_Certificate.html)

**PROGRAMS**

# 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).

<b>MCC CORRECTIONS PROGRAM</b>	<b>15 CR. HRS.</b>
CJ 250.....	3
<i>INTRODUCTION TO CORRECTIONS</i>	
CJ 251A.....	3
<i>LEGAL ISSUES IN CORRECTIONS</i>	
CJ 252A.....	3
<i>CORRECTIONAL INSTITUTIONS/FACILITIES</i>	
CJ 257.....	3
<i>CLIENT RELATIONS IN CORRECTIONS</i>	
CJ 258A.....	3
<i>CLIENT GROWTH AND DEVELOPMENT</i>	
<b>TOTAL 15</b>	

*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).

### How much will this program cost me?\*

**Tuition and fees: \$1,810**  
**Books and supplies: \$845**  
**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 2013-2014, \*% finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*%.**

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

[www.muskegoncc.edu/Include/GE/Automotive\\_Technician\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Automotive_Technician_Certificate.html)

# Associate in Applied Science

## Criminal Justice/Corrections

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20-22 CR. HRS.</b>	<b>CORRECTIONS REQUIREMENTS</b>		<b>15 CR. HRS.</b>
BCOM 101		3	CJ 250		3
<i>BUSINESS &amp; TECHNICAL COMMUNICATIONS</i>			<i>INTRODUCTION TO CORRECTIONS</i>		
BCOM 102		3	CJ 251A		3
<i>ADVANCED BUS &amp; TECH COMMUNICATIONS</i>			<i>LEGAL ISSUES IN CORRECTIONS</i>		
Choose One (1) Course From:		3-4	CJ 252A		3
*BUS 105	BUSINESS STATISTICS		<i>CORRECTIONAL INSTITUTIONS/FACILITIES</i>		
BUS 126	BUSINESS MATH		CJ 257		3
MATH 109	COLLEGE ALGEBRA WITH APPLICATIONS		<i>CLIENT RELATIONS IN CORRECTIONS</i>		
*MATH 115	PROBABILITY AND STATISTICS		CJ 258A		3
Choose One (1) Course From:		3	<i>CLIENT GROWTH AND DEVELOPMENT</i>		
BUS 127	HUMAN RELATIONS		<b>RECOMMENDED ELECTIVES</b>		<b>10-12 CR. HRS.</b>
COM 101	ORAL COMMUNICATIONS		CJ 110		3
Choose One (1) Course From:		3-4	<i>DEFENSIVE TACTICS</i>		
GEOG 104	CULTURAL GEOGRAPHY		CJ 112		1
PHIL 205	BUSINESS ETHICS		<i>EMERGENCY VEHICLE OPERATIONS</i>		
PSCI 111	INTRO TO AMERICAN GOVERNMENT		CJ 120		2
PSCI 211	COMPARATIVE GOVERNMENTS		<i>FIREARMS CERTIFICATION</i>		
PSYC 102	APPLIED PSYCHOLOGY		CJ 122		3
PSYC 201	GENERAL PSYCHOLOGY		<i>THE POLICE PATROL FUNCTION</i>		
Choose One (1) Course From:		3	CJ 123		3
CIS 110	COMPUTER CONCEPTS		<i>TRAFFIC ENFORCEMENT</i>		
CIS 120A	INTRO TO COMPUTER INFORMATION SYSTEMS		CJ 130		3
PEA/DNC		2	<i>TACTICAL COMMUNICATION</i>		
<i>ONE CREDIT HOUR FROM PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT OF CHOICE</i>			CJ 193		1
			<i>HAZ-MAT COMMUNICATIONS</i>		
<b>CRIMINAL JUSTICE REQUIREMENTS</b>		<b>15 CR. HRS.</b>	CJ 202		3
CJ 101		3	<i>POLICE ADMINISTRATION II</i>		
<i>INTRO TO LAW ENFORCEMENT</i>			CJ 204		3
CJ 102		3	<i>CRIMINAL INVESTIGATIONS</i>		
<i>POLICE ADMINISTRATION I</i>			CJ 205		3
CJ 104		3	<i>INTERROGATION AND CASE PREPARATION</i>		
<i>CRIMINOLOGY</i>			CJ 206		3
CJ 109		3	<i>EVIDENCE AND CRIMINAL PROCEDURE</i>		
<i>CRIME PREVENTION AND JUVENILE DELINQUENCY</i>			CJ 207		3
CJ 201		3	<i>POLICE AND COMMUNITY RELATIONS</i>		
<i>CRIMINAL LAW</i>			CJ 208		3
			<i>POLICE SCIENCE LABORATORY I</i>		
			CJ 298		3
			<i>INSTRUCTOR SKILL DEVELOPMENT</i>		
					<b>TOTAL 62</b>

*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

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20-22 CR. HRS.</b>	<b>GEOSPATIAL TECHNOLOGY REQUIREMENTS</b>		<b>15-17 CR. HRS.</b>
BCOM 101		3	GEORG 230		3
<i>BUSINESS &amp; TECHNICAL COMMUNICATIONS</i>			<i>ELEMENTS OF MAP DESIGN</i>		
BCOM 102		3	GEORG 231		3
<i>ADVANCED BUS &amp; TECH COMMUNICATIONS</i>			<i>INTRO TO GEOGRAPHIC INFORMATION SYSTEMS</i>		
Choose One (1) Course From:		3-4	GEORG 232		3
*BUS 105	BUSINESS STATISTICS		<i>APPLICATIONS OF GEOGRAPHIC INFO SYSTEMS</i>		
BUS 126	BUSINESS MATH		Choose Two (2) Courses From:		6-8
MATH 109	COLLEGE ALGEBRA WITH APPLICATIONS		BUS 105	BUSINESS STATISTICS	
*MATH 115	PROBABILITY AND STATISTICS		CAD 100	INTRODUCTION TO DRAFTING	
Choose One (1) Course From:		3	CIS 253A	DATABASE DESIGN AND IMPLEMENTATION	
BUS 127	HUMAN RELATIONS		GEORG 101A	PHYSICAL GEOGRAPHY	
COM 101	ORAL COMMUNICATIONS		GEORG 215	INTRO TO WEATHER AND CLIMATE	
Choose One (1) Course From:		3-4	GEORG 290CI	COOPERATIVE INTERNSHIP PROGRAM	
GEORG 104	CULTURAL GEOGRAPHY		GRD 120	INTRODUCTION TO GRAPHIC DESIGN	
PHIL 205	BUSINESS ETHICS		MATH 115	PROBABILITY AND STATISTICS	
PSCI 111	INTRO TO AMERICAN GOVERNMENT		<b>RECOMMENDED ELECTIVES</b> <b>12 CR. HRS.</b>		
PSCI 211	COMPARATIVE GOVERNMENTS		CJ 110		3
PSYC 102	APPLIED PSYCHOLOGY		<i>DEFENSIVE TACTICS</i>		
PSYC 201	GENERAL PSYCHOLOGY		CJ 112		1
Choose One (1) Course From:		3	<i>EMERGENCY VEHICLE OPERATIONS</i>		
CIS 110	COMPUTER CONCEPTS		CJ 120		2
CIS 120A	INTRO TO COMPUTER INFORMATION SYSTEMS		<i>FIREARMS CERTIFICATION</i>		
PEA/DNC		2	CJ 122		3
<i>ONE CREDIT HOUR FROM PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT OF CHOICE</i>			<i>THE POLICE PATROL FUNCTION</i>		
<b>CRIMINAL JUSTICE REQUIREMENTS</b>		<b>15 CR. HRS.</b>	CJ 123		3
CJ 101		3	<i>TRAFFIC ENFORCEMENT</i>		
<i>INTRO TO LAW ENFORCEMENT</i>			CJ 130		3
CJ 102		3	<i>TACTICAL COMMUNICATION</i>		
<i>POLICE ADMINISTRATION I</i>			CJ 193		1
CJ 104		3	<i>HAZ-MAT COMMUNICATIONS</i>		
<i>CRIMINOLOGY</i>			CJ 208		3
CJ 109		3	<i>POLICE SCIENCE LABORATORY I</i>		
<i>CRIME PREVENTION AND JUVENILE DELINQUENCY</i>			CJ 250		3
CJ 201		3	<i>INTRODUCTION TO CORRECTIONS</i>		
<i>CRIMINAL LAW</i>			CJ 251A		3
			<i>LEGAL ISSUES IN CORRECTIONS</i>		
			CJ 252A		3
			<i>CORRECTIONAL INSTITUTIONS/FACILITIES</i>		
			CJ 257		3
			<i>CLIENT RELATIONS IN CORRECTIONS</i>		
			CJ 258A		3
			<i>CLIENT GROWTH AND DEVELOPMENT</i>		
			CJ 298		3
			<i>INSTRUCTOR SKILL DEVELOPMENT</i>		
					<b>TOTAL 62</b>

*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/Law Enforcement

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20-22 CR. HRS.</b>	<b>LAW ENFORCEMENT REQUIREMENTS</b>		<b>15 CR. HRS.</b>
BCOM 101		3	CJ 202		3
<i>BUSINESS &amp; TECHNICAL COMMUNICATIONS</i>			<i>POLICE ADMINISTRATION II</i>		
BCOM 102		3	CJ 204		3
<i>ADVANCED BUS &amp; TECH COMMUNICATIONS</i>			<i>CRIMINAL INVESTIGATIONS</i>		
Choose One (1) Course From:		3-4	CJ 205		3
*BUS 105	<i>BUSINESS STATISTICS</i>		<i>INTERROGATION AND CASE PREPARATION</i>		
BUS 126	<i>BUSINESS MATH</i>		CJ 206		3
MATH 109	<i>COLLEGE ALGEBRA WITH APPLICATIONS</i>		<i>EVIDENCE AND CRIMINAL PROCEDURE</i>		
*MATH 115	<i>PROBABILITY AND STATISTICS</i>		CJ 207		3
Choose One (1) Course From:		3	<i>POLICE AND COMMUNITY RELATIONS</i>		
BUS 127	<i>HUMAN RELATIONS</i>		<b>RECOMMENDED ELECTIVES</b>		
COM 101	<i>ORAL COMMUNICATIONS</i>				<b>10-12 CR. HRS.</b>
Choose One (1) Course From:		3-4	CJ 110		3
GEOG 104	<i>CULTURAL GEOGRAPHY</i>		<i>DEFENSIVE TACTICS</i>		
PHIL 205	<i>BUSINESS ETHICS</i>		CJ 112		1
PSCI 111	<i>INTRO TO AMERICAN GOVERNMENT</i>		<i>EMERGENCY VEHICLE OPERATIONS</i>		
PSCI 211	<i>COMPARATIVE GOVERNMENTS</i>		CJ 120		2
PSYC 102	<i>APPLIED PSYCHOLOGY</i>		<i>FIREARMS CERTIFICATION</i>		
PSYC 201	<i>GENERAL PSYCHOLOGY</i>		CJ 122		3
Choose One (1) Course From:		3	<i>THE POLICE PATROL FUNCTION</i>		
CIS 110	<i>COMPUTER CONCEPTS</i>		CJ 123		3
CIS 120A	<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>TRAFFIC ENFORCEMENT</i>		
PEA/DNC		2	CJ 130		3
<i>ONE CREDIT HOUR FROM PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT OF CHOICE</i>			<i>TACTICAL COMMUNICATION</i>		
			CJ 193		1
			<i>HAZ-MAT COMMUNICATIONS</i>		
			CJ 208		3
			<i>POLICE SCIENCE LABORATORY I</i>		
			CJ 250		3
			<i>INTRODUCTION TO CORRECTIONS</i>		
			CJ 251A		3
			<i>LEGAL ISSUES IN CORRECTIONS</i>		
			CJ 252A		3
			<i>CORRECTIONAL INSTITUTIONS/FACILITIES</i>		
			CJ 257		3
			<i>CLIENT RELATIONS IN CORRECTIONS</i>		
			CJ 258A		3
			<i>CLIENT GROWTH AND DEVELOPMENT</i>		
			CJ 298		3
			<i>INSTRUCTOR SKILL DEVELOPMENT</i>		
			<b>TOTAL 62</b>		

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

## 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20 CR. HRS.</b>	<b>DEGREE REQUIREMENTS</b>	<b>29 CR. HRS.</b>
BCOM 101.....	3	ACC 201 .....	4
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>PRINCIPLES OF ACCOUNTING</i>	
BCOM 102.....	3	BUS 262/COM 262.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>SOCIAL MEDIA</i>	
CIS 120A.....	3	COM 212 .....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>TELEVISION PRODUCTION</i>	
PHIL 205.....	3	GRD 120 .....	3
<i>BUSINESS ETHICS</i>		<i>INTRODUCTION TO GRAPHIC DESIGN</i>	
Choose One (1) Course From: .....	3	PSCI 111 .....	4
*BUS 105 <i>BUSINESS STATISTICS</i>		<i>INTRODUCTION TO AMERICAN GOVERNMENT</i>	
*MATH 115 <i>PROBABILITY AND STATISTICS</i>		PSCI 205 .....	3
Choose One (1) Course From: .....	3	<i>CONTEMPORARY ISSUES</i>	
BUS 127 <i>HUMAN RELATIONS</i>		PSCI 290CI .....	3
COM 101 <i>ORAL COMMUNICATIONS</i>		<i>CAMPAIGN COOPERATIVE INTERNSHIP</i>	
PEA/DNC .....	2	Choose One (1) Course From: .....	3
<i>ONE CREDIT HOUR FROM PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT OF CHOICE</i>		CIS 287 <i>PERSONAL COMPUTER</i>	
		<i>DIGITAL VIDEO EDITING</i>	
		COM 102 <i>MASS MEDIA</i>	
		Choose Three (3) Courses From: .....	3
		CIS 101EW <i>INTRO TO ELECTRONIC SPREADSHEETS</i>	
		CIS 102EW <i>INTERM ELECTRONIC SPREADSHEETS</i>	
		CIS 153A <i>DATABASE MANAGEMENT - ACCESS</i>	
		CIS 177DW <i>INTRODUCTION TO HTML EDITORS</i>	
		GRD 100ID <i>INTRODUCTION TO INDESIGN</i>	
		GRD 100IL <i>INTRODUCTION TO ILLUSTRATOR</i>	
		GRD 100PS <i>INTRODUCTION TO PHOTOSHOP</i>	
		<b>TOTAL 62</b>	
<b>ENTREPRENEUR CORE REQUIREMENTS</b>	<b>13 CR. HRS.</b>		
BUS 104.....	3		
<i>ACCOUNTING FOR BUSINESS OWNERS</i>			
BUS 131.....	1		
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>			
BUS 230.....	3		
<i>ENTREPRENEURIAL PLANNING</i>			
BUS 240.....	3		
<i>ENTREPRENEURSHIP CAPSTONE</i>			
Choose One (1) Course From: .....	3		
BUS 161A <i>EFFECTIVE SELLING</i>			
**BUS 220 <i>E-BUSINESS</i>			
**CIS 220 <i>E-BUSINESS</i>			

\* 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.

## **Nursing**

- ◆ AAS Nursing Degree
- ◆ Practical Nurse Diploma

## **Respiratory Therapy**

- ◆ AAS Respiratory Therapy

## **Business Technology Programs**

- ◆ AAS Administrative Assistant - Medical
- ◆ AAS Medical Office Management
- ◆ Health Care Support Assistant Certificate
- ◆ Medical Records & Billing Certificate



# Nursing

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## 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](http://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.  
[www.acenursing.org](http://www.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.

# Nursing Career Ladder Curriculum

The Muskegon Community College Nursing Program offers a career ladder nursing curriculum consisting of the practical nurse diploma and the Associate Degree in Applied Science Nursing (AAS) with the opportunity to enroll concurrently in the Michigan State University Bachelor of Science in Nursing (BSN).

Students who successfully complete the Practical Nurse Diploma 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 successfully complete the Associate in Applied Science Nursing (AAS) degree will be eligible to write the National Council Licensure Examination for Registered Nurses (NCLEX-RN) to practice as a Registered Nurse (RN).

Muskegon Community College Associate Degree Nursing students who have enrolled in clinical nursing courses in the nursing major are eligible to apply for transfer admission to Michigan State University into the concurrent enrollment Bachelor of Science in Nursing (BSN) program. Acceptance is determined by the applicant's previous academic record. Admission to the program is competitive; the most qualified candidates are selected from the pool of candidates meeting the minimum criteria.

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 in Applied Science Nursing (AAS) Nursing who have previously obtained the LPN or LVN licensure must possess an unencumbered license and current work experience.

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. See [www.muskegoncc.edu/nursing](http://www.muskegoncc.edu/nursing) for more information.

The Muskegon Community College Nursing Program is accredited by the Accreditation Commission for Education in Nursing (ACEN), 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326, (404) 975-5000, fax (404) 975-5020, [www.acenursing.org](http://www.acenursing.org).

The Michigan State University Bachelor of Science in Nursing (BSN) program is approved by the Michigan Board of Nursing and accredited by the Commission on Collegiate Nursing Education (CCNE).

See <http://reg.msu.edu/AcademicPrograms/ProgramDetail.aspx?Program=4008> for more information.

## MUSKEGON COMMUNITY COLLEGE NURSING PROGRAM CAREER LADDER

(Revised and Approved 12/3/14)

<b>MUSKEGON COMMUNITY COLLEGE ASSOCIATE IN APPLIED SCIENCE NURSING DEGREE (AAS)</b>					
<b>LEVEL II</b>	<b>Term 6</b>	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.	
	<b>Term 5</b>	NUR 212B	Care of the Family in Physiological Crisis	8 Cr.	
		BIOL 207 LEC	Microbiology Coreq: BIOL 207A Prereq: BIOL 105 L&L	3 Cr. 1 Cr.	
		PEA 101A	Fitness, Wellness, & Nutrition	1 Cr.	
<b>LEVEL I</b>	<b>PRACTICAL NURSE DIPLOMA</b>				
	<b>Term 4</b>	NUR 141B	Care of the Maturing Family	8 Cr.	
		*** MEET CHEMISTRY REQUIREMENT ***			
		*CHEM 109 LEC/109A	Chemistry for Health Sciences /Lab OR	5 Cr.	
		*CHEM 100 LEC/100A	Fundamentals of Chemistry/Lab OR Complete 1 year of chemistry with a C (2.0) or better from an approved high school within the past 8 years. OR Pass the Toledo Chemistry Competency Examination in the MCC Testing Center with a "C" (70%) or higher.	5 Cr.	
	<b>Term 3</b>	NUR 131B	Care of the Childrearing Family	8 Cr.	
		*BIOL 106 L&L	Anatomy & Physiology II Prereq: BIOL 105 L&L	4 Cr.	
	<b>Term 2</b>	NUR 126	Family Health and Nursing Care	7 Cr.	
		NUR 121A	Basic Pharmacology	1 Cr.	
	<b>Term 1</b>	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.			
				<b>Total 67 Credits (17 NUR / 10 Non-NUR)</b>	
				<b>Total 40 Credits 25 NUR / 15 Non-NUR</b>	
<p>* 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.</p> <p>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.</p> <p>If testing/coursework is over eight years old, competency must be validated on established examinations or by repeating the course.</p> <p>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.</p>					

R 12/3/14

## MUSKEGON COMMUNITY COLLEGE – MICHIGAN STATE UNIVERSITY CONCURRENT BSN NURSING PROGRAM LADDER

<b>MSU NURSING</b>	<b>MICHIGAN STATE UNIVERSITY BACHELOR OF SCIENCE NURSING – 123 TOTAL CREDITS</b>			
	Term 10	NUR 485	Integrative Seminar III	2 Cr.
		NUR 470	Community & Population Health	4 Cr.
	Term 9	NUR 465	Leadership Immersion	4 Cr.
		NUR 455	Integrative Seminar II	2 Cr.
	Term 8	NUR 355	Integrative Seminar I	2 Cr.
	NUR 336	Health Promotion for the BSN	4 Cr.	
Term 7	NUR 340	Foundations of Nursing Practice	4 Cr.	
<b>MCC LEVEL II</b>	<b>MCC ASSOCIATE IN APPLIED SCIENCE NURSING DEGREE (AAS)</b>			
	Term 6	NUR 325	Transitions to BSN Practice	2 Cr.
	Term 5	ISS 300	Social Science	4 Cr.
<b>MCC LEVEL I</b>	<b>MCC PRACTICAL NURSE DIPLOMA</b>			
	Term 4	NUR 300	Pathophysiology	4 Cr.
	Term 3	MCC Course		
		MATH 115	Probability and Statistics	3 Cr.
	<b>APPLY AND BE ACCEPTED TO MSU BSN PROGRAM</b>			
	MCC Courses – select one:			
	Term 2	HIST 101	Western Civilization to 1500	4 Cr.
		HIST 102	Western Civilization 1500 to Present	4 Cr.
		MU 103	Introduction to Music Literature	3 Cr.
		PHIL 101	Basic Concepts of Philosophy	3 Cr.
	PHIL 204	Biomedical Ethics ( <i>recommended</i> )	3 Cr.	
	PHIL 205	Business Ethics	3 Cr.	
<b>MSU PREREQUISITES</b>				
MCC Courses				
Term 1	ENG 102	English Composition	3 Cr.	
	MATH 100A	Intermediate Algebra	4 Cr.	
	ED 250	Human Growth and Learning	3 Cr.	
Select one:				
	HIST 201	United States to 1877	3 Cr.	
	HIST 202	US from Reconstruction to Present	3 Cr.	
<p>The Michigan State University Bachelor of Science in Nursing (B.S.N.) program is approved by the Michigan Board of Nursing and accredited by the Commission on Collegiate Nursing Education (C.C.N.E.). Muskegon Community College Associate Degree in Nursing students who have enrolled in clinical nursing courses in the nursing major are eligible to apply for transfer admission to Michigan State University into the concurrent enrollment B.S.N. program. Acceptance is determined by the applicant's previous academic record. Admission to the program is competitive; the most qualified candidates are selected from the pool of candidates meeting the minimum criteria.</p> <p>See <a href="http://req.msu.edu/AcademicPrograms/ProgramDetail.aspx?Program=4008">http://req.msu.edu/AcademicPrograms/ProgramDetail.aspx?Program=4008</a> for more information. R 11/2014</p>				

## Practical Nursing Diploma

### How much will this program cost me?\*

*Tuition and fees: \$7,494*

*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: \$6,500*

*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 2013-2014, 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 2013-2014 is \*%.*

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

*[www.muskegoncc.edu/Include/GE/Nursing-Diploma.html](http://www.muskegoncc.edu/Include/GE/Nursing-Diploma.html)*

## Nursing 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.

*Continued on Next Page*

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](http://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 19 or above on ACT reading test.
- ♦ Score 81 or higher on the COMPASS Reading Test.

### Writing Skills Competency

Complete **one** of the following:

- ♦ Score 1 or 2 in both Reading and Writing on MEAP or MME.
- ♦ Score 19 or above on ACT English test.
- ♦ 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.

## Occupational 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/nursing](http://www.muskegoncc.edu/nursing) 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](http://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

### 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.

### Nursing Advisory Committee

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.



## Associate in Applied Science

# Respiratory Therapy

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*(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 MEAP, or score 19 or above on the ACT Reading, or score 80 on 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. 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. **Students must have the ability to meet the Program Technical Standards ([www.muskegoncc.edu/pages/2283.asp](http://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 243 or call (231) 777-0223 or email: [rt@muskegoncc.edu](mailto:rt@muskegoncc.edu)***

***STUDENTS MUST COMPLETE THE RT CURRICULUM REQUIREMENTS WITH A MINIMUM GPA OF "C" (2.0) IN EACH COURSE.***

**YEAR 1**

Semester 1 (Fall: September - December)	CR. HRS.
AH 102.....3 <i>BASIC PATIENT CARE SKILLS</i>	
BIOL 105L&L.....4 <i>ANATOMY &amp; PHYSIOLOGY I</i>	
MATH 100A.....4 <i>INTERMEDIATE ALGEBRA</i>	
<b>OR</b>	
MATH 041 .....1 <i>MATHEMATICS FOR ALLIED HEALTH SCIENCES</i>	
RT 101.....1 <i>RESPIRATORY THERAPY PHYSICS</i>	

Semester 2 (Winter: January - February)	CR. HRS.
CHEM 100LEC & CHEM 100A.....5 <i>FUNDAMENTALS OF CHEMISTRY, L&amp;L</i>	
<b>OR</b>	
CHEM 109LEC & CHEM 109A.....5 <i>CHEMISTRY FOR HEALTH SCIENCE, L&amp;L</i>	
RT 110L&L.....3 <i>EQUIPMENT &amp; PROCEDURES I</i>	
RT 111L&L.....3 <i>INTRODUCTION TO RESPIRATORY THERAPY</i>	

Semester 2 (Winter: March - April)	CR. HRS.
CHEM 100LEC & CHEM 100A.....(continued) <i>FUNDAMENTALS OF CHEMISTRY, L&amp;L</i>	
<b>OR</b>	
CHEM 109LEC & CHEM 109A.....(continued) <i>CHEMISTRY FOR HEALTH SCIENCE, L&amp;L</i>	
RT 120L&L.....3 <i>EQUIPMENT &amp; PROCEDURES II</i>	
RT 121.....2 <i>PHARMACOLOGY</i>	
RT 122.....2 <i>CLINICAL I</i>	

Semester 3 (Summer: May - August)	CR. HRS.
RT 130L&L.....3 <i>EQUIPMENT &amp; PROCEDURES III</i>	
RT 131.....3 <i>PHYSIOLOGY</i>	
RT 132.....3 <i>CLINICAL II</i>	
RT 134.....1 <i>INTRO TO MECHANICAL VENTILATION</i>	

**YEAR 2**

Semester 4 (Fall: September - October)	CR. HRS.
RT 141.....2 <i>PULMONARY PATHOPHYSIOLOGY</i>	
RT 144.....3 <i>ADULT MECHANICAL VENTILATION</i>	
RT 152 CLI.....5 <i>CLINICAL IV</i>	

Semester 4 (Fall: November - December)	CR. HRS.
RT 162 CLI.....7 <i>CLINICAL V</i>	

Semester 5 (Winter: January - April)	CR. HRS.
BIOL 106L&L.....4 <i>ANATOMY &amp; PHYSIOLOGY II</i>	
ENG 101 .....3 <i>ENGLISH COMPOSITION</i>	
RT 210.....4 <i>CARDIOVASCULAR &amp; RENAL PHYSIOLOGY</i>	
RT 220C.....4 <i>PEDIATRIC-NEONATAL CRITICAL CARE</i>	

Semester 6 (Summer: May - August)	CR. HRS.
BUS 122.....3 <i>PRINCIPLES OF MANAGEMENT</i>	
PSYC 201.....4 <i>GENERAL PSYCHOLOGY</i>	
RT 212A.....7 <i>ADVANCED CLINICAL PRACTICUM I</i>	
Choose One (1) Course From:.....3-4	
PSCI 111 INTRODUCTION TO GOVERNMENT.....4	
HIST 201 UNITED STATES TO 1877.....3	
HIST 202 UNITED STATES FROM RECONSTRUCTION TO PRESENT.....3	

Semester 7 (Fall: September - December)	CR. HRS.
BIOL 207LEC & BIOL 207A.....4 <i>MICROBIOLOGY, L&amp;L</i>	
PHIL 204.....3 <i>BIOMEDICAL ETHICS</i>	
RT 222A.....3 <i>CLINICAL ROTATION VII</i>	
RT 230B.....2 <i>PULMONARY DIAGNOSTICS &amp; REHABILITATION</i>	
RT 240.....1 <i>THE HEALTH CARE ENVIRONMENT</i>	

**TOTAL 99-103**

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

# 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 243, 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](http://www.muskegoncc.edu)*)
- ◆ Submit a completed Muskegon Community College Respiratory Therapy Program Admission Application. (Room 243 or call (231) 777-0223)
- ◆ Submit official evidence of high school graduation or successful completion of the General Education Development (GED) tests. (Room 243 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](http://www.muskegoncc.edu)*)
- ◆ Submit a completed Muskegon Community College Respiratory Therapy Program Admission Application. (Room 243 or call (231) 777-0223)
- ◆ Meet with the Director of Respiratory Therapy. (Room 243 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

## Entrepreneur Degrees

- ♦ Music Performance Entrepreneur
- ♦ Visual Art

# 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20 CR. HRS.</b>	<b>DEGREE REQUIREMENTS</b>	<b>28 CR. HRS.</b>
BCOM 101.....	3	ACC 201 .....	4
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>PRINCIPLES OF ACCOUNTING I</i>	
BCOM 102.....	3	ACC 202 .....	4
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>PRINCIPLES OF ACCOUNTING II</i>	
BUS 126.....	3	ACC 206 .....	3
<i>BUSINESS MATH</i>		<i>QUICKBOOKS COMPUTERIZED ACCOUNTING</i>	
CIS 120A.....	3	BUS 180D.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>WORD PROCESSING PART I</i>	
PHIL 205.....	3	BUS 181C.....	3
<i>BUSINESS ETHICS</i>		<i>OFFICE PROCEDURES I: DOCUMENT FORMATTING</i>	
Choose One (1) Course From: .....	3	BUS 182C.....	3
BUS 127 <i>HUMAN RELATIONS</i>		<i>OFFICE PROCEDURES II: DOCUMENT PRODUCTION</i>	
COM 101 <i>ORAL COMMUNICATIONS</i>		BUS 185B.....	2
PEA/DNC .....	2	<i>ELECTRONIC CALCULATOR</i>	
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103,</i>		BUS 290CI.....	3
<i>PEA 104A, PEA 118, OR PEA 201 AND</i>		<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
<i>ONE PEA/DNC CREDIT HOUR OF CHOICE</i>		CIS 101EW .....	1
		<i>INTRODUCTION TO ELECTRONIC SPREADSHEETS</i>	
<b>ENTREPRENEUR CORE REQUIREMENTS</b>	<b>13 CR. HRS.</b>	CIS 102EW .....	1
BUS 104.....	3	<i>INTERMEDIATE ELECTRONIC SPREADSHEETS</i>	
<i>ACCOUNTING FOR BUSINESS OWNERS</i>		CIS 153A.....	1
BUS 131.....	1	<i>DATABASE MANAGEMENT-ACCESS</i>	
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>		<b>TOTAL 61</b>	
BUS 230.....	3		
<i>ENTREPRENEURIAL PLANNING</i>			
BUS 240.....	3		
<i>ENTREPRENEURSHIP CAPSTONE</i>			
Choose One (1) Course From: .....	3		
BUS 161A <i>EFFECTIVE SELLING</i>			
**BUS 220 <i>E-BUSINESS</i>			
**CIS 220 <i>E-BUSINESS</i>			

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

# 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
<i>HUMAN RELATIONS</i>	
BUS 161A.....	3
<i>EFFECTIVE SELLING</i>	
BUS 166.....	3
<i>QUALITY CUSTOMER SERVICE</i>	
BUS 266.....	3
<i>QUALITY CUSTOMER SERVICE II</i>	
<b>TOTAL 12</b>	

## How much will this program cost me?\*

**Tuition and fees: \$1,467**  
**Books and supplies: \$701**  
**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 2013-2014, %% finished in 11 months.*

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %%.*

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

[www.muskegoncc.edu/Include/GE/Automotive\\_Technician\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Automotive_Technician_Certificate.html)



# 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20-22 CR. HRS.</b>	<b>CAREER PROGRAM REQUIREMENTS</b>	<b>21 CR. HRS.</b>
BCOM 101.....	3	BUS 122.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>PRINCIPLES OF MANAGEMENT</i>	
BCOM 102.....	3	BUS 123.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>BUSINESS LAW I</i>	
Choose One (1) Course From:.....	3-4	BUS 125.....	3
*BUS 105 <i>BUSINESS STATISTICS</i>		<i>SUPERVISION</i>	
BUS 126 <i>BUSINESS MATH</i>		BUS 127.....	3
MATH 109 <i>COLLEGE ALGEBRA WITH APPLICATIONS</i>		<i>HUMAN RELATIONS</i>	
*MATH 115 <i>PROBABILITY AND STATISTICS</i>		<i>(IF NOT TAKEN AS A GEN. ED. COURSE)</i>	
Choose One (1) Course From:.....	3	BUS 222.....	3
BUS 127 <i>HUMAN RELATIONS</i>		<i>FUNDAMENTALS OF ORGANIZATIONAL BEHAVIOR</i>	
COM 101 <i>ORAL COMMUNICATIONS</i>		BUS 260.....	3
Choose One (1) Course From:.....	3	<i>PRINCIPLES OF MARKETING</i>	
CIS 110 <i>COMPUTER CONCEPTS</i>		BUS 273A.....	3
CIS 120A <i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>HUMAN RESOURCE MANAGEMENT</i>	
Choose One (1) Course From:.....	3-4	<b>RECOMMENDED ELECTIVES</b>	<b>9-11 CR. HRS.</b>
GEOG 104 <i>CULTURAL GEOGRAPHY</i>		ACC 202.....	4
PHIL 205 <i>BUSINESS ETHICS</i>		<i>PRINCIPLES OF ACCOUNTING II</i>	
PSCI 111 <i>INTRO TO AMERICAN GOVERNMENT</i>		BUS 105.....	3
PSCI 211 <i>COMPARATIVE GOVERNMENTS</i>		<i>BUSINESS STATISTICS</i>	
PSYC 102 <i>APPLIED PSYCHOLOGY</i>		BUS 114.....	3
PSYC 201 <i>GENERAL PSYCHOLOGY</i>		<i>PERSONAL FINANCE</i>	
PEA/DNC.....	2	BUS 124.....	3
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE</i>		<i>BUSINESS LAW II</i>	
<b>BUSINESS CORE REQUIREMENTS</b>	<b>10 CR. HRS.</b>	BUS 166.....	3
ACC 201.....	4	<i>QUALITY CUSTOMER SERVICE</i>	
<i>PRINCIPLES OF ACCOUNTING I</i>		BUS 161A.....	3
BUS 121.....	3	<i>EFFECTIVE SELLING</i>	
<i>INTRODUCTION TO BUSINESS</i>		BUS 220/CIS 220.....	3
BUS 200.....	3	<i>E-BUSINESS</i>	
<i>INTERNATIONAL BUSINESS</i>		BUS 262/ COM 262.....	3
		<i>SOCIAL MEDIA</i>	
		BUS 274.....	1
		<i>INTERNATIONAL STUDIES IN HUMAN RESOURCES</i>	
		BUS 290CI.....	3
		<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
		CIS 101EW.....	1
		<i>INTRODUCTION TO ELECTRONIC SPREADSHEETS</i>	
		CIS 120A.....	3
		<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
		QC 105.....	3
		<i>QUALITY AND PRODUCTIVITY USING SPC-STATISTICAL PROCESS CONTROL</i>	
		<b>TOTAL 62</b>	

\* 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.

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20-22 CR. HRS.</b>	<b>CAREER PROGRAM REQUIREMENTS</b>		<b>24 CR. HRS.</b>
BCOM 101		3	BUS 123		3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>			<i>BUSINESS LAW I</i>		
BCOM 102		3	BUS 127		3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			<i>HUMAN RELATIONS (IF NOT TAKEN AS A GEN. ED.)</i>		
Choose One (1) Course From:		3-4	BUS 161A		3
*BUS 105	BUSINESS STATISTICS		<i>EFFECTIVE SELLING</i>		
BUS 126	BUSINESS MATH		BUS 162		3
MATH 109	COLLEGE ALGEBRA WITH APPLICATIONS		<i>PRINCIPLES OF RETAILING</i>		
*MATH 115	PROBABILITY AND STATISTICS		BUS 166		3
Choose One (1) Course From:		3	<i>QUALITY CUSTOMER SERVICE</i>		
BUS 127	HUMAN RELATIONS		BUS 260		3
COM 101	ORAL COMMUNICATIONS		<i>PRINCIPLES OF MARKETING</i>		
Choose One (1) Course From:		3	BUS 263		3
CIS 110	COMPUTER CONCEPTS		<i>ADVERTISING DYNAMICS</i>		
CIS 120A	INTRO TO COMPUTER INFORMATION SYSTEMS		Choose One (1) Course From:		3
Choose One (1) Course From:		3-4	BUS 122	PRINCIPLES OF MANAGEMENT	
GEOG 104	CULTURAL GEOGRAPHY		BUS 125	SUPERVISION	
PHIL 205	BUSINESS ETHICS		<b>RECOMMENDED ELECTIVES</b>		
PSCI 111	INTRO TO AMERICAN GOVERNMENT		<b>6-8 CR. HRS.</b>		
PSCI 211	COMPARATIVE GOVERNMENTS		ACC 202		4
PSYC 102	APPLIED PSYCHOLOGY		<i>PRINCIPLES OF ACCOUNTING II</i>		
PSYC 201	GENERAL PSYCHOLOGY		BUS 114		3
PEA/DNC		2	<i>PERSONAL FINANCE</i>		
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE</i>			BUS 124		3
			<i>BUSINESS LAW II</i>		
<b>BUSINESS CORE REQUIREMENTS</b>			<b>10 CR. HRS.</b>		
ACC 201		4	BUS 220/CIS 220		3
<i>PRINCIPLES OF ACCOUNTING I</i>			<i>E-BUSINESS</i>		
BUS 121		3	BUS 222		3
<i>INTRODUCTION TO BUSINESS</i>			<i>FUNDAMENTALS OF ORGANIZATIONAL BEHAVIOR</i>		
BUS 200		3	BUS 262/COM 262		3
<i>INTERNATIONAL BUSINESS</i>			<i>SOCIAL MEDIA</i>		
			BUS 266		3
			<i>QUALITY CUSTOMER SERVICE II</i>		
			BUS 290CI		3
			<i>COOPERATIVE INTERNSHIP PROGRAM</i>		
			CIS 120A		3
			<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		
			GR 104		3
			<i>JOB PLANNING LAYOUT AND DESIGN</i>		
			Choose One (1) Course From:		3
			*BUS 105	BUSINESS STATISTICS	
			*MATH 115	PROBABILITY AND STATISTICS	
					<b>TOTAL 62</b>

PROGRAMS

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

# Associate in Applied Science

## Music Performance Entrepreneur

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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20 CR. HRS.</b>	<b>DEGREE REQUIREMENTS</b>		<b>30 CR. HRS.</b>
BCOM 101	BUSINESS AND TECHNICAL COMMUNICATIONS	3	MU 101	MUSIC THEORY	3
BCOM 102	ADVANCED BUS AND TECH COMMUNICATIONS	3	MU 103	INTRODUCTION TO MUSIC LITERATURE	3
CIS 120A	INTRO TO COMPUTER INFORMATION SYSTEMS	3	MU 194	SIGHT-READING AND EAR TRAINING	1
PHIL 205	BUSINESS ETHICS	3	MU 240	PROFESSIONAL PRACTICES IN MUSIC	3
Choose One (1) Course From:		3	Performance/Ensemble		4
*BUS 105	BUSINESS STATISTICS		ANY MU PERFORMANCE/ENSEMBLE COURSES		
BUS 126	BUSINESS MATH		Choose One (1) Course From:		3
*MATH 115	PROBABILITY AND STATISTICS		MU 100	INTRODUCTION TO MUSIC THEORY	
Choose One (1) Course From:		3	***MU 102	MUSIC THEORY	
BUS 127	HUMAN RELATIONS		Choose One (1) Course From:		3
COM 101	ORAL COMMUNICATIONS		MU 190A	CLASS PIANO FOR MUSIC MAJORS	
Choose One (1) Course From:		1	MU 190B	CLASS PIANO (NON-MUSIC MAJORS)	
HE 110	INDUSTRIAL SAFETY AND WORKPLACE TRAINING		<b>APPLIED MUSIC OPTIONS</b>		
PEA/DNC	ANY PHYSICAL EDUCATION OR DANCE COURSE		Choose One (1) of the following options:		8
Choose One (1) Course From:		1	<b>OPTION 1</b>		
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201			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		
<b>ENTREPRENEUR CORE REQUIREMENTS</b>		<b>13 CR. HRS.</b>	<b>OPTION 2</b>		
BUS 131	INTRODUCTION TO ENTREPRENEURSHIP	1	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		
BUS 104	ACCOUNTING FOR BUSINESS OWNERS	3	<b>OPTION 3</b>		
BUS 230	ENTREPRENEURIAL PLANNING	3	ANY EIGHT COURSES WITH A SECONDARY INSTRUMENT FROM MU 127 TO MU 147		
BUS 240	ENTREPRENEURSHIP CAPSTONE	3	<b>ELECTIVES</b>		<b>3 CR. HRS.</b>
Choose One (1) Course From:		3	ANY MU COURSE NOT TAKEN ABOVE		
BUS 161A	EFFECTIVE SELLING				
**BUS 220	E-BUSINESS				
**CIS220	E-BUSINESS				
					<b>TOTAL 63</b>

\* 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

## 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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>21-22 CR. HRS.</b>	<b>CAREER PROGRAM REQUIREMENTS</b>	<b>29 CR. HRS.</b>
BCOM 101.....	3	ACC 202.....	4
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>PRINCIPLES OF ACCOUNTING II</i>	
BCOM 102.....	3	ACC 206.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>QUICKBOOKS COMPUTERIZED ACCOUNTING</i>	
Choose One (1) Course From:.....	4	BUS 123.....	3
MATH 109 COLLEGE ALGEBRA WITH APPLICATIONS		<i>BUSINESS LAW I</i>	
MATH 111 ALGEBRA WITH COORDINATE GEOMETRY		BUS 167.....	1
		<i>PROFESSIONALISM IN YOUR CAREER</i>	
Choose One (1) Course From:.....	3	BUS 180D.....	3
BUS 127 HUMAN RELATIONS		<i>WORD PROCESSING PART I</i>	
COM 101 ORAL COMMUNICATIONS		*BUS 181C.....	3
		<i>OFFICE PROCEDURES I: DOCUMENT FORMATTING</i>	
Choose One (1) Course From:.....	3	*BUS 182C.....	3
CIS 110 COMPUTER CONCEPTS		<i>OFFICE PROCEDURES II: DOCUMENT PRODUCTION</i>	
CIS 120A INTRO TO COMPUTER INFORMATION SYSTEMS		*BUS 280C.....	3
		<i>WORD PROCESSING PART II</i>	
Choose One (1) Course From:.....	3-4	CIS 101EW.....	1
GEOG 104 CULTURAL GEOGRAPHY		<i>INTRODUCTION TO ELECTRONIC SPREADSHEETS</i>	
PHIL 205 BUSINESS ETHICS		CIS 102EW.....	1
PSCI 111 INTRO TO AMERICAN GOVERNMENT		<i>INTERMEDIATE ELECTRONIC SPREADSHEETS</i>	
PSCI 211 COMPARATIVE GOVERNMENTS		ECON 101A.....	4
PSYC 102 APPLIED PSYCHOLOGY		<i>PRINCIPLES OF MACROECONOMICS</i>	
PSYC 201 GENERAL PSYCHOLOGY			
PEA/DNC.....	2		
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE</i>		<b>RECOMMENDED ELECTIVES</b>	<b>2-4 CR. HRS.</b>
<b>BUSINESS CORE REQUIREMENTS</b>	<b>10 CR. HRS.</b>	BUS 179.....	1
ACC 201.....	4	<i>KEYBOARDING</i>	
<i>PRINCIPLES OF ACCOUNTING I</i>		BUS 273A.....	3
BUS 121.....	3	<i>HUMAN RESOURCE MANAGEMENT</i>	
<i>INTRODUCTION TO BUSINESS</i>		BUS 281D.....	3
BUS 200.....	3	<i>OFFICE PROCEDURES III: ADVANCED APPLICATIONS</i>	
<i>INTERNATIONAL BUSINESS</i>		BUS 290CI.....	2-4
		<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
		CIS 119PP.....	1
		<i>INTRODUCTION TO PRESENTATION GRAPHICS</i>	
			<b>TOTAL 62</b>

PROGRAMS

\*Students must obtain a grade of “C” or better in each of these three classes.

# 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20 CR. HRS.</b>	<b>DEGREE REQUIREMENTS</b>	<b>30 CR. HRS.</b>
BCOM 101 .....	3	ART 104 .....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>DRAWING I</i>	
BCOM 102 .....	3	ART 105B .....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>TWO-DIMENSIONAL FORM AND SURFACE</i>	
BUS 126 .....	3	ART 198 .....	3
<i>BUSINESS MATH</i>		<i>ART HISTORY I</i>	
CIS 120A .....	3	ART 199 .....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>ART HISTORY II</i>	
HE 110 .....	1	ART 202 .....	3
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		<i>CONTEMPORARY ART HISTORY</i>	
PHIL 205 .....	3	ART 204B .....	3
<i>BUSINESS ETHICS</i>		<i>DRAWING II-TRANSFER PORTFOLIO PREPARATION</i>	
Choose One (1) Course From: .....	3	ART 240 .....	3
BUS 127 <i>HUMAN RELATIONS</i>		<i>PROFESSIONAL PRACTICES IN ART</i>	
COM 101 <i>ORAL COMMUNICATIONS</i>		ART 250 .....	3
Choose One (1) Course From: .....	1	<i>GALLERY/COLLECTION PRACTICUM</i>	
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201		ART 290CI .....	3
		<i>ART COOPERATIVE INTERNSHIP</i>	
		Choose One (1) Course From: .....	3
<b>ENTREPRENEUR CORE REQUIREMENTS</b>	<b>13 CR. HRS.</b>	ART 108 <i>CERAMICS I</i>	
BUS 104 .....	3	ART 109 <i>SCULPTURE I</i>	
<i>ACCOUNTING FOR BUSINESS OWNERS</i>		ART 117 <i>THREE-DIMENSIONAL FORM AND SPACE</i>	
BUS 131 .....	1		
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>			<b>TOTAL 63</b>
BUS 230 .....	3		
<i>ENTREPRENEURIAL PLANNING</i>			
BUS 240 .....	3		
<i>ENTREPRENEURSHIP CAPSTONE</i>			
Choose One (1) Course From: .....	3		
BUS 161A <i>EFFECTIVE SELLING</i>			
**BUS 220 <i>E-BUSINESS</i>			
**CIS220 <i>E-BUSINESS</i>			

\*\* BUS 220 E-Business and CIS 220 E-Business are identical 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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20-22 CR. HRS.</b>	<b>CAREER PROGRAM REQUIREMENTS (Continued)</b>	<b>CR. HRS.</b>
BCOM 101.....	3	CIS 102EW .....	1
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>INTERMEDIATE ELECTRONIC SPREADSHEETS</i>	
BCOM 102.....	3	CIS 109 .....	2
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>PERSONAL COMPUTER MAINTENANCE</i>	
CIS 120A.....	3	CIS 115WW .....	1
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>INTRODUCTION TO WORD PROCESSING</i>	
Choose One (1) Course From: .....	3-4	CIS 119PP .....	1
*BUS 105 <i>BUSINESS STATISTICS</i>		<i>INTRODUCTION TO PRESENTATION GRAPHICS</i>	
BUS 126 <i>BUSINESS MATH</i>		CIS 143 .....	3
MATH 109 <i>COLLEGE ALGEBRA WITH APPLICATIONS</i>		<i>INTRODUCTION TO LOCAL AREA NETWORKS</i>	
*MATH 115 <i>PROBABILITY AND STATISTICS</i>		CIS 153A.....	1
Choose One (1) Course From: .....	3	<i>DATABASE MANAGEMENT-ACCESS</i>	
BUS 127 <i>HUMAN RELATIONS</i>		CIS 167A.....	1
COM 101 <i>ORAL COMMUNICATIONS (RECOMMENDED)</i>		<i>INTRODUCTION TO INTERNET ANIMATION</i>	
Choose One (1) Course From: .....	3-4	CIS 177DW .....	1
GEOG 104 <i>CULTURAL GEOGRAPHY</i>		<i>INTRODUCTION TO HTML EDITORS</i>	
PHIL 205 <i>BUSINESS ETHICS (RECOMMENDED)</i>		CIS 193A.....	1
PSCI 111 <i>INTRO TO AMERICAN GOVERNMENT</i>		<i>INTRODUCTION TO OPERATING SYSTEMS</i>	
PSCI 211 <i>COMPARATIVE GOVERNMENTS</i>		CIS 199 .....	1
PSYC 102 <i>APPLIED PSYCHOLOGY</i>		<i>INTERNET CONTENT MANAGEMENT SYSTEMS</i>	
PSYC 201 <i>GENERAL PSYCHOLOGY</i>		CIS 253A.....	3
PEA/DNC .....	2	<i>DATABASE DESIGN AND IMPLEMENTATION</i>	
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE</i>		CIS 257A.....	3
		<i>HTML FOR INTERNET WEB PAGE DESIGN</i>	
<b>BUSINESS CORE REQUIREMENTS</b>	<b>10 CR. HRS.</b>	GRD 120 .....	3
ACC 201 .....	4	<i>INTRODUCTION TO GRAPHIC DESIGN</i>	
<i>PRINCIPLES OF ACCOUNTING I</i>			
BUS 121 .....	3	<b>RECOMMENDED ELECTIVES</b>	<b>2-3 CR. HRS.</b>
<i>INTRODUCTION TO BUSINESS</i>			
BUS 262 .....	3	<i>Strongly recommended</i>	
<i>SOCIAL MEDIA</i>			
<b>CAREER PROGRAM REQUIREMENTS</b>	<b>30 CR. HRS.</b>	CIS 183 .....	3
BUS 179 .....	1	<i>NETWORKING TECHNOLOGIES</i>	
<i>KEYBOARDING</i>			
BUS 167.....	1	CIS 210 .....	3
<i>PROFESSIONALISM IN YOUR CAREER</i>			
BUS 220/CIS 220 .....	3	<i>OPERATING SYSTEMS CONCEPTS</i>	
<i>E-BUSINESS</i>			
BUS 290CI.....	2	<i>Other recommendations:</i>	
<i>COOPERATIVE INTERNSHIP PROGRAM</i>			
CIS 101EW .....	1	PHIL 104.....	3
<i>INTRODUCTION TO ELECTRONIC SPREADSHEETS</i>			
		<i>SYMBOLIC LOGIC</i>	
		CIS 258 .....	3
		<i>ADVANCED HTML</i>	
		ACC 206 .....	3
		<i>QUICKBOOKS</i>	
		<b>TOTAL 62</b>	

PROGRAMS

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

# Computer Networking Certificate

CERTIFICATE REQUIREMENTS	37 CR. HRS.
BUS 290CI.....	2
<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
CIS 109.....	2
<i>PERSONAL COMPUTER MAINTENANCE</i>	
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
CIS 143.....	3
<i>INTRODUCTION TO LOCAL AREA NETWORKS</i>	
CIS 183.....	3
<i>NETWORKING TECHNOLOGIES</i>	
CIS 209.....	3
<i>PERSONAL COMPUTER MAINTENANCE II (A+ CERTIFICATION)</i>	
CIS 210.....	3
<i>OPERATING SYSTEMS CONCEPTS</i>	
CIS 243.....	3
<i>TELECOMMUNICATIONS</i>	
CIS 275.....	3
<i>LINUX OPERATING SYSTEM</i>	
CIS 283.....	3
<i>ADVANCED LOCAL AREA NETWORKING</i>	
CIS 293.....	3
<i>NETWORK SECURITY</i>	
Choose One (1) Course From:.....	3
CIS 162 <i>VISUAL C# PROGRAMMING</i>	
CIS 185 <i>C PROGRAMMING</i>	
Choose One (1) Course From:.....	3
CIS 260A <i>VISUAL BASIC PROGRAMMING</i>	
CIS 280 <i>JAVA PROGRAMMING</i>	
<b>TOTAL 37</b>	

PROGRAMS

## How much will this program cost me?\*

**Tuition and fees: \$4,478**  
**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 2013-2014, % finished in 9 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.**

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

[www.muskegoncc.edu/Include/GE/Computer\\_Networking\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Computer_Networking_Certificate.html)

# 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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20-21 CR. HRS.</b>	<b>DEGREE REQUIREMENTS</b>	<b>31 CR. HRS.</b>
BCOM 101.....	3	BUS 290CI.....	2
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
BCOM 102.....	3	CIS 109.....	2
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>PERSONAL COMPUTER MAINTENANCE</i>	
CIS 120A.....	3	CIS 143.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>INTRODUCTION TO LOCAL AREA NETWORKS</i>	
PHIL 205.....	3	CIS 183.....	3
<i>BUSINESS ETHICS</i>		<i>NETWORKING TECHNOLOGIES</i>	
Choose One (1) Course From:.....	3-4	CIS 209.....	3
BUS 126 <i>BUSINESS MATH</i>		<i>PERSONAL COMPUTER MAINTENANCE II (A+ CERTIFICATION)</i>	
MATH 109 <i>COLLEGE ALGEBRA WITH APPLICATIONS</i>		CIS 210.....	3
MATH 115 <i>PROBABILITY AND STATISTICS OR HIGHER LEVEL MATH COURSE</i>		<i>OPERATING SYSTEMS CONCEPTS</i>	
Choose One (1) Course From:.....	3	CIS 243.....	3
BUS 127 <i>HUMAN RELATIONS</i>		<i>TELECOMMUNICATIONS</i>	
COM 101 <i>ORAL COMMUNICATIONS</i>		CIS 275.....	3
Choose One (1) Course From:.....	1	<i>LINUX OPERATING SYSTEM</i>	
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201		CIS 283.....	3
Choose One (1) Course From:.....	1	<i>ADVANCED LOCAL AREA NETWORKING</i>	
HE 110 <i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		CIS 293.....	3
PEA/DNC <i>ANY PHYSICAL EDUCATION OR DANCE COURSE</i>		<i>NETWORK SECURITY</i>	
		Choose One (1) Course From:.....	3
		CIS 162 <i>VISUAL C# PROGRAMMING</i>	
		CIS 185 <i>C PROGRAMMING</i>	
<b>ENTREPRENEUR CORE REQUIREMENTS</b>	<b>13 CR. HRS.</b>		
BUS 104.....	3		
<i>ACCOUNTING FOR BUSINESS OWNERS</i>			
BUS 131.....	1		
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>			
BUS 230.....	3		
<i>ENTREPRENEURIAL PLANNING</i>			
BUS 240.....	3		
<i>ENTREPRENEURSHIP CAPSTONE</i>			
Choose One (1) Course From:.....	3		
BUS 161A <i>EFFECTIVE SELLING</i>			
**BUS 220 <i>E-BUSINESS</i>			
**CIS220 <i>E-BUSINESS</i>			
		<b>TOTAL 64-65</b>	

\*\* 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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20-22 CR. HRS.</b>	<b>CAREER PROGRAM REQUIREMENTS</b>	<b>29 CR. HRS.</b>
BCOM 101.....	3	BUS 290CI.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
BCOM 102.....	3	CIS 109.....	2
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>PERSONAL COMPUTER MAINTENANCE</i>	
CIS 120A.....	3	CIS 143.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>INTRODUCTION TO LOCAL AREA NETWORKS</i>	
Choose One (1) Course From:.....	3-4	CIS 183.....	3
*BUS 105 <i>BUSINESS STATISTICS</i>		<i>NETWORKING TECHNOLOGIES</i>	
BUS 126 <i>BUSINESS MATH</i>		CIS 209.....	3
MATH 109 <i>COLLEGE ALGEBRA WITH APPLICATIONS</i>		<i>PC MAINTENANCE II (A+ CERTIFICATION)</i>	
*MATH 115 <i>PROBABILITY AND STATISTICS</i>		CIS 210.....	3
Choose One (1) Course From:.....	3	<i>OPERATING SYSTEMS CONCEPTS</i>	
BUS 127 <i>HUMAN RELATIONS</i>		CIS 243.....	3
COM 101 <i>ORAL COMMUNICATIONS</i>		<i>TELECOMMUNICATIONS</i>	
Choose One (1) Course From:.....	3-4	CIS 275.....	3
GEOG 104 <i>CULTURAL GEOGRAPHY</i>		<i>LINUX OPERATING SYSTEM</i>	
PHIL 205 <i>BUSINESS ETHICS</i>		CIS 283.....	3
PSCI 111 <i>INTRO TO AMERICAN GOVERNMENT</i>		<i>ADVANCED LOCAL AREA NETWORKS</i>	
PSCI 211 <i>COMPARATIVE GOVERNMENTS</i>		CIS 293.....	3
PSYC 102 <i>APPLIED PSYCHOLOGY</i>		<i>NETWORK SECURITY</i>	
PSYC 201 <i>GENERAL PSYCHOLOGY</i>			
PEA/DNC.....	2	<b>RECOMMENDED ELECTIVES</b>	<b>1-3 CR. HRS.</b>
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103,</i>		CIS 200+.....	1-3
<i>PEA 104A, PEA 118, OR PEA 201 AND</i>		<i>ANY CIS COURSE 200-LEVEL OR HIGHER</i>	
<i>ONE PEA/DNC CREDIT HOUR OF CHOICE</i>		CIS 253A.....	3
		<i>DATABASE DESIGN AND IMPLEMENTATION</i>	
<b>BUSINESS CORE REQUIREMENTS</b>	<b>10 CR. HRS.</b>	PHIL 104.....	3
ACC 201.....	4	<i>SYMBOLIC LOGIC</i>	
<i>PRINCIPLES OF ACCOUNTING I</i>			
BUS 121.....	3		
<i>INTRODUCTION TO BUSINESS</i>			
BUS 200.....	3		
<i>INTERNATIONAL BUSINESS</i>			
			<b>TOTAL 62</b>

PROGRAMS

\* 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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20-22 CR. HRS.</b>	<b>BUSINESS CORE REQUIREMENTS</b>	<b>6 CR. HRS.</b>
BCOM 101.....	3	BUS 121.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>INTRODUCTION TO BUSINESS</i>	
BCOM 102.....	3	BUS 220/CIS 220 .....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>E-BUSINESS</i>	
CIS 120A.....	3	<b>PROGRAMMING CORE REQUIREMENTS</b>	<b>17 CR. HRS.</b>
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		CIS 153A.....	1
Choose One (1) Course From: .....	3-4	<i>DATABASE MANAGEMENT-ACCESS</i>	
BUS 126 <i>BUSINESS MATH</i>		CIS 162 .....	3
MATH 109 <i>COLLEGE ALGEBRA WITH APPLICATIONS</i>		<i>VISUAL C# PROGRAMMING</i>	
<i>OR HIGHER LEVEL MATH COURSE</i>		CIS 185 .....	3
Choose One (1) Course From: .....	3	<i>C PROGRAMMING</i>	
BUS 127 <i>HUMAN RELATIONS</i>		CIS 217 .....	1
COM 101 <i>ORAL COMMUNICATIONS</i>		<i>INTRODUCTION TO JAVASCRIPT PROGRAMMING</i>	
Choose One (1) Course From: .....	3-4	CIS 250 .....	3
GEOG 104 <i>CULTURAL GEOGRAPHY</i>		<i>DEVELOPING INFORMATION SYSTEMS</i>	
PHIL 205 <i>BUSINESS ETHICS</i>		CIS 253A.....	3
PSCI 111 <i>INTRO TO AMERICAN GOVERNMENT</i>		<i>DATABASE DESIGN AND IMPLEMENTATION</i>	
PSCI 211 <i>COMPARATIVE GOVERNMENTS</i>		CIS 257A.....	3
PSYC 102 <i>APPLIED PSYCHOLOGY</i>		<i>HTML FOR INTERNET WEB PAGE DESIGN</i>	
PSYC 201 <i>GENERAL PSYCHOLOGY</i>			
PEA/DNC .....	2	<b>CAREER PROGRAM REQUIREMENTS</b>	
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE</i>		<i>In addition to the preceding courses, choose ONE career track from the following page to determine your career program course requirements.</i>	

**CAREER PROGRAM REQUIREMENTS**

Choose ONE of the following tracks:

APPLICATION DEVELOPER TRACK	19 CR. HRS.	WEB DEVELOPER TRACK	19 CR. HRS.
CIS 121 .....1 <i>FILE DESIGN AND UTILITIES FOR MIDRANGE COMPUTERS</i>		BUS 262/COM 262 .....3 <i>SOCIAL MEDIA</i>	
CIS 170 .....3 <i>RPG PROGRAMMING</i>		CIS 167A/GRD 167A .....1 <i>INTRODUCTION TO INTERNET ANIMATION</i>	
CIS 210 .....3 <i>OPERATING SYSTEMS CONCEPTS</i>		CIS 177 DW .....1 <i>INTRODUCTION TO HTML EDITORS</i>	
CIS 275 .....3 <i>LINUX OPERATING SYSTEM</i>		CIS 199 .....1 <i>INTERNET CONTENT MANAGEMENT SYSTEMS</i>	
CIS 291 .....3 <i>IMPLEMENTING SECURITY INTO APPLICATIONS</i>		CIS 227 .....3 <i>ADVANCED JAVASCRIPT</i>	
Choose Two (2) Courses From: .....6		CIS 258 .....3 <i>ADVANCED HTML WEB DEVELOPMENT</i>	
CIS 260A <i>VISUAL BASIC PROGRAMMING</i>		CIS 280 .....3 <i>JAVA PROGRAMMING</i>	
CIS 270A <i>ADVANCED RPG PROGRAMMING</i>		CIS Elective .....1	
CIS 280 <i>JAVA PROGRAMMING</i>		Choose One (1) Course From: .....3	
		CIS 267ASP <i>SERVER-SIDE WEB PROGRAMMING USING ASP</i>	
		CIS 267PHP <i>SERVER-SIDE WEB PROGRAMMING USING PHP</i>	
MOBILE DEVELOPER TRACK	19 CR. HRS.	GAME DEVELOPER TRACK	19 CR. HRS.
BUS 262/COM 262 .....3 <i>SOCIAL MEDIA</i>		CIS 124 .....3 <i>INTRODUCTION TO GAME DEVELOPMENT</i>	
CIS 199 .....1 <i>INTERNET CONTENT MANAGEMENT SYSTEMS</i>		CIS 167A/GRD 167A .....1 <i>INTRODUCTION TO INTERNET ANIMATION</i>	
CIS 227 .....3 <i>ADVANCED JAVASCRIPT</i>		CIS 227 .....3 <i>ADVANCED JAVASCRIPT</i>	
CIS 258 .....3 <i>ADVANCED HTML WEB DEVELOPMENT</i>		CIS 244 .....3 <i>GAME SCRIPTING</i>	
CIS 280 .....3 <i>JAVA PROGRAMMING</i>		CIS 267PHP .....3 <i>SERVER-SIDE WEB PROGRAMMING USING PHP</i>	
CIS 286 .....3 <i>PROGRAMMING FOR MOBILE APPLICATIONS</i>		CIS 284 .....3 <i>INTERACTIVE MEDIA AND GAME DESIGN</i>	
CIS 291 .....3 <i>IMPLEMENTING SECURITY INTO APPLICATIONS</i>		Choose One (1) Course From: .....3	
		**BUS 262 <i>SOCIAL MEDIA</i>	
		**COM 262 <i>SOCIAL MEDIA</i>	
		CIS 258 <i>ADVANCED HTML WEB DEVELOPMENT</i>	

**TOTAL 62-64**

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

# C/Java Programming Certificate

CERTIFICATE REQUIREMENTS	22 CR. HRS.
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
CIS 153A.....	1
<i>DATABASE MANAGEMENT-ACCESS</i>	
CIS 185 .....	3
<i>C PROGRAMMING</i>	
CIS 210 .....	3
<i>OPERATING SYSTEMS CONCEPTS</i>	
CIS 250 .....	3
<i>DEVELOPING INFORMATION SYSTEMS</i>	
CIS 253A.....	3
<i>DATABASE DESIGN AND IMPLEMENTATION</i>	
CIS 275 .....	3
<i>LINUX OPERATING SYSTEM</i>	
CIS 280 .....	3
<i>JAVA PROGRAMMING</i>	
<b>TOTAL</b>	<b>22</b>

## How much will this program cost me?\*

**Tuition and fees: \$2,670**  
**Books and supplies: \$752**  
**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 2013-2014, % finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.**

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

[www.muskegoncc.edu/Include/GE/Automotive\\_Technician\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Automotive_Technician_Certificate.html)

# Midrange Programming Certificate

CERTIFICATE REQUIREMENTS	20 CR. HRS.
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
CIS 121 .....	1
<i>FILE DESIGN AND UTILITIES FOR MIDRANGE COMPUTERS</i>	
CIS 131 .....	1
<i>OPERATIONS AND COMMANDS FOR MIDRANGE COMPUTERS</i>	
CIS 170 .....	3
<i>RPG PROGRAMMING</i>	
CIS 210 .....	3
<i>OPERATING SYSTEMS CONCEPTS</i>	
CIS 250 .....	3
<i>DEVELOPING INFORMATION SYSTEMS</i>	
CIS 253A.....	3
<i>DATABASE DESIGN AND IMPLEMENTATION</i>	
CIS 270A.....	3
<i>ADVANCED RPG PROGRAMMING</i>	
<b>TOTAL 20</b>	

## How much will this program cost me?\*

**Tuition and fees: \$2,390**  
**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 2013-2014, \*\* finished in 7 months.**

*\*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*\*%.**

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

[www.muskegoncc.edu/Include/GE/Midrange\\_Programming\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Midrange_Programming_Certificate.html)

# .NET Programming Certificate

CERTIFICATE REQUIREMENTS	19 CR. HRS.
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
CIS 153A.....	1
<i>DATABASE MANAGEMENT-ACCESS</i>	
CIS 162 .....	3
<i>VISUAL C# PROGRAMMING</i>	
CIS 210 .....	3
<i>OPERATING SYSTEMS CONCEPTS</i>	
CIS 250 .....	3
<i>DEVELOPING INFORMATION SYSTEMS</i>	
CIS 253A.....	3
<i>DATABASE DESIGN AND IMPLEMENTATION</i>	
CIS 260A.....	3
<i>VISUAL BASIC PROGRAMMING</i>	
<b>TOTAL</b>	<b>19</b>

## How much will this program cost me?\*

**Tuition and fees: \$2,978**  
**Books and supplies: \$670**  
**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 2013-2014, \*% finished in 11 months.*

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*%.*

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

*[www.muskegoncc.edu/Include/GE/Automotive\\_Technician\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Automotive_Technician_Certificate.html)*

**PROGRAMS**

# 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>22 CR. HRS.</b>	<b>DEGREE REQUIREMENTS</b>	<b>29 CR. HRS.</b>
AMT 129.....	3	CIS 143.....	3
<i>INTRO TO TECHNOLOGY</i>		<i>INTRODUCTION TO LOCAL AREA NETWORKS</i>	
BCOM 101.....	3	CIS 183.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>NETWORKING TECHNOLOGIES</i>	
BCOM 102.....	3	ELTR 101.....	4
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>ELECTRONICS-BASIC</i>	
ELTR 111.....	5	ELTR 102A.....	4
<i>ELECTRONICS MATHEMATICS</i>		<i>ACTIVE DEVICES AND CIRCUIT ANALYSIS</i>	
HE 110.....	1	CIS 109.....	2
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		<i>PERSONAL COMPUTER MAINTENANCE</i>	
PHIL 205.....	3	ELTR 112.....	3
<i>BUSINESS ETHICS</i>		<i>DIGITAL ELECTRONICS</i>	
Choose One (1) Course From:.....	3	ELTR 201A.....	4
<i>BUS 127 HUMAN RELATIONS</i>		<i>COMMUNICATIONS (PRINCIPLES AND SERVICING)</i>	
<i>COM 101 ORAL COMMUNICATIONS</i>		CIS 209.....	3
Choose One (1) Course From:.....	1	<i>PERSONAL COMPUTER MAINTENANCE II (A+ CERTIFICATION)</i>	
<i>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</i>		TECH 290CI.....	3
		<i>COOPERATIVE INTERNSHIP</i>	
<b>ENTREPRENEUR CORE REQUIREMENTS</b>	<b>13 CR. HRS.</b>		<b>TOTAL 64</b>
BUS 104.....	3		
<i>ACCOUNTING FOR BUSINESS OWNERS</i>			
BUS 131.....	1		
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>			
BUS 230.....	3		
<i>ENTREPRENEURIAL PLANNING</i>			
BUS 240.....	3		
<i>ENTREPRENEURSHIP CAPSTONE</i>			
Choose One (1) Course From:.....	3		
<i>BUS 161A EFFECTIVE SELLING</i>			
<i>**BUS 220 E-BUSINESS</i>			
<i>**CIS 220 E-BUSINESS</i>			

**\*\* 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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20-22 CR. HRS.</b>	<b>CAREER PROGRAM REQUIREMENTS</b>	<b>29 CR. HRS.</b>
BCOM 101.....	3	BUS 167.....	1
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>PROFESSIONALISM IN YOUR CAREER</i>	
BCOM 102.....	3	BUS 262/COM 262.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>SOCIAL MEDIA</i>	
CIS 120A.....	3	CIS 153A.....	1
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>DATABASE MANAGEMENT-ACCESS</i>	
Choose One (1) Course From:.....	3-4	CIS 199.....	1
BUS 126 BUSINESS MATH		<i>INTERNET CONTENT MANAGEMENT SYSTEMS</i>	
MATH 109 COLLEGE ALGEBRA WITH APPLICATIONS		CIS 167A/GRD 167A.....	1
OR HIGHER LEVEL MATH COURSE		<i>INTRODUCTION TO INTERNET ANIMATION</i>	
Choose One (1) Course From:.....	3	CIS 177DW.....	1
BUS 127 HUMAN RELATIONS		<i>INTRODUCTION TO HTML EDITORS</i>	
COM 101 ORAL COMMUNICATIONS		CIS 217.....	1
Choose One (1) Course From:.....	3-4	<i>INTRODUCTION TO JAVASCRIPT PROGRAMMING</i>	
GEOG 104 CULTURAL GEOGRAPHY		CIS 257A.....	3
PHIL 205 BUSINESS ETHICS		<i>HTML FOR INTERNET WEB PAGE DESIGN</i>	
PSCI 111 INTRO TO AMERICAN GOVERNMENT		CIS 258.....	3
PSCI 211 COMPARATIVE GOVERNMENTS		<i>ADVANCED HTML WEB DEVELOPMENT</i>	
PSYC 102 APPLIED PSYCHOLOGY		GRD 100IL.....	1
PSYC 201 GENERAL PSYCHOLOGY		<i>INTRODUCTION TO ILLUSTRATOR</i>	
PEA/DNC.....	2	GRD 100PS.....	1
ONE CREDIT HOUR FROM: PEA 101A, PEA 103,		<i>INTRODUCTION TO PHOTOSHOP</i>	
PEA 104A, PEA 118, OR PEA 201 AND		GRD 120.....	3
ONE PEA/DNC CREDIT HOUR OF CHOICE		<i>INTRODUCTION TO GRAPHIC DESIGN</i>	
<b>BUSINESS CORE REQUIREMENTS</b>	<b>10 CR. HRS.</b>	GRD 210.....	3
ACC 201.....	4	<i>GRAPHIC DESIGN II</i>	
<i>PRINCIPLES OF ACCOUNTING I</i>		Choose One (1) Course From:.....	3
BUS 121.....	3	CIS 187 MULTIMEDIA DIGITIZING	
<i>INTRODUCTION TO BUSINESS</i>		CIS 287 PC DIGITAL VIDEO EDITING	
BUS 220/CIS 220.....	3	GR 160 DIGITAL IMAGING	
<i>E-BUSINESS</i>		Choose One (1) Course From:.....	3
		CIS 267ASP SERVER-SIDE WEB PROGRAMMING	
		USING ASP	
		CIS 267PHP SERVER-SIDE WEB PROGRAMMING	
		USING PHP	
		<b>ELECTIVES</b>	<b>3 CR. HRS.</b>
		ANY 3 CREDITS OF	
		CIS AND/OR GRD COURSEWORK	
		<b>TOTAL</b>	<b>62-64</b>



# Web Design Certificate

## CERTIFICATE REQUIREMENTS 32 CR. HRS.

CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
CIS 153A.....	1
<i>DATABASE MANAGEMENT-ACCESS</i>	
CIS 177DW.....	1
<i>INTRODUCTION TO HTML EDITORS</i>	
CIS 187.....	3
<i>MULTIMEDIA DIGITIZING</i>	
CIS 199.....	1
<i>INTERNET CONTENT MANAGEMENT SYSTEMS</i>	
CIS 217.....	1
<i>INTRODUCTION TO JAVASCRIPT PROGRAMMING</i>	
CIS 220/BUS 220.....	3
<i>E-BUSINESS</i>	
CIS 257A.....	3
<i>HTML FOR INTERNET WEB PAGE DESIGN</i>	
CIS 258.....	3
<i>ADVANCED HTML</i>	
CIS 287.....	3
<i>PERSONAL COMPUTER DIGITAL VIDEO EDITING</i>	
GRD 120.....	3
<i>INTRODUCTION TO GRAPHIC DESIGN</i>	
GRD 167A/CIS 167A.....	1
<i>INTRODUCTION TO INTERNET ANIMATION</i>	
GRD 210.....	3
<i>GRAPHIC DESIGN II</i>	
Choose One (1) Course From:.....	3
CIS 267ASP	SERVER-SIDE WEB PROGRAMMING USING ASP
CIS 267PHP	SERVER-SIDE WEB PROGRAMMING USING PHP

**TOTAL 32**

### How much will this program cost me?\*

**Tuition and fees: \$4,826**  
**Books and supplies: \$1,251**  
**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 2013-2014, % finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.**

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

[www.muskegoncc.edu/Include/GE/Automotive\\_Technician\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Automotive_Technician_Certificate.html)

# 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.

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20-21 CR. HRS.</b>	<b>DEGREE REQUIREMENTS</b>		<b>29 CR. HRS.</b>
BCOM 101.....		3	CIS 124.....		3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>			<i>INTRODUCTION TO GAME DEVELOPMENT</i>		
BCOM 102.....		3	CIS 153A.....		1
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			<i>DATABASE MANAGEMENT-ACCESS</i>		
CIS 120A.....		3	CIS 244.....		3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>			<i>GAME SCRIPTING</i>		
PHIL 205.....		3	CIS 253A.....		3
<i>BUSINESS ETHICS</i>			<i>DATABASE DESIGN AND IMPLEMENTATION</i>		
Choose One (1) Course From:.....		3	CIS 257A.....		3
*BUS 105	<i>BUSINESS STATISTICS</i>		<i>HTML FOR INTERNET WEB PAGE DESIGN</i>		
*MATH 115	<i>PROBABILITY AND STATISTICS</i>		CIS 284.....		3
	<i>OR HIGHER LEVEL MATH COURSE</i>		<i>INTERACTIVE MEDIA AND GAME DESIGN</i>		
Choose One (1) Course From:.....		3	GRD 120.....		3
BUS 127	<i>HUMAN RELATIONS</i>		<i>INTRODUCTION TO GRAPHIC DESIGN</i>		
COM 101	<i>ORAL COMMUNICATIONS</i>		GRD 167A/CIS 167A.....		1
Choose One (1) Course From:.....		1	<i>INTRODUCTION TO INTERNET ANIMATION</i>		
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201			Choose One (1) Course From:.....		3
Choose One (1) Course From:.....		1	CIS 162	<i>VISUAL C# PROGRAMMING</i>	
HE 110	<i>INDUSTRIAL SAFETY AND</i>		CIS 185	<i>C PROGRAMMING</i>	
	<i>WORKPLACE TRAINING</i>		Choose One (1) Course From:.....		3
PEA/DNC	<i>ANY PHYSICAL EDUCATION</i>		CIS 267ASP	<i>SERVER-SIDE WEB PROGRAMMING</i>	
	<i>OR DANCE COURSE</i>			<i>USING ASP</i>	
			CIS 267PHP	<i>SERVER-SIDE WEB PROGRAMMING</i>	
				<i>USING PHP</i>	
<b>ENTREPRENEUR CORE REQUIREMENTS</b>	<b>13 CR. HRS.</b>		Choose One (1) Course From:.....		3
BUS 131.....		1	ART 198	<i>ART HISTORY I</i>	
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>			BUS 290CI	<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
BUS 104.....		3	COM 102	<i>MASS MEDIA</i>	
<i>ACCOUNTING FOR BUSINESS OWNERS</i>			TH 102	<i>INTRO TO ACTING I</i>	
BUS 230.....		3			
<i>ENTREPRENEURIAL PLANNING</i>					
BUS 240.....		3			
<i>ENTREPRENEURSHIP CAPSTONE</i>					
Choose One (1) Course From:.....		3			
BUS 161A	<i>EFFECTIVE SELLING</i>				
**BUS 220	<i>E-BUSINESS</i>				
**CIS 220	<i>E-BUSINESS</i>				
					<b>TOTAL 62-63</b>

PROGRAMS

\* 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20 CR. HRS.</b>	<b>DEGREE REQUIREMENTS</b>	<b>29 CR. HRS.</b>
BCOM 101.....		3	BUS 290CI.....	1
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>			<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
BCOM 102.....		3	CIS 153A.....	1
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			<i>DATABASE MANAGEMENT-ACCESS</i>	
CIS 120A.....		3	CIS 177.....	1
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>			<i>INTRODUCTION TO HTML EDITORS</i>	
PHIL 205.....		3	CIS 187.....	3
<i>BUSINESS ETHICS</i>			<i>MULTIMEDIA DIGITIZING</i>	
Choose One (1) Course From:.....		3	CIS 217.....	1
*BUS 105	<i>BUSINESS STATISTICS</i>		<i>INTRODUCTION TO JAVASCRIPT PROGRAMMING</i>	
BUS 126	<i>BUSINESS MATH</i>		CIS 253A.....	3
*MATH 115	<i>PROBABILITY AND STATISTICS</i>		<i>DATABASE DESIGN AND IMPLEMENTATION</i>	
Choose One (1) Course From:.....		3	CIS 257A.....	3
BUS 127	<i>HUMAN RELATIONS</i>		<i>HTML FOR INTERNET WEB PAGE DESIGN</i>	
COM 101	<i>ORAL COMMUNICATIONS</i>		CIS 287.....	3
Choose One (1) Course From:.....		1	<i>PERSONAL COMPUTER DIGITAL VIDEO EDITING</i>	
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201			GR 160.....	3
Choose One (1) Course From:.....		1	<i>DIGITAL IMAGING</i>	
HE 110	<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		GRD 120.....	3
PEA/DNC	<i>ANY PHYSICAL EDUCATION OR DANCE COURSE</i>		<i>INTRODUCTION TO GRAPHIC DESIGN</i>	
			GRD 167A/CIS 167A.....	1
			<i>INTRODUCTION TO INTERNET ANIMATION</i>	
			Choose One (1) Course From:.....	3
			CIS 162	<i>VISUAL C# PROGRAMMING</i>
			CIS 185	<i>C PROGRAMMING</i>
			Choose One (1) Course From:.....	3
			CIS 267ASP	<i>SERVER-SIDE WEB PROGRAMMING USING ASP</i>
			CIS 267PHP	<i>SERVER-SIDE WEB PROGRAMMING USING PHP</i>
				<b>TOTAL 62</b>
<b>ENTREPRENEUR CORE REQUIREMENTS</b>		<b>13 CR. HRS.</b>		
BUS 104.....		3		
<i>ACCOUNTING FOR BUSINESS OWNERS</i>				
BUS 131.....		1		
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>				
BUS 220/CIS 220.....		3		
<i>E-BUSINESS</i>				
BUS 230.....		3		
<i>ENTREPRENEURIAL PLANNING</i>				
BUS 240.....		3		
<i>ENTREPRENEURSHIP CAPSTONE</i>				

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

# 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20 CR. HRS.</b>	<b>CAREER PROGRAM REQUIREMENTS</b>	<b>31 CR. HRS.</b>
BCOM 101.....	3	ACC 206.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>QUICKBOOKS COMPUTERIZED ACCOUNTING</i>	
BCOM 102.....	3	BUS 167.....	1
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>PROFESSIONALISM IN YOUR CAREER</i>	
BUS 126.....	3	BUS 179.....	1
<i>BUSINESS MATH</i>		<i>KEYBOARDING</i>	
CIS 120A.....	3	BUS 181C.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>OFFICE PROCEDURES I: DOCUMENT FORMATTING</i>	
PHIL 205.....	3	BUS 182C.....	3
<i>BUSINESS ETHICS</i>		<i>OFFICE PROCEDURES II: DOCUMENT PRODUCTION</i>	
Choose One (1) Course From:.....	3	BUS 185B.....	2
BUS 127 <i>HUMAN RELATIONS</i>		<i>ELECTRONIC CALCULATOR</i>	
COM 101 <i>ORAL COMMUNICATIONS</i>		BUS 187A.....	2
PEA/DNC.....	2	<i>ELECTRONIC RECORDS MANAGEMENT</i>	
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103,</i>		BUS 188A1.....	3
<i>PEA 104A, PEA 118, OR PEA 201 AND</i>		<i>VOICE TRANSCRIPTION, ADMINISTRATIVE</i>	
<i>ONE PEA/DNC CREDIT HOUR OF CHOICE</i>		BUS 280C.....	3
<b>BUSINESS CORE REQUIREMENTS</b>	<b>10 CR. HRS.</b>	<i>WORD PROCESSING PART II</i>	
ACC 201.....	4	BUS 281D.....	3
<i>PRINCIPLES OF ACCOUNTING I</i>		<i>OFFICE PROCEDURES III: ADVANCED APPLICATIONS</i>	
BUS 121.....	3	BUS 290CI.....	3
<i>INTRODUCTION TO BUSINESS</i>		<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
BUS 180D.....	3	CIS 101EW.....	1
<i>WORD PROCESSING PART I</i>		<i>INTRODUCTION TO ELECTRONIC SPREADSHEETS</i>	
		CIS 102EW.....	1
		<i>INTERMEDIATE ELECTRONIC SPREADSHEETS</i>	
		CIS 119PP.....	1
		<i>INTRODUCTION TO PRESENTATION GRAPHICS</i>	
		CIS 153A.....	1
		<i>DATABASE MANAGEMENT-ACCESS</i>	
		<b>*RECOMMENDED ELECTIVES</b>	<b>VARIABLE CR. HRS.</b>
		ACC 202.....	4
		<i>PRINCIPLES OF ACCOUNTING II</i>	
		BUS 123.....	3
		<i>BUSINESS LAW I</i>	
		BUS 166.....	3
		<i>QUALITY CUSTOMER SERVICE</i>	
		BUS 200.....	3
		<i>INTERNATIONAL BUSINESS</i>	
		*As needed to meet 62 credit hour minimum.	
		<b>TOTAL 62</b>	

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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20 CR. HRS.</b>	<b>CAREER PROGRAM REQUIREMENTS</b>	<b>32 CR. HRS.</b>
BCOM 101.....	3	AH 101.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>MEDICAL TERMINOLOGY</i>	
BCOM 102.....	3	AH 104.....	2
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>MEDICAL BILLING</i>	
BUS 126.....	3	AH 106.....	3
<i>BUSINESS MATH</i>		<i>FUNDAMENTALS OF HEALTH CARE DELIVERY</i>	
CIS 120A.....	3	BIOL 115.....	4
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>INTRODUCTION TO ANATOMY AND PHYSIOLOGY</i>	
Choose One (1) Course From:.....	3	BUS 167.....	1
<i>BUS 127 HUMAN RELATIONS</i>		<i>PROFESSIONALISM IN YOUR CAREER</i>	
<i>COM 101 ORAL COMMUNICATIONS</i>		BUS 181C.....	3
Choose One (1) Course From:.....	3	<i>OFFICE PROCEDURES I: DOCUMENT FORMATTING</i>	
<i>PHIL 204 BIOMEDICAL ETHICS</i>		BUS 182C.....	3
<i>PHIL 205 BUSINESS ETHICS</i>		<i>OFFICE PROCEDURES II: DOCUMENT PRODUCTION</i>	
<i>PSYC 102 APPLIED PSYCHOLOGY</i>		BUS 188F.....	3
PEA/DNC.....	2	<i>INTRODUCTION TO MEDICAL TRANSCRIPTION</i>	
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103,</i>		BUS 195.....	3
<i>PEA 104A, PEA 118, OR PEA 201 AND</i>		<i>MEDICAL RECORDS MANAGEMENT</i>	
<i>ONE PEA/DNC CREDIT HOUR OF CHOICE</i>		BUS 196.....	3
<b>BUSINESS CORE REQUIREMENTS</b>	<b>10 CR. HRS.</b>	<i>ELECTRONIC HEALTH RECORDS</i>	
ACC 201.....	4	BUS 290CI.....	3
<i>PRINCIPLES OF ACCOUNTING I</i>		<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
BUS 121.....	3	CIS 101EW.....	1
<i>INTRODUCTION TO BUSINESS</i>		<i>INTRO TO ELECTRONIC SPREADSHEETS</i>	
BUS 180D.....	3		
<i>WORD PROCESSING PART I</i>		<b>TOTAL 62</b>	

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

# Healthcare Support Assistant Certificate

The Healthcare Support Assistant Certificate prepares the graduate to offer high level customer service, organize and document care of patients, use electronic health records and provide for basic patient care needs in supervised health care settings or in the home. Students must achieve a passing grade in each course in the certificate to earn this certificate.

<b>CERTIFICATE REQUIREMENTS</b>	<b>25 CR. HRS.</b>
AH 101 .....	3
<i>MEDICAL TERMINOLOGY</i>	
AH 106 .....	3
<i>FUNDAMENTALS OF HEALTH CARE DELIVERY</i>	
AH 107 .....	5
<i>NURSE AIDE/HOME HEALTH AIDE</i>	
BUS 166 .....	3
<i>QUALITY CUSTOMER SERVICE</i>	
BUS 188F .....	3
<i>INTRODUCTION TO MEDICAL TRANSCRIPTION</i>	
BUS 196 .....	3
<i>ELECTRONIC HEALTH RECORDS</i>	
HE 100A .....	2
<i>COMMUNITY FIRST AID AND SAFETY</i>	
HE 106 .....	3
<i>CONCEPTS OF HEALTH AND WELL-BEING</i>	
<b>TOTAL 25</b>	

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

# Medical Assistant Certificate

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The medical assistant certificate program prepares graduates to perform administrative and clinical duties under the direction of the physician. Administrative duties may include scheduling appointments, maintaining medical records, billing and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physicians.

<b>CERTIFICATE REQUIREMENTS</b>	<b>32 CR. HRS.</b>
AH 101 .....	3
<i>MEDICAL TERMINOLOGY</i>	
AH 104 .....	2
<i>MEDICAL INSURANCE BILLING</i>	
BIOL 115 .....	4
<i>INTRODUCTION TO ANATOMY AND PHYSIOLOGY</i>	
BUS 195 .....	3
<i>MEDICAL RECORDS MANAGEMENT</i>	
BUS 196 .....	3
<i>ELECTRONIC HEALTH RECORDS</i>	
MA 101 .....	3
<i>MEDICAL ASSISTANT ADMINISTRATIVE I</i>	
MA 102 .....	4
<i>MEDICAL ASSISTANT CLINICAL I</i>	
MA 105 .....	2
<i>MEDICAL ASSISTANT ADMINISTRATIVE II</i>	
MA 106 .....	4
<i>MEDICAL ASSISTANT CLINICAL II</i>	
MA 110 .....	4
<i>MEDICAL ASSISTANT SEMINAR AND INTERNSHIP</i>	
<b>TOTAL 32</b>	



# 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20-22 CR. HRS.</b>	<b>CAREER PROGRAM REQUIREMENTS</b>	<b>32-33 CR. HRS.</b>
BCOM 101.....		3	ACC 206 .....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>			<i>QUICKBOOKS COMPUTERIZED ACCOUNTING</i>	
BCOM 102.....		3	AH 101.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			<i>MEDICAL TERMINOLOGY</i>	
CIS 120A.....		3	AH 104.....	2
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>			<i>MEDICAL INSURANCE BILLING</i>	
Choose One (1) Course From: .....		3-4	AH 106.....	3
*BUS 105	<i>BUSINESS STATISTICS</i>		<i>FUNDAMENTALS OF HEALTH CARE DELIVERY</i>	
BUS 126	<i>BUSINESS MATH</i>		BUS 123.....	3
MATH 109	<i>COLLEGE ALGEBRA WITH APPLICATIONS</i>		<i>BUSINESS LAW I</i>	
*MATH 115	<i>PROBABILITY AND STATISTICS</i>		BUS 125.....	3
Choose One (1) Course From: .....		3	<i>SUPERVISION</i>	
BUS 127	<i>HUMAN RELATIONS</i>		BUS 166.....	3
COM 101	<i>ORAL COMMUNICATIONS</i>		<i>QUALITY CUSTOMER SERVICE</i>	
Choose One (1) Course From: .....		3-4	BUS 167.....	1
GEOG 104	<i>CULTURAL GEOGRAPHY</i>		<i>PROFESSIONALISM IN YOUR CAREER</i>	
PHIL 205	<i>BUSINESS ETHICS</i>		BUS 195.....	3
PSCI 111	<i>INTRO TO AMERICAN GOVERNMENT</i>		<i>MEDICAL RECORDS MANAGEMENT</i>	
PSCI 211	<i>COMPARATIVE GOVERNMENTS</i>		BUS 196.....	3
PSYC 102	<i>APPLIED PSYCHOLOGY</i>		<i>ELECTRONIC HEALTH RECORDS</i>	
PSYC 201	<i>GENERAL PSYCHOLOGY</i>		BUS 273A.....	3
PEA/DNC .....		2	<i>HUMAN RESOURCE MANAGEMENT</i>	
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103,</i>			BUS 290CI.....	2-3
<i>PEA 104A, PEA 118, OR PEA 201 AND</i>			<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
<i>ONE PEA/DNC CREDIT HOUR OF CHOICE</i>				
<b>BUSINESS CORE REQUIREMENTS</b>		<b>10 CR. HRS.</b>	<b>TOTAL 62-64</b>	
ACC 201 .....		4	<b>OTHER CLASSES TO CONSIDER</b>	
<i>PRINCIPLES OF ACCOUNTING I</i>			BUS179.....	1
BUS 121.....		3	<i>KEYBOARDING</i>	
<i>INTRODUCTION TO BUSINESS</i>			CIS 101EW.....	1
BUS 180D.....		3	<i>INTRODUCTION TO ELECTRONIC SPREADSHEETS</i>	
<i>WORD PROCESSING PART I</i>			CIS 153A.....	1
			<i>DATABASE MANAGEMENT-ACCESS</i>	

\* 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.

<b>CERTIFICATE REQUIREMENTS</b>	<b>35 CR. HRS.</b>
AH 101.....	3
<i>MEDICAL TERMINOLOGY</i>	
AH 104.....	2
<i>MEDICAL BILLING</i>	
AH 106.....	3
<i>FUNDAMENTALS OF HEALTH CARE DELIVERY</i>	
BCOM 101.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>	
BIOL 115.....	4
<i>INTRODUCTION TO ANATOMY AND PHYSIOLOGY</i>	
BUS 167.....	1
<i>PROFESSIONALISM IN YOUR CAREER</i>	
BUS 179.....	1
<i>KEYBOARDING</i>	
	<b>CR. HRS.</b>
BUS 180D.....	3
<i>WORD PROCESSING PART I</i>	
BUS 181C.....	3
<i>OFFICE PROCEDURES I: DOCUMENT FORMATTING</i>	
BUS 182C.....	3
<i>OFFICE PROCEDURES II: DOCUMENT PRODUCTION</i>	
BUS 195.....	3
<i>MEDICAL RECORDS MANAGEMENT</i>	
BUS 196.....	3
<i>ELECTRONIC HEALTH RECORDS</i>	
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
	<b>TOTAL 35</b>

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

## How much will this program cost me?\*

**Tuition and fees: \$4,307**

**Books and supplies: \$1,629**

**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 2013-2014, \*\*% finished in 11 months.

\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*\*%.

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

[www.muskegoncc.edu/Include/GE/Automotive\\_Technician\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Automotive_Technician_Certificate.html)

# 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.

<b>CERTIFICATE REQUIREMENTS</b>	<b>32 CR. HRS.</b>
BCOM 101.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>	
BCOM 102.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>	
BUS 167.....	1
<i>PROFESSIONALISM IN YOUR CAREER</i>	
BUS 179.....	1
<i>KEYBOARDING</i>	
BUS 180D.....	3
<i>WORD PROCESSING PART I</i>	
BUS 181C.....	3
<i>OFFICE PROCEDURES I: DOCUMENT FORMATTING</i>	
BUS 182C.....	3
<i>OFFICE PROCEDURES II: DOCUMENT PRODUCTION</i>	
BUS 185B.....	2
<i>ELECTRONIC CALCULATOR</i>	
	<b>CR. HRS.</b>
BUS 280C.....	3
<i>WORD PROCESSING PART II</i>	
BUS 281D.....	3
<i>OFFICE PROCEDURES III: ADVANCED APPLICATIONS</i>	
CIS 101EW.....	1
<i>INTRODUCTION TO ELECTRONIC SPREADSHEETS</i>	
CIS 102EW.....	1
<i>INTERMEDIATE ELECTRONIC SPREADSHEETS</i>	
CIS 119PP.....	1
<i>INTRODUCTION TO PRESENTATION GRAPHICS</i>	
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
CIS 153A.....	1
<i>DATABASE MANAGEMENT-ACCESS</i>	

**TOTAL 32**

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

## How much will this program cost me?\*

**Tuition and fees: \$4,296**  
**Books and supplies: \$1,885**  
**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 2013-2014, % finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.**

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

[www.muskegoncc.edu/Include/GE/Automotive\\_Technician\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Automotive_Technician_Certificate.html)

# 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.

PROGRAMS

### GENERAL EDUCATION REQUIREMENTS

**20-22 CR. HRS.**

BCOM 101	.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		
BCOM 102	.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		
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
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE</i>		

### CAREER PROGRAM REQUIREMENTS

**29 CR. HRS.**

ED 109	.....	3
<i>THE PARENT-CHILD CONNECTION</i>		
ED 111	.....	3
<i>INTRO TO THE EDUCATION OF YOUNG CHILDREN</i>		
ED 120B	.....	3
<i>EARLY CHILDHOOD EDUCATION</i>		
ED 210	.....	3
<i>CHILD CARE AND GUIDANCE</i>		
ED 211	.....	3
<i>BEHAVIOR MANAGEMENT</i>		
ED 214	.....	3
<i>INFANTS AND TODDLERS</i>		
ED 220A	.....	2
<i>EARLY CHILDHOOD ASSESSMENT</i>		
ED 230	.....	3
<i>CHILDREN'S LITERATURE</i>		

### CAREER PROGRAM REQUIREMENTS (CONTINUED)

ED 252A	.....	3
<i>CHILD DEVELOPMENT PRACTICUM</i>		
Choose One (1) Course From:	.....	3
ED 225	CHILD DEVELOPMENT	
ED 250	HUMAN GROWTH AND LEARNING	

### RECOMMENDED ELECTIVES

**11-13 CR. HRS.**

ART 211	.....	3
<i>ART EDUCATION WORKSHOP</i>		
CSS 100A	.....	2
<i>COLLEGE SUCCESS SEMINAR</i>		
ED 118	.....	3
<i>CREATIVE CURRICULUM FOR CHILDREN</i>		
ED 200	.....	3
<i>LITERACY BIRTH TO FIVE</i>		
ED 202	.....	3
<i>TEACHING OF READING IN THE ELEMENTARY SCHOOL</i>		
ED 207	.....	3
<i>PRINCIPLES OF ELEMENTARY EDUCATION</i>		
ED 216	.....	3
<i>EDUCATING THE EXCEPTIONAL CHILD AND YOUNG ADULT</i>		
ED 219	.....	3
<i>SCIENCE IN THE ELEMENTARY CLASSROOM</i>		
ED 223	.....	3
<i>CHILD CARE CENTER ADMINISTRATION</i>		
ED 251	.....	3
<i>HEALTH NEEDS OF THE YOUNG CHILD</i>		
MATH 100A (Formerly MATH 050)	.....	4
<i>INTERMEDIATE ALGEBRA</i>		
MU 192	.....	4
<i>MUSIC FOR THE CLASSROOM TEACHER</i>		
PSYC 202	.....	3
<i>EDUCATIONAL PSYCHOLOGY</i>		
SOC 101	.....	3
<i>PRINCIPLES OF SOCIOLOGY</i>		
TH 108	.....	3
<i>THEATER FOR CHILDREN</i>		
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
<i>THE PARENT-CHILD CONNECTION</i>	
ED 111 .....	3
<i>INTRO TO THE EDUCATION OF YOUNG CHILDREN</i>	
ED 120B.....	3
<i>EARLY CHILDHOOD EDUCATION</i>	
ED 210 .....	3
<i>CHILD CARE AND GUIDANCE</i>	
ED 211 .....	3
<i>BEHAVIOR MANAGEMENT</i>	
ED 214 .....	3
<i>INFANTS AND TODDLERS</i>	
ED 220A.....	2
<i>EARLY CHILDHOOD ASSESSMENT</i>	
ED 230 .....	3
<i>CHILDREN'S LITERATURE</i>	
ED 252A.....	3
<i>CHILD DEVELOPMENT PRACTICUM</i>	
Choose One (1) Course From: .....	3
ED 225 <i>CHILD DEVELOPMENT</i>	
ED 250 <i>HUMAN GROWTH AND LEARNING</i>	

**TOTAL 29**

## \*ADMINISTRATIVE ELECTIVES 9 CR. HRS.

ED 118 .....	3
<i>CREATIVE CURRICULUM FOR CHILDREN</i>	
ED 251 .....	3
<i>HEALTH NEEDS OF THE YOUNG CHILD</i>	
Choose One (1) Course From: .....	3
ED 107 <i>CHILD CARE: OPERATING</i>	
<i>A SUCCESSFUL BUSINESS</i>	
ED 223 <i>CHILD CARE CENTER ADMINISTRATION</i>	

*\*For those pursuing a Director's position*

**TOTAL 38**

**Total Fieldwork Hours: 480**

### How much will this program cost me?\*

**Tuition and fees: \$3,898**  
**Books and supplies: \$1,514**  
**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 2013-2014, \*\*% finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*\*%.**

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

[www.muskegoncc.edu/Include/GE/Automotive\\_Technician\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Automotive_Technician_Certificate.html)

# Family Child Care (FCC) Certificate

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

*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: \$3,898**

**Books and supplies: \$1,196**

**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 2013-2014, % finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 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](http://www.muskegoncc.edu/Include/GE/Early_Child_Care_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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>21 CR. HRS.</b>	<b>DEGREE REQUIREMENTS</b>	<b>29 CR. HRS.</b>
BCOM 101.....	3	ED 111.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>INTRO TO EDUCATION OF YOUNG CHILDREN</i>	
BCOM 102.....	3	ED 120B.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>EARLY CHILDHOOD EDUCATION</i>	
CIS 120A.....	3	ED 210.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>CHILD CARE AND GUIDANCE</i>	
HE 110.....	1	ED 211.....	3
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		<i>BEHAVIOR MANAGEMENT</i>	
MATH 105.....	4	ED 214.....	3
<i>MATHEMATICS FOR ELEMENTARY TEACHERS</i>		<i>INFANTS AND TODDLERS</i>	
PHIL 205.....	3	ED 220A.....	2
<i>BUSINESS ETHICS</i>		<i>EARLY CHILDHOOD ASSESSMENT</i>	
Choose One (1) Course From:.....	3	ED 223.....	3
<i>BUS 127 HUMAN RELATIONS</i>		<i>CHILD CARE CENTER ADMINISTRATION</i>	
<i>COM 101 ORAL COMMUNICATIONS</i>		ED 230.....	3
Choose One (1) Course From:.....	1	<i>CHILDREN'S LITERATURE</i>	
<i>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</i>		ED 252A.....	3
<b>ENTREPRENEUR CORE REQUIREMENTS</b>	<b>13 CR. HRS.</b>	<i>CHILD DEVELOPMENT PRACTICUM</i>	
BUS 104.....	3	Choose One (1) Course From:.....	3
<i>ACCOUNTING FOR BUSINESS OWNERS</i>		ED 225 <i>CHILD DEVELOPMENT</i>	
BUS 131.....	1	ED 250 <i>HUMAN GROWTH AND LEARNING</i>	
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>		<b>TOTAL 63</b>	
BUS 230.....	3		
<i>ENTREPRENEURIAL PLANNING</i>			
BUS 240.....	3		
<i>ENTREPRENEURSHIP CAPSTONE</i>			
Choose One (1) Course From:.....	3		
<i>BUS 161A EFFECTIVE SELLING</i>			
<b>**BUS 220 E-BUSINESS</b>			
<b>**CIS220 E-BUSINESS</b>			

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



# Infant-Toddler Development Associate Certificate

CERTIFICATE REQUIREMENTS	26 CR. HRS.
ED 111.....	3
<i>INTRO TO EDUCATION OF YOUNG CHILDREN</i>	
ED 120B.....	3
<i>EARLY CHILDHOOD EDUCATION</i>	
ED 210.....	3
<i>CHILD CARE AND GUIDANCE</i>	
ED 214.....	3
<i>INFANTS AND TODDLERS</i>	
ED 216.....	3
<i>EDUCATING THE EXCEPTIONAL CHILD AND YOUNG ADULT</i>	
ED 220A.....	2
<i>EARLY CHILDHOOD ASSESSMENT</i>	
ED 230.....	3
<i>CHILDREN'S LITERATURE</i>	
ED 252A.....	3
<i>CHILD DEVELOPMENT PRACTICUM</i>	
Choose One (1) Course From: .....	3
ED 225 <i>CHILD DEVELOPMENT</i>	
ED 250 <i>HUMAN GROWTH AND LEARNING</i>	
<b>TOTAL 26</b>	

*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: \$3,550  
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 2013-2014, \*\*% finished in 6 months.*

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 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](http://www.muskegoncc.edu/Include/GE/Infant_Toddler_Development_Associate_Certificate.html)*

# Instructional Assistant, Autism Certificate

CERTIFICATE REQUIREMENTS	34 CR. HRS.
ED 101A.....	3
<i>INTRODUCTION TO EDUCATION</i>	
ED 109.....	3
<i>THE PARENT-CHILD CONNECTION</i>	
ED 211.....	3
<i>BEHAVIOR MANAGEMENT</i>	
ED 225.....	3
<i>CHILD DEVELOPMENT</i>	
ED 227.....	3
<i>EDUCATIONAL AND ASSISTIVE TECHNOLOGY</i>	
ED 229.....	3
<i>FUNDAMENTAL CONCEPTS OF AUTISM SPECTRUM</i>	
ED 231.....	3
<i>INTRO TO AUTISM SPECTRUM DISORDERS (ASD) THERAPIES I</i>	
ED 232.....	3
<i>ADVANCED AUTISM SPECTRUM DISORDERS (ASD) THERAPIES II</i>	
ED 272.....	3
<i>EDUCATION PRACTICUM</i>	
PSYC 201.....	4
<i>GENERAL PSYCHOLOGY</i>	
PSYC 202.....	3
<i>EDUCATIONAL PSYCHOLOGY</i>	
<b>TOTAL 34</b>	

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: \$4,362**  
**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 2013-2014, % finished in 15 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 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](http://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

## Instructional Assistant, Special Education

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20-22 CR. HRS.</b>	<b>RECOMMENDED ELECTIVES</b>	<b>10-12 CR. HRS.</b>
BCOM 101.....	3	ART 211.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>ART EDUCATION WORKSHOP</i>	
BCOM 102.....	3	CSS 100A.....	2
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>COLLEGE SUCCESS SEMINAR</i>	
Choose One (1) Course From:.....	3-4	ED 106.....	2
BUS 126 <i>BUSINESS MATH</i>		<i>INTRODUCTION TO OUTDOOR EDUCATION</i>	
MATH 105 <i>MATH FOR ELEMENTARY TEACHERS</i>		ED 118.....	3
Choose One (1) Course From:.....	3	<i>CREATIVE CURRICULUM FOR CHILDREN</i>	
BUS 127 <i>HUMAN RELATIONS</i>		ED 207.....	3
COM 101 <i>ORAL COMMUNICATIONS</i>		<i>PRINCIPLES OF ELEMENTARY EDUCATION</i>	
Choose One (1) Course From:.....	3	ED 219.....	3
CIS 110 <i>COMPUTER CONCEPTS</i>		<i>SCIENCE IN THE ELEMENTARY CLASSROOM</i>	
CIS 120A <i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		ED 220A.....	3
Choose One (1) Course From:.....	3-4	<i>EARLY CHILDHOOD ASSESSMENT</i>	
GEOG 104 <i>CULTURAL GEOGRAPHY</i>		ED 226.....	3
PHIL 205 <i>BUSINESS ETHICS</i>		<i>INTERDISCIPLINARY APPROACHES TO EARLY INTERVENTIONS</i>	
PSCI 111 <i>INTRO TO AMERICAN GOVERNMENT</i>		ED 251.....	3
PSCI 211 <i>COMPARATIVE GOVERNMENTS</i>		<i>HEALTH NEEDS OF THE YOUNG CHILD</i>	
PSYC 102 <i>APPLIED PSYCHOLOGY</i>		HE 100A.....	2
PSYC 201 <i>GENERAL PSYCHOLOGY</i>		<i>COMMUNITY FIRST AID AND SAFETY</i>	
PEA/DNC.....	2	MATH 100A (Formerly MATH 050).....	4
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE</i>		<i>INTERMEDIATE ALGEBRA</i>	
<b>CAREER PROGRAM REQUIREMENTS</b>	<b>30 CR. HRS.</b>	MU 192.....	4
ED 101A.....	3	<i>MUSIC FOR THE CLASSROOM TEACHER</i>	
<i>INTRODUCTION TO EDUCATION</i>		SOC 101.....	3
ED 109.....	3	<i>PRINCIPLES OF SOCIOLOGY</i>	
<i>THE PARENT-CHILD CONNECTION</i>		TH 108.....	3
ED 202.....	3	<i>THEATER FOR CHILDREN</i>	
<i>TEACHING OF READING IN THE ELEMENTARY SCHOOL</i>		<b>TOTAL 62</b>	
ED 211.....	3	<b>Total Fieldwork Hours: 480</b>	
<i>BEHAVIOR MANAGEMENT</i>			
ED 216.....	3		
<i>EDUCATING THE EXCEPTIONAL CHILD AND YOUNG ADULT</i>			
ED 221.....	3		
<i>TEACHING STUDENTS WITH LEARNING AND BEHAVIORAL PROBLEMS</i>			
ED 230.....	3		
<i>CHILDREN'S LITERATURE</i>			
ED 272.....	3		
<i>EDUCATION PRACTICUM</i>			
PSYC 202.....	3		
<i>EDUCATIONAL PSYCHOLOGY</i>			
Choose One (1) Course From:.....	3		
ED 225 <i>CHILD DEVELOPMENT</i>			
ED 250 <i>HUMAN GROWTH AND LEARNING</i>			

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.***

# 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20-22 CR. HRS.</b>	<b>RECOMMENDED ELECTIVES</b>	<b>13-15 CR. HRS.</b>
BCOM 101.....	3	ART 211 .....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>ART EDUCATION WORKSHOP</i>	
BCOM 102.....	3	CSS 100A.....	2
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>COLLEGE SUCCESS SEMINAR</i>	
Choose One (1) Course From: .....	3-4	ED 106 .....	2
BUS 126 <i>BUSINESS MATH</i>		<i>INTRODUCTION TO OUTDOOR EDUCATION</i>	
MATH 105 <i>MATH FOR ELEMENTARY TEACHERS</i>		ED 118 .....	3
Choose One (1) Course From: .....	3	<i>CREATIVE CURRICULUM FOR CHILDREN</i>	
BUS 127 <i>HUMAN RELATIONS</i>		ED 207 .....	3
COM 101 <i>ORAL COMMUNICATIONS</i>		<i>PRINCIPLES OF ELEMENTARY EDUCATION</i>	
Choose One (1) Course From: .....	3	ED 216 .....	3
CIS 110 <i>COMPUTER CONCEPTS</i>		<i>EDUCATING THE EXCEPTIONAL CHILD AND YOUNG ADULT</i>	
CIS 120A <i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		ED 219 .....	3
Choose One (1) Course From: .....	3-4	<i>SCIENCE IN THE ELEMENTARY CLASSROOM</i>	
GEOG 104 <i>CULTURAL GEOGRAPHY</i>		ED 251 .....	3
PHIL 205 <i>BUSINESS ETHICS</i>		<i>HEALTH NEEDS OF THE YOUNG CHILD</i>	
PSCI 111 <i>INTRO TO AMERICAN GOVERNMENT</i>		MATH 100A (Formerly MATH 050).....	4
PSCI 211 <i>COMPARATIVE GOVERNMENTS</i>		<i>INTERMEDIATE ALGEBRA</i>	
PSYC 102 <i>APPLIED PSYCHOLOGY</i>		MU 192 .....	4
PSYC 201 <i>GENERAL PSYCHOLOGY</i>		<i>MUSIC FOR THE CLASSROOM TEACHER</i>	
PEA/DNC .....	2	SOC 101 .....	3
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201 AND ONE PEA/DNC CREDIT HOUR OF CHOICE</i>		<i>PRINCIPLES OF SOCIOLOGY</i>	
		TH 108 .....	3
		<i>THEATER FOR CHILDREN</i>	
		<b>TOTAL 62</b>	
<b>CAREER PROGRAM REQUIREMENTS</b>	<b>27 CR. HRS.</b>	<b>Total Fieldwork Hours: 480</b>	
ED 101A.....	3		
<i>A INTRODUCTION TO EDUCATION</i>			
ED 109 .....	3		
<i>THE PARENT-CHILD CONNECTION</i>			
ED 202 .....	3		
<i>TEACHING OF READING IN THE ELEMENTARY SCHOOL</i>			
ED 211 .....	3		
<i>BEHAVIOR MANAGEMENT</i>			
ED 221 .....	3		
<i>TEACHING STUDENTS WITH LEARNING AND BEHAVIOR PROBLEMS</i>			
ED 230 .....	3		
<i>CHILDREN'S LITERATURE</i>			
ED 272 .....	3		
<i>EDUCATION PRACTICUM</i>			
PSYC 202.....	3		
<i>EDUCATIONAL PSYCHOLOGY</i>			
Choose One (1) Course From: .....	3		
ED 225 <i>CHILD DEVELOPMENT</i>			
ED 250 <i>HUMAN GROWTH AND LEARNING</i>			

# 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
- ♦ Display Advertising Certificate
- ♦ Electronics Technology Certificate
- ♦ Graphic Design for Multimedia Certificate
- ♦ Graphic Design Video/Audio Certificate
- ♦ Grounds Maintenance Certificate
- ♦ Industrial Electrical Maintenance Certificate
- ♦ Industrial Maintenance Certificate
- ♦ Industrial Technology Certificate
- ♦ Machining Technology Certificate
- ♦ Machinist Certificate
- ♦ Machine Mechanic Certificate (Industrial Maintenance)
- ♦ Printing Prepress Certificate
- ♦ Production Supervision Certificate
- ♦ Quality Assurance Certificate
- ♦ Welding Technology 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20 CR. HRS.</b>	<b>DEGREE REQUIREMENTS</b>	<b>29 CR. HRS.</b>
BCOM 101.....	3	AT 101.....	2
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>INTRODUCTION TO AUTOMOTIVE TECHNOLOGY</i>	
BCOM 102.....	3	AT 114.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>AUTOMOTIVE POWER PLANTS (ENGINE REBUILDING)</i>	
HE 110.....	1	AT 120.....	3
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		<i>INTRODUCTION TO ELECTRICAL SYSTEMS I</i>	
PHIL 205.....	3	AT 121.....	3
<i>BUSINESS ETHICS</i>		<i>ELECTRICAL SYSTEMS II</i>	
Choose One (1) Course From:.....	3	AT 122.....	3
<i>AMT 129 INTRO TO TECHNOLOGY</i>		<i>FUEL SYSTEMS AND EMISSION CONTROLS</i>	
<i>CIS 120A INTRO TO COMPUTER INFORMATION SYSTEMS</i>		AT 123.....	3
		<i>ENGINE TUNE UP (DRIVEABILITY)</i>	
Choose One (1) Course From:.....	3	AT 140.....	3
<i>*BUS 105 BUSINESS STATISTICS</i>		<i>INTRO TO HYBRIDS AND ALTERNATIVE FUELS</i>	
<i>*MATH 115 PROBABILITY AND STATISTICS</i>		AT 150.....	3
Choose One (1) Course From:.....	3	<i>AUTOMOTIVE BRAKES</i>	
<i>BUS 127 HUMAN RELATIONS</i>		AT 214.....	3
<i>COM 101 ORAL COMMUNICATIONS</i>		<i>SERVICE MANAGEMENT</i>	
Choose One (1) Course From:.....	1	AT 223.....	3
<i>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</i>		<i>ADVANCED ENGINE PERFORMANCE</i>	
<b>ENTREPRENEUR CORE REQUIREMENTS</b>	<b>13 CR. HRS.</b>		<b>TOTAL 62</b>
BUS 104.....	3		
<i>ACCOUNTING FOR BUSINESS OWNERS</i>			
BUS 131.....	1		
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>			
BUS 230.....	3		
<i>ENTREPRENEURIAL PLANNING</i>			
BUS 240.....	3		
<i>ENTREPRENEURSHIP CAPSTONE</i>			
Choose One (1) Course From:.....	3		
<i>BUS 161A EFFECTIVE SELLING</i>			
<i>**BUS 220 E-BUSINESS</i>			
<i>**CIS220 E-BUSINESS</i>			

\* 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.

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20-21 CR. HRS.</b>	<b>DEGREE REQUIREMENTS</b>	<b>29 CR. HRS.</b>	
BCOM 101.....		3	AT 101.....	2	
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>			<i>INTRODUCTION TO AUTOMOTIVE TECHNOLOGY</i>		
BCOM 102.....		3	AT 114.....	3	
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			<i>AUTOMOTIVE POWER PLANTS (ENGINE REBUILDING)</i>		
HE 110.....		1	AT 120.....	3	
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>			<i>INTRODUCTION TO ELECTRICAL SYSTEMS I</i>		
PHIL 205.....		3	AT 121.....	3	
<i>BUSINESS ETHICS</i>			<i>ELECTRICAL SYSTEMS II</i>		
Choose One (1) Course From:.....		3	AT 122.....	3	
<i>AMT 129 INTRO TO TECHNOLOGY</i>			<i>FUEL SYSTEMS AND EMISSION CONTROLS</i>		
<i>CIS 120A INTRO TO COMPUTER INFORMATION SYSTEMS</i>			AT 123.....	3	
			<i>ENGINE TUNE UP (DRIVEABILITY)</i>		
Choose One (1) Course From:.....		3-4	AT 150.....	3	
<i>*BUS 105 BUSINESS STATISTICS</i>			<i>AUTOMOTIVE BRAKES</i>		
<i>MATH 109 COLLEGE ALGEBRA WITH APPLICATIONS</i>			AT 214.....	3	
<i>*MATH 115 PROBABILITY AND STATISTICS</i>			<i>SERVICE MANAGEMENT</i>		
<i>TMAT 101A TECHNICAL MATH I</i>			<i>Choose one (1) of the following options:</i>		
<i>OR HIGHER LEVEL MATH COURSE</i>			<b>OPTION 1 TRANSMISSIONS</b>		
Choose One (1) Course From:.....		3	AT 210.....	3	
<i>BUS 127 HUMAN RELATIONS</i>			<i>POWERTRAINS (MANUAL DRIVETRAINS)</i>		
<i>COM 101 ORAL COMMUNICATIONS</i>			AT 211.....	3	
Choose One (1) Course From:.....		1	<i>AUTOMATIC TRANSMISSIONS</i>		
<i>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</i>			<b>OPTION 2 GENERAL TECHNICIAN</b>		
<b>ENTREPRENEUR CORE REQUIREMENTS</b>		<b>13 CR. HRS.</b>	AT 160.....	3	
BUS 104.....		3	<i>AUTOMOTIVE AIR CONDITIONING</i>		
<i>ACCOUNTING FOR BUSINESS OWNERS</i>			AT 212.....	3	
BUS 131.....		1	<i>ALIGNMENT AND SUSPENSION</i>		
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>			<b>TOTAL 62-63</b>		
BUS 230.....		3			
<i>ENTREPRENEURIAL PLANNING</i>					
BUS 240.....		3			
<i>ENTREPRENEURSHIP CAPSTONE</i>					
Choose One (1) Course From:.....		3			
<i>BUS 161A EFFECTIVE SELLING</i>					
<i>**BUS 220 E-BUSINESS</i>					
<i>**CIS220 E-BUSINESS</i>					

PROGRAMS

\* 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20 CR. HRS.</b>	<b>TECHNICAL-RELATED REQUIREMENTS</b>		<b>6 CR. HRS.</b>
AMT 129.....	INTRODUCTION TO TECHNOLOGY	3	MT 101A.....	BASIC MACHINING	3
BCOM 101.....	BUSINESS AND TECHNICAL COMMUNICATIONS	3	W 101.....	BASIC WELDING	3
BCOM 102.....	ADVANCED BUS AND TECH COMMUNICATIONS	3	<b>ELECTIVES 3 CR. HRS.</b>		
BUS 127.....	HUMAN RELATIONS	3	<i>Electives must be chosen from the following list or have departmental approval.</i>		
HE 110.....	INDUSTRIAL SAFETY AND WORKPLACE TRAINING	1	CAD 150.....	BLUEPRINT READING	3
Choose Two (2) Courses From:.....		6	ELTC 101L&L.....	ELECTRICITY-BASIC	3
TMAT 101A	TECHNICAL MATH I		HP 101.....	HYDRAULICS/PNEUMATICS	3
TMAT 102A	TECHNICAL MATH II		MET 101.....	INDUSTRIAL MATERIALS	3
TMAT 201	TECHNICAL MATH III		MET 102.....	BASIC CAST METALS	3
Choose One (1) Course From:.....		1	MET 201.....	METALLURGY	3
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201			TECH 290CI.....	COOPERATIVE INTERNSHIP	3
<b>AUTOMOTIVE TECHNOLOGY REQUIREMENTS 33 CR. HRS.</b>			Choose One (1) Course From:.....		3
AT 114.....	AUTOMOTIVE POWER PLANTS (ENGINE REBUILDING)	3	CAD 100	INTRODUCTION TO DRAFTING	
AT 120.....	INTRODUCTION TO ELECTRICAL SYSTEMS I	3	CAD 130	DRAFTING STANDARDS AND CONVENTIONS I	
AT 121.....	ELECTRICAL SYSTEMS II	3	CAD 140	DRAFTING STANDARDS AND CONVENTIONS II	
AT 122.....	FUEL SYSTEMS AND EMISSION CONTROLS	3	<b>TOTAL 62</b>		
AT 123.....	ENGINE TUNE UP (DRIVABILITY)	3			
AT 150.....	AUTOMOTIVE BRAKES	3			
AT 160.....	AUTOMOTIVE AIR CONDITIONING	3			
AT 210.....	POWERTRAINS (MANUAL DRIVETRAINS)	3			
AT 211.....	AUTOMATIC TRANSMISSIONS	3			
AT 212.....	ALIGNMENT AND SUSPENSION	3			
AT 214.....	SERVICE MANAGEMENT	3			

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

# Automotive Technician Certificate

CERTIFICATE REQUIREMENTS	18 CR. HRS.
AT 114.....	3
<i>AUTOMOTIVE POWER PLANTS (ENGINE REBUILDING)</i>	
AT 120.....	3
<i>INTRO TO ELECTRICAL SYSTEMS I</i>	
AT 121.....	3
<i>ELECTRICAL SYSTEMS II</i>	
TMAT 101A.....	3
<i>TECHNICAL MATH</i>	

Choose One (1) of the following focus areas:

### DRIVEABILITY

AT 122.....	3
<i>FUEL SYSTEMS AND EMISSION CONTROLS</i>	
AT 123.....	3
<i>ENGINE TUNE UP (DRIVEABILITY)</i>	

### SYSTEMS

Choose Two (2) Courses From: .....	6
AT 150	<i>AUTOMOTIVE BRAKES</i>
AT 160	<i>AUTOMOTIVE AIR CONDITIONING</i>
AT 211	<i>AUTOMATIC TRANSMISSIONS</i>
AT 212	<i>ALIGNMENT AND SUSPENSION</i>

**TOTAL 18**

### How much will this program cost me?\*

**Tuition and fees: \$5,986**  
**Books and supplies: \$932**  
**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 2013-2014, % finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.**

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

[www.muskegoncc.edu/Include/GE/Automotive\\_Technician\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Automotive_Technician_Certificate.html)

# Automotive Technology Certificate

CERTIFICATE REQUIREMENTS	30 CR. HRS.
AT 114.....	3
<i>AUTOMOTIVE POWER PLANTS (ENGINE REBUILDING)</i>	
AT 120.....	3
<i>INTRO TO ELECTRICAL SYSTEMS I</i>	
AT 121.....	3
<i>ELECTRICAL SYSTEMS II</i>	
AT 122.....	3
<i>FUEL SYSTEMS AND EMISSION CONTROLS</i>	
AT 123.....	3
<i>ENGINE TUNE UP (DRIVEABILITY)</i>	
AT 210.....	3
<i>POWERTRAINS (MANUAL DRIVETRAINS)</i>	
AT 211.....	3
<i>AUTOMATIC TRANSMISSIONS</i>	
AT 212.....	3
<i>ALIGNMENT AND SUSPENSION</i>	
TMAT 101A.....	3
<i>TECHNICAL MATH</i>	
Choose One (1) Course From: .....	3
AT 150 <i>AUTOMOTIVE BRAKES</i>	
AT 160 <i>AUTOMOTIVE AIR CONDITIONING</i>	
<b>TOTAL 30</b>	

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

PROGRAMS

## How much will this program cost me?\*

**Tuition and fees: \$8,322**  
**Books and supplies: \$1,559**  
**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 24 months to complete. Of those that completed the program in 2013-2014, % finished in 24 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.**

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

[www.muskegoncc.edu/Include/GE/Automotive\\_Technology\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Automotive_Technology_Certificate.html)

# 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.

<b>CERTIFICATE REQUIREMENTS</b>	<b>28 CR. HRS.</b>
AT 140.....	3
<i>INTRO TO HYBRIDS AND ALTERNATIVE FUELS</i>	
BIOL 104L&L.....	4
<i>INTRODUCTORY BIOLOGY II</i>	
CHEM 100A.....	1
<i>FUNDAMENTALS OF CHEMISTRY LABORATORY</i>	
CHEM 100LEC.....	4
<i>FUNDAMENTALS OF CHEMISTRY</i>	
CHEM 101A.....	1
<i>GENERAL AND INORGANIC CHEMISTRY LABORATORY</i>	
CHEM 101LEC.....	4
<i>GENERAL AND INORGANIC CHEMISTRY</i>	
MATH 109.....	4
<i>COLLEGE ALGEBRA WITH APPLICATIONS</i>	
TECH 200.....	3
<i>APPLIED ALTERNATIVE AND RENEWABLE ENERGY</i>	
TECH 290CI.....	4
<i>COOPERATIVE INTERNSHIP</i>	
<b>TOTAL 28</b>	

## How much will this program cost me?\*

**Tuition and fees: \$4,478**  
**Books and supplies: \$998**  
**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 2013-2014, % finished in 10 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.**

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

[www.muskegoncc.edu/Include/GE/Bio-Fuel\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Bio-Fuel_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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>19 CR. HRS.</b>	<b>TECHNICAL-RELATED REQUIREMENTS</b>	<b>43 CR. HRS.</b>
AMT 129.....	3	AH 101.....	3
<i>INTRODUCTION TO TECHNOLOGY</i>		<i>MEDICAL TERMINOLOGY</i>	
BCOM 101.....	3	BIOL 105L&L.....	4
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>ANATOMY &amp; PHYSIOLOGY I</i>	
BCOM 102.....	3	BIOL 106L&L.....	4
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>ANATOMY &amp; PHYSIOLOGY II</i>	
BUS 127.....	3	CIS 109.....	2
<i>HUMAN RELATIONS</i>		<i>PERSONAL COMPUTER MAINTENANCE</i>	
ELTR 111.....	5	ELTC 150.....	3
<i>ELECTRONICS MATHEMATICS</i>		<i>INDUSTRIAL ELECTRICITY</i>	
HE 110.....	1	ELTR 101.....	4
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		<i>ELECTRONICS-BASIC</i>	
Choose One (1) Course From:.....	1	ELTR 102A.....	4
<i>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</i>		<i>ACTIVE DEVICES &amp; CIRCUIT ANALYSIS</i>	
		ELTR 112.....	3
		<i>DIGITAL ELECTRONICS I</i>	
		ELTR 202A.....	4
		<i>INDUSTRIAL ELECTRONIC SYSTEMS</i>	
		ELTR 211A.....	3
		<i>MICROCOMPUTER INTERFACING</i>	
		HP 101.....	3
		<i>HYDRAULICS/PNEUMATICS</i>	
		ELTR 212.....	4
		<i>MEDICAL INSTRUMENTATION &amp; MEASUREMENT</i>	
		TECH 290CI.....	2
		<i>COOPERATIVE INTERNSHIP</i>	
		<b>TOTAL 62</b>	

*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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20 CR. HRS.</b>	<i>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
AMT 129.....	3	<b>TECHNICAL-RELATED REQUIREMENTS</b>	<b>6 CR. HRS.</b>
<i>INTRODUCTION TO TECHNOLOGY</i>		AMT 200.....	3
BCOM 101.....	3	<i>CAD/CNC CAPSTONE</i>	
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		MET 101.....	3
BCOM 102.....	3	<i>INDUSTRIAL MATERIALS</i>	
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<b>ELECTIVES</b>	<b>6 MINIMUM CR. HRS.</b>
BUS 127.....	3	<i>Electives must be chosen from the following list or have departmental approval.</i>	
<i>HUMAN RELATIONS</i>		CAD 100.....	3
HE 110.....	1	<i>INTRODUCTION TO DRAFTING</i>	
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		CAD 135.....	3
TMAT 101A.....	3	<i>ENGINEERING GRAPHICS</i>	
<i>TECHNICAL MATH I</i>		ELTC 101L&L.....	3
TMAT 102A.....	3	<i>ELECTRICITY-BASIC</i>	
<i>TECHNICAL MATH II</i>		HP 101.....	3
Choose One (1) Course From:.....	1	<i>HYDRAULICS/PNEUMATICS</i>	
<i>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</i>		MET 102.....	3
<b>COMPUTER-AIDED DRAFTING &amp; DESIGN REQUIREMENTS</b>	<b>12 CR. HRS.</b>	<i>BASIC CAST METALS</i>	
CAD 110.....	3	MET 201.....	3
<i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>		<i>METALLURGY</i>	
CAD 210.....	3	MT 103.....	3
<i>PARAMETRIC DESIGN I-PART MODELING</i>		<i>ADVANCED MACHINING</i>	
CAD 220.....	3	QC 101.....	3
<i>PARAMETRIC DESIGN II-ASSEMBLIES</i>		<i>BASIC QUALITY CONTROL</i>	
CAD 250.....	3	TECH 290CI.....	3
<i>INTRODUCTION TO SOLIDWORKS 3D</i>		<i>COOPERATIVE INTERNSHIP</i>	
<b>MACHINE TECHNOLOGY REQUIREMENTS</b>	<b>18 CR. HRS.</b>	W 101.....	3
MT 101A.....	3	<i>BASIC WELDING</i>	
<i>BASIC MACHINING</i>			<b>TOTAL 62</b>
MT 102.....	3		
<i>INTERMEDIATE MACHINING</i>			
MT 150.....	3		
<i>MACHINERY HANDBOOK</i>			
MT 205.....	3		
<i>NC/CNC (COMPUTER NUMERICAL CONTROL)</i>			
MT 206.....	3		
<i>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>			
MT 216.....	3		

# 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.

<b>CERTIFICATE REQUIREMENTS</b>	<b>30 CR. HRS.</b>
AMT 200.....	3
<i>CAD/CNC CAPSTONE</i>	
CAD 110.....	3
<i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>	
CAD 210.....	3
<i>PARAMETRIC DESIGN I-PART MODELING</i>	
CAD 250.....	3
<i>INTRODUCTION TO SOLIDWORKS 3D</i>	
MT 101A.....	3
<i>BASIC MACHINING</i>	
MT 150.....	3
<i>MACHINERY HANDBOOK</i>	
MT 205.....	3
<i>NC/CNC (COMPUTER NUMERICAL CONTROL)</i>	
MT 206.....	3
<i>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
MT 216.....	3
<i>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
TMAT 101A.....	3
<i>TECHNICAL MATH</i>	

**TOTAL 30**

## How much will this program cost me?\*

**Tuition and fees: \$6,092**

**Books and supplies: \$1,041**

**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 2013-2014, % finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.**

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

[www.muskegoncc.edu/Include/GE/Automotive\\_Technician\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Automotive_Technician_Certificate.html)

# Associate in Applied Science

## Collision Repair

This degree program will provide students with the foundation skills and knowledge to perform collision repair and refinishing according to the “manufacturer’s specifications.” Students completing this degree will have hands-on experience in problem solving and dealing with issues relating to collision repair. Using the I-CAR Training Alliance Curriculum they will learn to estimate, use both hand and power tools, straighten frames, replace damaged parts, repair dents and creases and refinish painted surfaces. Employment opportunities exist throughout the collision repair field for formally trained collision repair technicians. Advances in collision repair technology have made it desirable to become I-CAR certified.

### GENERAL EDUCATION REQUIREMENTS

20 CR. HRS.

AMT 129.....	3
<i>INTRODUCTION TO TECHNOLOGY</i>	
BCOM 101.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>	
BCOM 102.....	3
<i>ADVANCED BUSINESS AND TECHNICAL COMMUNICATIONS</i>	
BUS 127.....	3
<i>HUMAN RELATIONS</i>	
HE 110.....	1
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>	
PEA 101A, PEA 103, PEA 104A, PEA 118, or PEA 201....	1
<i>TECHNICAL MATH (CHOOSE TWO)</i>	
TMAT 101A, 102, 201.....	6

### AUTOMOTIVE COLLISION REPAIR REQUIREMENTS

24 Cr. Hrs.

AT 102.....	3
<i>NON-STRUCTURAL REPAIR</i>	
AT 104.....	3
<i>AUTO BODY WELDING AND CUTTING</i>	
AT 106.....	3
<i>INTRODUCTION TO REFINISHING</i>	
AT 201.....	3
<i>ADVANCED NON-STRUCTURAL REPAIR</i>	
AT 108.....	2
<i>COLLISION REPAIR ESTIMATING</i>	
AT 109.....	2
<i>AUTOMOTIVE PLASTIC REPAIR</i>	
AT 203.....	3
<i>AUTO BODY STRUCTURAL REPAIR</i>	
AT 205.....	3
<i>ADVANCED REFINISHING</i>	
AT 207.....	2
<i>COLLISION REPAIR INTERNSHIP</i>	

### CAREER PROGRAM REQUIREMENTS

12 CR. HRS.

AT 120.....	3
<i>INTRODUCTION TO ELECTRICAL SYSTEMS I</i>	
AT 121.....	3
<i>ELECTRICAL SYSTEMS II</i>	
AT 160.....	3
<i>AUTOMOTIVE AIR CONDITIONING</i>	
AT 212.....	3
<i>ALIGNMENT &amp; SUSPENSION</i>	

### SUGGESTED ELECTIVES

6 CR. HRS.

<i>Electives must be chosen from the following list or have departmental approval.</i>	
CAD 100, 130, OR 140.....	3
<i>DRAFTING</i>	
CAD 150.....	3
<i>BLUEPRINT READING</i>	
HP 101.....	3
<i>HYDRAULICS/PNEUMATICS</i>	
MET 101.....	3
<i>INDUSTRIAL MATERIALS</i>	
MET 102.....	3
<i>BBASIC CAST METALS</i>	
MET 201.....	3
<i>METALLURGY</i>	

**TOTAL 62**



# 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20 CR. HRS.</b>	<b>TECHNICAL-RELATED REQUIREMENTS</b>	<b>12 CR. HRS.</b>
AMT 129.....	3	HP 101.....	3
<i>INTRODUCTION TO TECHNOLOGY</i>		<i>HYDRAULICS/PNEUMATICS</i>	
BCOM 101.....	3	MET 201.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>METALLURGY</i>	
BCOM 102.....	3	MT 101A.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>BASIC MACHINING</i>	
BUS 127.....	3	MT 205.....	3
<i>HUMAN RELATIONS</i>		<i>NC/CNC (COMPUTER NUMERICAL CONTROL)</i>	
HE 110.....	1		
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		<b>ELECTIVES</b>	<b>6 CR. HRS.</b>
TMAT 102A.....	3	<i>Electives must be chosen from the following list or have departmental approval.</i>	
<i>TECHNICAL MATH II</i>		BUS 179.....	1
TMAT 201.....	3	<i>KEYBOARDING (OR DEMONSTRATE PROFICIENCY)</i>	
<i>TECHNICAL MATH III</i>		CAD 100.....	3
Choose One (1) Course From:	1	<i>INTRODUCTION TO DRAFTING</i>	
<i>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</i>		CAD 150.....	3
		<i>BLUEPRINT READING</i>	
<b>COMPUTER-AIDED DRAFTING &amp; DESIGN REQUIREMENTS</b>	<b>24 CR. HRS.</b>	CAD 151.....	3
CAD 110.....	3	<i>GEOMETRIC DIMENSIONING &amp; TOLERANCING</i>	
<i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>		CAD 152.....	3
CAD 120.....	3	<i>RESIDENTIAL ARCHITECTURE</i>	
<i>DESCRIPTIVE GEOMETRY</i>		CAD 153.....	3
CAD 135.....	3	<i>COMMERCIAL ARCHITECTURE</i>	
<i>ENGINEERING GRAPHICS</i>		CAD 251.....	3
CAD 210.....	3	<i>DIE DESIGN</i>	
<i>PARAMETRIC DESIGN I-PART MODELING</i>		COM 101.....	3
CAD 220.....	3	<i>ORAL COMMUNICATIONS</i>	
<i>PARAMETRIC DESIGN II-ASSEMBLIES</i>		ELTC 101L&L.....	3
CAD 230.....	3	<i>ELECTRICITY-BASIC</i>	
<i>TOOL DESIGN</i>		MET 101.....	3
CAD 240.....	3	<i>INDUSTRIAL MATERIALS</i>	
<i>PRODUCT DESIGN</i>		MET 102.....	3
CAD 250.....	3	<i>BASIC CAST METALS</i>	
<i>INTRODUCTION TO SOLIDWORKS 3D</i>		MT 150.....	3
<i>Students with no drafting experience will be required to take CAD 100 Introduction to Drafting.</i>		<i>MACHINERY HANDBOOK</i>	
		QC 101.....	3
		<i>BASIC QUALITY CONTROL</i>	
		TECH 290CI.....	3
		<i>COOPERATIVE INTERNSHIP</i>	
		W 101.....	3
		<i>BASIC WELDING</i>	
		<b>TOTAL</b>	<b>62</b>

*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.*

# Computer-Aided Drafting and Design Certificate

## CERTIFICATE REQUIREMENTS

(21 CR. HRS.)	CR. HRS.
CAD 110 .....	3
<i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>	
CAD 120 .....	3
<i>DESCRIPTIVE GEOMETRY</i>	
CAD 135 .....	3
<i>ENGINEERING GRAPHICS</i>	
CAD 210 .....	3
<i>PARAMETRIC DESIGN I-PART MODELING</i>	
CAD 250 .....	3
<i>INTRODUCTION TO SOLIDWORKS 3D</i>	
TMAT 102A .....	3
<i>TECHNICAL MATH II</i>	
TMAT 201 .....	3
<i>TECHNICAL MATH III</i>	

**TOTAL 21**

*BCOM 101 Business and Technical Communications is recommended.*

### How much will this program cost me?\*

**Tuition and fees: \$4,226**  
**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 2013-2014, % finished in 7 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.**

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

[www.muskegoncc.edu/Include/GE/CAD\\_Certificate.html](http://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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>19 CR. HRS.</b>	<b>TECHNICAL-RELATED REQUIREMENTS</b>	<b>3 CR. HRS.</b>
AMT 129.....3 <i>INTRODUCTION TO TECHNOLOGY</i>		Choose One (1) Course From:.....3 <i>CAD 100 INTRODUCTION TO DRAFTING</i> <i>CAD 110 INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>	
BCOM 101.....3 <i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>			
BCOM 102.....3 <i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			
BUS 127.....3 <i>HUMAN RELATIONS</i>			
ELTR 111.....5 <i>ELECTRONICS MATHEMATICS</i>			
HE 110.....1 <i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>			
Choose One (1) Course From:.....1 <i>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</i>			
		<b>ELECTIVES</b>	<b>14 CR. HRS.</b>
		<i>Electives must be chosen from the following list or have departmental approval.</i>	
		BUS 125.....3 <i>SUPERVISION</i>	
		CIS 209.....3 <i>PERSONAL COMPUTER MAINTENANCE II (A+ CERTIFICATION)</i>	
		COM 101.....3 <i>ORAL COMMUNICATIONS</i>	
		ELTC 203.....3 <i>ADVANCED PROGRAMMABLE CONTROLLERS</i>	
		ELTR 212.....4 <i>MEDICAL INSTRUMENTATION &amp; MEASUREMENT</i>	
		HP 101.....3 <i>HYDRAULICS/PNEUMATICS</i>	
		MET 101.....3 <i>INDUSTRIAL MATERIALS</i>	
		TECH 200.....3 <i>APPLIED ALTERNATIVE AND RENEWABLE ENERGY</i>	
		TECH 290CI.....3 <i>COOPERATIVE INTERNSHIP</i>	
			<b>TOTAL 62</b>
<b>ELECTRONICS TECHNOLOGY REQUIREMENTS</b>	<b>26 CR. HRS.</b>		
CIS 109.....2 <i>PERSONAL COMPUTER MAINTENANCE</i>			
ELTC 150.....3 <i>INDUSTRIAL ELECTRICITY</i>			
ELTC 160L&L.....3 <i>PROGRAMMABLE CONTROLLERS</i>			
ELTR 101.....4 <i>ELECTRONICS-BASIC</i>			
ELTR 102A.....4 <i>ACTIVE DEVICES &amp; CIRCUIT ANALYSIS</i>			
ELTR 112.....3 <i>DIGITAL ELECTRONICS I</i>			
ELTR 202A.....4 <i>INDUSTRIAL ELECTRONIC SYSTEMS</i>			
ELTR 211A.....3 <i>MICROCOMPUTER INTERFACING</i>			

*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	37 CR. HRS.
BCOM 101.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>	
CIS 109 .....	2
<i>PERSONAL COMPUTER MAINTENANCE</i>	
ELTC 150.....	3
<i>INDUSTRIAL ELECTRICITY</i>	
ELTC 160.....	3
<i>PROGRAMMABLE CONTROLLERS</i>	
ELTR 101.....	4
<i>ELECTRONICS-BASIC</i>	
ELTR 102A.....	4
<i>ACTIVE DEVICES AND CIRCUIT ANALYSIS</i>	
ELTR 111.....	5
<i>ELECTRONICS MATHEMATICS</i>	
ELTR 112.....	3
<i>DIGITAL ELECTRONICS I</i>	
ELTR 202A.....	4
<i>INDUSTRIAL ELECTRONICS SYSTEMS</i>	
ELTR 211A.....	3
<i>MICROCOMPUTER INTERFACING</i>	
Choose One (1) Course From: .....	3
CAD 100 <i>INTRODUCTION TO DRAFTING</i>	
CAD 110 <i>INTRO TO COMPUTER-AIDED                   DRAFTING (2D)</i>	
<b>TOTAL</b>	<b>37</b>

## How much will this program cost me?\*

**Tuition and fees: \$6,566**  
**Books and supplies: \$1,892**  
**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 2013-2014, \*\*% finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*\*%.**

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

[www.muskegoncc.edu/Include/GE/  
Electronics\\_Technology\\_Certificate.html](http://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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>16 CR. HRS.</b>	<b>TECHNICAL-RELATED REQUIREMENTS</b>	<b>9 CR. HRS.</b>
BCOM 101.....	3	CIS 120A.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>INTRODUCTION TO COMPUTER INFORMATION SYSTEMS</i>	
BCOM 102.....	3	CIS 167FL/GRD 167FL.....	1
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>INTRODUCTION TO INTERNET ANIMATION</i>	
BUS 123.....	3	CIS 177DW.....	1
<i>BUSINESS LAW</i>		<i>INTRODUCTION TO HTML EDITORS</i>	
BUS 127.....	3	CIS 199.....	1
<i>HUMAN RELATIONS</i>		<i>INTERNET CONTENT MANAGEMENT SYSTEMS</i>	
TMAT 101A.....	3	CIS 257A.....	3
<i>TECHNICAL MATH I</i>		<i>HTML FOR INTERNET WEB PAGE DESIGN</i>	
Choose One (1) Course From:.....	1	<b>RECOMMENDED ELECTIVES</b>	<b>3 CR. HRS.</b>
<i>PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201</i>		CIS 258.....	3
		<i>ADVANCED HTML</i>	
<b>GRAPHIC DESIGN REQUIREMENTS</b>	<b>35 CR. HRS.</b>		<b>TOTAL 62</b>
GR 110.....	3		
<i>INTRODUCTION TO GRAPHIC REPRODUCTION</i>			
GR 160.....	3		
<i>DIGITAL IMAGING</i>			
GR 220.....	3		
<i>ELECTRONIC PUBLISHING</i>			
GR 270.....	3		
<i>COMPUTER IMAGING FOR THE PRINTING INDUSTRY</i>			
GRD 100ID.....	1		
<i>INTRODUCTION TO INDESIGN</i>			
GRD 100IL.....	1		
<i>INTRODUCTION TO ILLUSTRATOR</i>			
GRD 100PS.....	1		
<i>INTRODUCTION TO PHOTOSHOP</i>			
GRD 107.....	2		
<i>IMAGE ASSEMBLY</i>			
GRD 120.....	3		
<i>INTRODUCTION TO GRAPHIC DESIGN</i>			
GRD 130.....	3		
<i>DRAWING FOR GRAPHIC DESIGN</i>			
GRD 140.....	3		
<i>INTRODUCTION TO TYPOGRAPHY</i>			
GRD 160.....	3		
<i>HISTORY OF GRAPHIC DESIGN</i>			
GRD 210.....	3		
<i>GRAPHIC DESIGN II</i>			
GRD 290CI.....	3		
<i>PRODUCTION PRACTICUM</i>			

*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.

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20 CR. HRS.</b>	<b>DEGREE REQUIREMENTS</b>		<b>32 CR. HRS.</b>
BCOM 101	.....	3	BUS 263	.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>			<i>ADVERTISING DYNAMICS</i>		
BCOM 102	.....	3	CIS 177DW	.....	1
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			<i>INTRO TO HTML EDITORS</i>		
BUS 126	.....	3	GR 110	.....	3
<i>BUSINESS MATH</i>			<i>INTRODUCTION TO GRAPHIC REPRODUCTION</i>		
CIS 120A	.....	3	GR 160	.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>			<i>DIGITAL IMAGING</i>		
HE 110	.....	1	GR 200L&L	.....	3
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>			<i>PRINCIPLES OF 35MM PHOTOGRAPHY</i>		
PHIL 205	.....	3	GR 270	.....	3
<i>BUSINESS ETHICS</i>			<i>COMPUTER IMAGING FOR THE PRINTING INDUSTRY</i>		
Choose One (1) Course From:	.....	3	GRD 100ID	.....	1
BUS 127	<i>HUMAN RELATIONS</i>		<i>INTRODUCTION TO INDESIGN</i>		
COM 101	<i>ORAL COMMUNICATIONS</i>		GRD 100IL	.....	1
Choose One (1) Course From:	.....	1	<i>INTRODUCTION TO ILLUSTRATOR</i>		
<i>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</i>			GRD 100PS	.....	1
			<i>INTRODUCTION TO PHOTOSHOP</i>		
			GRD 120	.....	3
			<i>INTRODUCTION TO GRAPHIC DESIGN</i>		
			GRD 130	.....	3
			<i>DRAWING FOR GRAPHIC DESIGN</i>		
			GRD 140	.....	3
			<i>INTRODUCTION TO TYPOGRAPHY</i>		
			GRD 167A/CIS 167A	.....	1
			<i>INTRO TO INTERNET ANIMATION</i>		
			GRD 210	.....	3
			<i>GRAPHIC DESIGN II</i>		
<b>ENTREPRENEUR CORE REQUIREMENTS</b>		<b>13 CR. HRS.</b>			
BUS 104	.....	3			
<i>ACCOUNTING FOR BUSINESS OWNERS</i>					
BUS 131	.....	1			
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>					
BUS 230	.....	3			
<i>ENTREPRENEURIAL PLANNING</i>					
BUS 240	.....	3			
<i>ENTREPRENEURSHIP CAPSTONE</i>					
Choose One (1) Course From:	.....	3			
BUS 161A	<i>EFFECTIVE SELLING</i>				
**BUS 220	<i>E-BUSINESS</i>				
**CIS 220	<i>E-BUSINESS</i>				
					<b>TOTAL 65</b>

PROGRAMS

\*\* 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
<i>BUSINESS LAW</i>	
BUS 263.....	3
<i>ADVERTISING DYNAMICS</i>	
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
CIS 167A/GRD 167A.....	1
<i>INTRO TO INTERNET ANIMATION</i>	
CIS 177DW.....	1
<i>INTRO TO HTML EDITORS</i>	
GR 110.....	3
<i>INTRODUCTION TO GRAPHIC REPRODUCTION</i>	
GR 160.....	3
<i>DIGITAL IMAGING</i>	
GR 200L&L.....	3
<i>PRINCIPLES OF 35MM PHOTOGRAPHY</i>	
GR 270.....	3
<i>COMPUTER IMAGING FOR THE PRINTING INDUSTRY</i>	
GRD 100ID.....	1
<i>INTRODUCTION TO INDESIGN</i>	
GRD 100IL.....	1
<i>INTRODUCTION TO ILLUSTRATOR</i>	
GRD 100PS.....	1
<i>INTRODUCTION TO PHOTOSHOP</i>	
GRD 120.....	3
<i>INTRODUCTION TO GRAPHIC DESIGN</i>	
GRD 130.....	3
<i>DRAWING FOR GRAPHIC DESIGN</i>	
GRD 140.....	3
<i>INTRODUCTION TO TYPOGRAPHY</i>	
<b>TOTAL 35</b>	

PROGRAMS

## How much will this program cost me?\*

*Tuition and fees: \$6,914*  
*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 2013-2014, \*\*% finished in 11 months.*

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 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](http://www.muskegoncc.edu/Include/GE/Graphic_Design_Advertising_Certificate.html)

# Graphic Design for Multimedia Certificate

CERTIFICATE REQUIREMENTS	33 CR. HRS.
BUS 123.....	3
<i>BUSINESS LAW</i>	
CIS 119PP.....	1
<i>INTRODUCTION TO PRESENTATION GRAPHICS</i>	
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
CIS 177DW.....	1
<i>INTRODUCTION TO HTML EDITORS</i>	
CIS 187.....	3
<i>MULTIMEDIA DIGITIZING</i>	
CIS 257A.....	3
<i>HTML FOR INTERNET WEB PAGE DESIGN</i>	
CIS 287.....	3
<i>PERSONAL COMPUTER DIGITAL VIDEO EDITING</i>	
GR 160.....	3
<i>DIGITAL IMAGING</i>	
GR 270.....	3
<i>COMPUTER IMAGING FOR THE PRINTING INDUSTRY</i>	
GRD 120.....	3
<i>INTRODUCTION TO GRAPHIC DESIGN</i>	
GRD 130.....	3
<i>DRAWING FOR GRAPHIC DESIGN</i>	
GRD 140.....	3
<i>INTRODUCTION TO TYPOGRAPHY</i>	
GRD 167A/CIS 167A.....	1
<i>INTRODUCTION TO INTERNET ANIMATION</i>	
<b>TOTAL</b>	<b>33</b>

## How much will this program cost me?\*

**Tuition and fees: \$5,368**  
**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 2013-2014, % finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 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](http://www.muskegoncc.edu/Include/GE/Graphic_Design_For_Multimedia_Certificate.html)



# Printing Prepress Certificate

CERTIFICATE REQUIREMENTS	25 CR. HRS.
BUS 123.....	3
<i>BUSINESS LAW</i>	
BUS 179.....	1
<i>KEYBOARDING</i>	
GR 110.....	3
<i>INTRODUCTION TO GRAPHIC REPRODUCTION</i>	
GR 160.....	3
<i>DIGITAL IMAGING</i>	
GR 220.....	3
<i>ELECTRONIC PUBLISHING</i>	
GRD 107.....	2
<i>IMAGE ASSEMBLY</i>	
GRD 120.....	3
<i>INTRODUCTION TO GRAPHIC DESIGN</i>	
GRD 130.....	3
<i>DRAWING FOR GRAPHIC DESIGN</i>	
GRD 140.....	3
<i>INTRODUCTION TO TYPOGRAPHY</i>	
Choose One (1) Course From: .....	1
CIS 100 <i>INTRO TO PERSONAL COMPUTERS</i>	
CIS 100L&L <i>INTRO TO PERSONAL COMPUTERS WITH LAB</i>	
<b>TOTAL</b>	<b>25</b>

PROGRAMS

## How much will this program cost me?\*

*Tuition and fees: \$5,290*  
*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 2013-2014, \*\*% finished in 9 months.*

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 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](http://www.muskegoncc.edu/Include/GE/Graphic_Design_Prepress_Certificate.html)*

# Graphic Design Video/Audio Certificate

CERTIFICATE REQUIREMENTS	29 CR. HRS.
BUS 123.....	3
<i>BUSINESS LAW</i>	
BUS 179.....	1
<i>KEYBOARDING</i>	
CIS 187.....	3
<i>DIGITIZING FOR MULTIMEDIA</i>	
CIS 287.....	3
<i>PERSONAL COMPUTER DIGITAL VIDEO EDITING</i>	
COM 102.....	3
<i>MASS MEDIA</i>	
COM 112.....	3
<i>AUDIO PRODUCTION</i>	
COM 212.....	3
<i>TELEVISION PRODUCTION</i>	
GRD 120.....	3
<i>INTRODUCTION TO GRAPHIC DESIGN</i>	
GRD 130.....	3
<i>DRAWING FOR GRAPHIC DESIGN</i>	
GRD 140.....	3
<i>INTRODUCTION TO TYPOGRAPHY</i>	
Choose One (1) Course From:.....	1
CIS 100 <i>INTRO TO PERSONAL COMPUTERS</i>	
CIS 100L&L <i>INTRO TO PERSONAL COMPUTERS</i>	
<i>WITH LAB</i>	
<b>TOTAL</b>	<b>29</b>

## How much will this program cost me?\*

**Tuition and fees: \$4,594**  
**Books and supplies: \$1,110**  
**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 2013-2014, \*\*% finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 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](http://www.muskegoncc.edu/Include/GE/Graphic_Design_Video_Audio_Certificate.html)

# Grounds Maintenance Certificate

CERTIFICATE REQUIREMENTS	18 CR. HRS.
AT 114.....	3
<i>AUTOMOTIVE POWER PLANTS (ENGINE REBUILDING)</i>	
ELTC 101L&L.....	3
<i>ELECTRICITY - BASIC</i>	
MT 101A.....	3
<i>MACHINING-BASIC</i>	
TECH 290CI.....	3
<i>COOPERATIVE INTERNSHIP</i>	
TMAT 101A.....	3
<i>TECHNICAL MATH I</i>	
W 101.....	3
<i>BASIC WELDING</i>	

**TOTAL 18**

PROGRAMS

## How much will this program cost me?\*

**Tuition and fees: \$3,806**  
**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 2013-2014, % finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.**

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

[www.muskegoncc.edu/Include/GE/Grounds\\_Maintenance\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Grounds_Maintenance_Certificate.html)

# Industrial Electrical Maintenance Certificate

CERTIFICATE REQUIREMENTS	34 CR. HRS.
AMT 129.....	3
<i>INTRO TO TECHNOLOGY</i>	
ELTC 150.....	3
<i>INDUSTRIAL ELECTRICITY</i>	
ELTC 152.....	3
<i>NATIONAL ELECTRICAL CODE</i>	
ELTC 160L&L.....	3
<i>PROGRAMMABLE CONTROLLERS</i>	
ELTC 203.....	3
<i>ADVANCED PROGRAMMABLE CONTROLLERS</i>	
ELTR 101.....	4
<i>ELECTRONICS-BASIC</i>	
ELTR 102A.....	4
<i>ACTIVE DEVICES AND CIRCUIT ANALYSIS</i>	
ELTR 111.....	5
<i>ELECTRONICS MATHEMATICS</i>	
HP 101.....	3
<i>HYDRAULICS/PNEUMATICS</i>	
W 101.....	3
<i>BASIC WELDING</i>	
<b>TOTAL 34</b>	

## How much will this program cost me?\*

**Tuition and fees: \$6,566**  
**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 2013-2014, % finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 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](http://www.muskegoncc.edu/Include/GE/Industrial_Electrical_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.

<b>CERTIFICATE REQUIREMENTS</b>	<b>19 CR. HRS.</b>
CAD 150 .....	3
<i>BLUEPRINT READING</i>	
ELTC 101L&L .....	3
<i>ELECTRICITY-BASIC</i>	
HE 110 .....	1
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>	
HP 101 .....	3
<i>HYDRAULICS/PNEUMATICS</i>	
MT 101A .....	3
<i>BASIC MACHINING</i>	
TMAT 102A .....	3
<i>TECHNICAL MATH II</i>	
W 101 .....	3
<i>BASIC WELDING</i>	
<b>TOTAL</b>	<b>19</b>

PROGRAMS

## How much will this program cost me?\*

**Tuition and fees: \$3,202**

**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 2013-2014, % finished in 7 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.**

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

[www.muskegoncc.edu/Include/GE/Industrial\\_Maintenance\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Industrial_Maintenance_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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20 CR. HRS.</b>	<b>ELECTIVES</b>	<b>16 CR. HRS.</b>
AMT 129.....	3	<i>Electives must be chosen from the following list or have departmental approval.</i>	
<i>INTRODUCTION TO TECHNOLOGY</i>		BUS 125.....	3
BCOM 101.....	3	<i>SUPERVISION</i>	
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		BUS 166.....	3
BCOM 102.....	3	<i>QUALITY CUSTOMER SERVICE</i>	
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		CAD 100.....	3
BUS 127.....	3	<i>INTRODUCTION TO DRAFTING</i>	
<i>HUMAN RELATIONS</i>		CAD 120.....	3
HE 110.....	1	<i>DESCRIPTIVE GEOMETRY</i>	
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		CIS 101EW.....	1
TMAT 102A.....	3	<i>INTRODUCTION TO ELECTRONIC SPREADSHEETS</i>	
<i>TECHNICAL MATH II</i>		CIS 119PP.....	1
TMAT 201.....	3	<i>INTRODUCTION TO PRESENTATION GRAPHICS</i>	
<i>TECHNICAL MATH III</i>		COM 101.....	3
Choose One (1) Course From:.....	1	<i>ORAL COMMUNICATIONS</i>	
<i>PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201</i>		ELTC 150.....	3
<b>TECHNICAL-RELATED REQUIREMENTS</b>	<b>27 CR. HRS.</b>	<i>INDUSTRIAL ELECTRICITY</i>	
CAD 110.....	3	HP 101.....	3
<i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>		<i>HYDRAULICS/PNEUMATICS</i>	
CAD 250.....	3	MT 150.....	3
<i>INTRODUCTION TO SOLIDWORKS 3D</i>		<i>MACHINERY HANDBOOK</i>	
ELTC 101L&L.....	3	MT 216.....	3
<i>ELECTRICITY-BASIC</i>		<i>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
MET 101.....	3	QC 105.....	3
<i>INDUSTRIAL MATERIALS</i>		<i>QUALITY AND PRODUCTIVITY USING</i>	
MET 201.....	3	<i>SPC-STATISTICAL PROCESS CONTROL</i>	
<i>METALLURGY</i>		TECH 290CI.....	3
MT 101A.....	3	<i>COOPERATIVE INTERNSHIP</i>	
<i>BASIC MACHINING</i>			
MT 206.....	3		
<i>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>			
QC 101.....	3		
<i>BASIC QUALITY CONTROL</i>			
W 101.....	3		
<i>BASIC WELDING</i>			
			<b>TOTAL 63</b>

*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.*

**PROGRAMS**

# Industrial Technology Certificate

CERTIFICATE REQUIREMENTS	27 CR. HRS.
AMT 129.....	.3
<i>INTRODUCTION TO TECHNOLOGY</i>	
CAD 150.....	.3
<i>BLUEPRINT READING</i>	
ELTC 101L&L.....	.3
<i>ELECTRICITY-BASIC</i>	
MET 101.....	.3
<i>INDUSTRIAL MATERIALS</i>	
MET 102.....	.3
<i>BASIC CAST METALS</i>	
MT 101A.....	.3
<i>BASIC MACHINING</i>	
QC 101.....	.3
<i>BASIC QUALITY CONTROL</i>	
TMAT 102A.....	.3
<i>TECHNICAL MATH II</i>	
W 101.....	.3
<i>BASIC WELDING</i>	

**TOTAL 27**

*BCOM 101 Business and Technical Communications is recommended.*

## How much will this program cost me?\*

**Tuition and fees: \$4,594**

**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 2013-2014, \*\*% finished in 7 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*\*%.**

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

[www.muskegoncc.edu/Include/GE/Industrial\\_Technology\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Industrial_Technology_Certificate.html)

# 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.

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20 CR. HRS.</b>	<b>TECHNICAL-RELATED REQUIREMENTS</b>	<b>15 CR. HRS.</b>
AMT 129.....		3	CAD 110 .....	3
<i>INTRODUCTION TO TECHNOLOGY</i>			<i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>	
BCOM 101.....		3	CAD 150 .....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>			<i>BLUEPRINT READING</i>	
BCOM 102.....		3	MT 205.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			<i>NC/CNC (COMPUTER NUMERICAL CONTROL)</i>	
BUS 127.....		3	W 101.....	3
<i>HUMAN RELATIONS</i>			<i>BASIC WELDING</i>	
HE 110.....		1	Choose One (1) Course From:.....	
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>			CAD 100	<i>INTRODUCTION TO DRAFTING</i>
Choose Two (2) Courses From:.....		6	CAD 110	<i>INTRO TO COMPUTER-AIDED DRAFTING</i>
MT 150	<i>MACHINERY HANDBOOK</i>		<b>ELECTIVES</b>	
TMAT 101A	<i>TECHNICAL MATH I</i>		<b>6 CR. HRS.</b>	
TMAT 102A	<i>TECHNICAL MATH II</i>		<i>Electives must be chosen from the following list or have departmental approval.</i>	
TMAT 201	<i>TECHNICAL MATH III</i>		BUS 125.....	3
Choose One (1) Course From:.....		1	<i>SUPERVISION</i>	
<i>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</i>			HP 101.....	3
			<i>HYDRAULICS/PNEUMATICS</i>	
<b>MACHINING TECHNOLOGY REQUIREMENTS</b>		<b>21 CR. HRS.</b>	MET 101 .....	3
MT 101A.....		3	<i>INDUSTRIAL MATERIALS</i>	
<i>BASIC MACHINING</i>			MET 102 .....	3
MT 102.....		3	<i>BASIC CAST METALS</i>	
<i>INTERMEDIATE MACHINING</i>			MET 201 .....	3
MT 103.....		3	<i>METALLURGY</i>	
<i>ADVANCED MACHINING</i>			MT 240.....	3
MT 206.....		3	<i>BASIC MACHINE REPAIR</i>	
<i>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>			MT 245.....	3
MT 216.....		3	<i>ADVANCED MACHINE REPAIR</i>	
<i>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>			QC 101 .....	3
MT 225.....		3	<i>BASIC QUALITY CONTROL</i>	
<i>MOLD MAKING</i>			TECH 290CI.....	3
MT 230.....		3	<i>COOPERATIVE INTERNSHIP</i>	
<i>BASIC DIE MAKING</i>			<b>TOTAL 62</b>	
<b>STUDENTS MUST WEAR APPROVED SAFETY GLASSES WHERE HAZARDS EXIST.</b>				



# Machining Technology Certificate

CERTIFICATE REQUIREMENTS	27 CR. HRS.
AMT 129.....	3
<i>INTRODUCTION TO TECHNOLOGY</i>	
CAD 150.....	3
<i>BLUEPRINT READING</i>	
MET 101.....	3
<i>INDUSTRIAL MATERIALS</i>	
MT 101A.....	3
<i>MACHINING-BASIC</i>	
MT 102.....	3
<i>INTERMEDIATE MACHINING</i>	
MT 103.....	3
<i>ADVANCED MACHINING</i>	
MT 205.....	3
<i>NC/CNC (COMPUTER NUMERICAL CONTROL)</i>	
QC 101.....	3
<i>BASIC QUALITY CONTROL</i>	
TMAT 102A.....	3
<i>TECHNICAL MATH II</i>	
<b>TOTAL 27</b>	

PROGRAMS

## How much will this program cost me?\*

*Tuition and fees: \$4,826*  
*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 2013-2014, \*\*% finished in 7 months.*

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*\*%.*

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

*[www.muskegoncc.edu/Include/GE/Machining\\_Technology\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Machining_Technology_Certificate.html)*

# Machinist Certificate

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

**TOTAL 24**

## How much will this program cost me?\*

*Tuition and fees: \$4,246  
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 2013-2014, \*\*% finished in 11 months.*

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*\*%.*

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

[www.muskegoncc.edu/Include/GE/Machinist\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Machinist_Certificate.html)

# Machine Mechanic Certificate (Industrial Maintenance)

CERTIFICATE REQUIREMENTS	22 CR. HRS.
CAD 150.....	3
<i>BLUEPRINT READING</i>	
ELTC 101L&L.....	3
<i>ELECTRICITY-BASIC</i>	
HE 110.....	1
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>	
HP 101.....	3
<i>HYDRAULICS/PNEUMATICS</i>	
MT 101A.....	3
<i>BASIC MACHINING</i>	
MT 240.....	3
<i>BASIC MACHINE REPAIR</i>	
TMAT 101A.....	3
<i>TECHNICAL MATH I</i>	
W 101.....	3
<i>BASIC WELDING</i>	
<b>TOTAL 22</b>	

PROGRAMS

## How much will this program cost me?\*

*Tuition and fees: \$3,898*  
*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 2013-2014, \*\*% finished in 11 months.*

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*\*%.*

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

*[www.muskegoncc.edu/Include/GE/Machine\\_Mechanic\\_Certificate.html](http://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.

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>22 CR. HRS.</b>	<b>ENGINEERING TECHNOLOGY ELECTIVES</b>	<b>18 CR. HRS.</b>
CIS 120A.....	3	<i>Electives must be chosen from the following list or have departmental approval.</i>	
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>			
COM 101 .....	3	CAD 250 .....	3
<i>ORAL COMMUNICATIONS</i>			
ENG 101 .....	3	<i>INTRODUCTION TO SOLID WORKS 3D</i>	
<i>ENGLISH COMPOSITION</i>			
ENG 102 .....	3	ELTC 101L&L.....	3
<i>ENGLISH COMPOSITION</i>			
HE 110 .....	1	<i>ELECTRICITY-BASIC</i>	
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>			
MATH 161 .....	4	HP 101 .....	3
<i>CALCULUS I</i>			
Choose One (1) Course From: .....	4	<i>HYDRAULICS/PNEUMATICS</i>	
<i>ECON 101A PRINCIPLES OF MACROECONOMICS</i>		MET 101 .....	3
<i>ECON 102A PRINCIPLES OF MICROECONOMICS</i>		<i>INDUSTRIAL MATERIALS</i>	
<i>PSYC 201 GENERAL PSYCHOLOGY</i>		MET 201 .....	3
Choose One (1) Course From: .....	1	<i>METALLURGY</i>	
<i>PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201</i>		MT 101A.....	3
		<i>BASIC MACHINING</i>	
		MT 206.....	2
		<i>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
		QC 101 .....	3
		<i>BASIC QUALITY CONTROL</i>	
		QC 105 .....	3
		<i>QUALITY AND PRODUCTIVITY USING SPC-STATISTICAL PROCESS CONTROL</i>	
<b>ENGINEERING-RELATED REQUIREMENTS</b>	<b>22 CR. HRS.</b>	<b>TOTAL 62</b>	
CAD 110 .....	3		
<i>INTRODUCTION TO COMPUTER-AIDED DRAFTING (2D)</i>			
CAD 210 .....	3		
<i>PARAMETRIC DESIGN I-PART MODELING</i>			
CHEM 101 LEC & CHEM 101A.....	5		
<i>GENERAL AND INORGANIC CHEMISTRY, L&amp;L</i>			
CIS 185 .....	3		
<i>"C" PROGRAMMING</i>			
MATH 215 .....	3		
<i>PROBABILITY AND STATISTICS FOR ENGINEERING</i>			
PHYS 203L&L .....	5		
<i>ENGINEERING PHYSICS</i>			

PROGRAMS

# 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.

PROGRAMS

<b>GENERAL EDUCATION REQUIREMENTS</b>	<b>20 CR. HRS.</b>	<b>TECHNICAL-RELATED REQUIREMENTS</b>	<b>12 CR. HRS.</b>
AMT 129.....	3	CAD 150.....	3
<i>INTRODUCTION TO TECHNOLOGY</i>		<i>BLUEPRINT READING</i>	
BCOM 101.....	3	MT 101A.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>		<i>BASIC MACHINING</i>	
BCOM 102.....	3	QC 101.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>BASIC QUALITY CONTROL</i>	
BUS 127.....	3	W 101.....	3
<i>HUMAN RELATIONS</i>		<i>BASIC WELDING</i>	
HE 110.....	1		
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		<b>ELECTIVES</b>	<b>9 CR. HRS.</b>
TMAT 102A.....	3	<i>Electives must be chosen from the following list or have departmental approval.</i>	
<i>TECHNICAL MATH II</i>		BUS 125.....	3
TMAT 201.....	3	<i>SUPERVISION</i>	
<i>TECHNICAL MATH III</i>		ELTC 101L&L.....	3
Choose One (1) Course From:.....	1	<i>ELECTRICITY- BASIC</i>	
<i>PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201</i>		HP 101.....	3
		<i>HYDRAULICS/PNEUMATICS</i>	
<b>MATERIALS TECHNOLOGY REQUIREMENTS</b>	<b>23 CR. HRS.</b>	MET 204.....	3
CHEM 100LEC & CHEM 100A.....	5	<i>INTRODUCTION TO PLASTICS</i>	
<i>FUNDAMENTALS OF CHEMISTRY, L&amp;L</i>		TECH 290CI.....	3
MET 101.....	3	<i>COOPERATIVE INTERNSHIP</i>	
<i>INDUSTRIAL MATERIALS</i>		<b>TOTAL 64</b>	
MET 102.....	3		
<i>BASIC CAST METALS</i>			
MET 201.....	3		
<i>METALLURGY</i>			
MET 202.....	3		
<i>ADVANCED METALS</i>			
MET 203.....	3		
<i>MATERIALS TESTING</i>			
MET 212.....	3		
<i>PATTERNMAKING GATING AND RISERING</i>			

# Production Supervision Certificate

CERTIFICATE REQUIREMENTS	24 CR. HRS.
AMT 129.....	3
<i>INTRODUCTION TO TECHNOLOGY</i>	
BCOM 101.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>	
BUS 125.....	3
<i>SUPERVISION</i>	
BUS 127.....	3
<i>HUMAN RELATIONS</i>	
CAD 150.....	3
<i>BLUEPRINT READING</i>	
MET 101.....	3
<i>INDUSTRIAL MATERIALS</i>	
QC 101.....	3
<i>BASIC QUALITY CONTROL</i>	
TMAT 101A.....	3
<i>TECHNICAL MATH I</i>	
<b>TOTAL 24</b>	

## How much will this program cost me?\*

**Tuition and fees: \$3,550**  
**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 2013-2014, % finished in 7 months.*

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.*

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

[www.muskegoncc.edu/Include/GE/Production\\_Supervisor\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Production_Supervisor_Certificate.html)

# Quality Assurance Certificate

CERTIFICATE REQUIREMENTS	21 CR. HRS.
AMT 129 .....	3
<i>INTRODUCTION TO TECHNOLOGY</i>	
BCOM 101 .....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>	
BUS 127 .....	3
<i>HUMAN RELATIONS</i>	
CAD 150 .....	3
<i>BLUEPRINT READING</i>	
QC 101 .....	3
<i>BASIC QUALITY CONTROL</i>	
QC 105 .....	3
<i>QUALITY AND PRODUCTIVITY USING SPC-STATISTICAL PROCESS CONTROL</i>	
TMAT 101A .....	3
<i>TECHNICAL MATH I</i>	
<b>TOTAL 21</b>	

## How much will this program cost me?\*

**Tuition and fees: \$3,086**

**Books and supplies: \$980**

**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 2013-2014, % finished in 7 months.*

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is %.*

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

[www.muskegoncc.edu/Include/GE/Quality\\_Assurance\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Quality_Assurance_Certificate.html)

# 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.

<b>GENERAL EDUCATION REQUIREMENTS</b>		<b>20 CR. HRS.</b>	<b>TECHNICAL-RELATED REQUIREMENTS</b>	<b>15 CR. HRS.</b>
AMT 129.....		3	CAD 150.....	3
<i>INTRODUCTION TO TECHNOLOGY</i>			<i>BLUEPRINT READING</i>	
BCOM 101.....		3	ELTC 101L&L.....	3
<i>BUSINESS AND TECHNICAL COMMUNICATIONS</i>			<i>ELECTRICITY-BASIC</i>	
BCOM 102.....		3	MET 201.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			<i>METALLURGY</i>	
BUS 127.....		3	MT 101A.....	3
<i>HUMAN RELATIONS</i>			<i>BASIC MACHINING</i>	
HE 110.....		1	Choose One (1) Course From:.....	3
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>			CAD 100 <i>INTRO TO DRAFTING</i>	
Choose Two (2) Courses From:.....		6	CAD 110 <i>INTRO TO COMPUTER-AIDED DRAFTING</i>	
TMAT 101A <i>TECHNICAL MATH I</i>			<b>ELECTIVES</b>	<b>6 CR. HRS.</b>
TMAT 102A <i>TECHNICAL MATH II</i>			<i>Electives must be chosen from the following list or have departmental approval.</i>	
TMAT 201 <i>TECHNICAL MATH III</i>			ACC 201.....	4
Choose One (1) Course From:.....		1	<i>PRINCIPLES OF ACCOUNTING I</i>	
PEA 101A, PEA 103, PEA 104A, PEA 118 OR PEA 201			BUS 125.....	3
			<i>SUPERVISION</i>	
<b>WELDING TECHNOLOGY REQUIREMENTS</b>		<b>21 CR. HRS.</b>	BUS 161A.....	3
W 101.....		3	<i>EFFECTIVE SELLING</i>	
<i>BASIC WELDING</i>			MET 102.....	3
W 102.....		3	<i>BASIC CAST METALS</i>	
<i>WELDING -ADVANCED</i>			TECH 290CI.....	3
W 103.....		3	<i>COOPERATIVE INTERNSHIP</i>	
<i>MIG/TIG WELDING</i>			QC 101.....	3
W 201.....		3	<i>BASIC QUALITY CONTROL</i>	
<i>STRUCTURAL WELDING</i>				
W 202.....		3		
<i>PIPE WELDING</i>				
W 203.....		3		
<i>WELDING MAINTENANCE</i>				
W 204.....		3		
<i>WELDING SUPERVISION</i>				
				<b>TOTAL 62-64</b>

*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
<i>BLUEPRINT READING</i>	
ELTC 101L&L.....	3
<i>ELECTRICITY-BASIC</i>	
MT 101A.....	3
<i>BASIC MACHINING</i>	
TMAT 101A.....	3
<i>TECHNICAL MATH I</i>	
W 101.....	3
<i>BASIC WELDING</i>	
W 102.....	3
<i>WELDING-ADVANCED</i>	
W 103.....	3
<i>MIG/TIG WELDING</i>	
W 201.....	3
<i>STRUCTURAL WELDING</i>	
<b>TOTAL 24</b>	

*BCOM 101 Business and Technical Communications is recommended.*

## How much will this program cost me?\*

**Tuition and fees: \$3,898**  
**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 2013-2014, \*\*% finished in 7 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*\*%.**

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

[www.muskegoncc.edu/Include/GE/Welding\\_Technology\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Welding_Technology_Certificate.html)

# 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.

<b>CERTIFICATE REQUIREMENTS</b>	<b>32 CR. HRS.</b>
ARE 115.....	3
<i>WIND TURBINE AND SOLAR ARRAY INSTALLATION</i>	
ELTC 103.....	3
<i>RESIDENTIAL WIRING</i>	
ELTC 150.....	3
<i>INDUSTRIAL ELECTRICITY</i>	
ELTC 152.....	3
<i>NATIONAL ELECTRIC CODE</i>	
ELTC 160L&L.....	3
<i>PROGRAMMABLE CONTROLLERS</i>	
ELTR 101.....	4
<i>ELECTRONICS-BASIC</i>	
ELTR 111.....	5
<i>ELECTRONICS MATHEMATICS</i>	
KVCC ELT 126.....	2
<i>POWER GENERATION AND DISTRIBUTION</i>	
TECH 200.....	3
<i>APPLIED ALTERNATIVE AND RENEWABLE ENERGY</i>	
W 101.....	3
<i>BASIC WELDING</i>	
<b>TOTAL 32</b>	

## How much will this program cost me?\*

**Tuition and fees: \$4,594**

**Books and supplies: \$1,322**

**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 2013-2014, \*\*% finished in 11 months.**

*\*Fewer than 10 students completed this program in 2013-14. 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 2013-2014 is \*\*%.**

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

[www.muskegoncc.edu/Include/GE/Wind\\_And\\_Solar\\_Certificate.html](http://www.muskegoncc.edu/Include/GE/Wind_And_Solar_Certificate.html)

# ASSOCIATE IN GENERAL STUDIES (AGS) DEGREE

## Not Intended for Transfer

The AGS degree is designed for students interested in self-enrichment who are not following a specific occupational or transfer program. Courses may be selected to suit individual student goals. Students should consult with a counselor for further information.

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA is required for the AGS Degree.

Courses numbered below 100 do not count toward the AGS. Any course can be used ONLY ONCE in any category. The same course cannot be used to satisfy two groups.

Student must complete at least 30 credits, or the last 15 credits, at Muskegon Community College to meet the degree residency requirement.

PROGRAMS

<b>Associate in General Studies</b>	
<b>Minimum – 62 credits</b>	
<b>Communication</b> – 6 credits with grades of “C” or better	<b>Personal, Social, and Cultural Awareness</b> - 3 credits
<b>Business and Technical Communication</b> - 101, 102	<b>Anthropology</b> - 103, 110
<b>Communication</b> - 101, 102, 107, 201	<b>Art</b> - 198, 199, 202, 213
<b>English</b> – 101, 102, any 200-level English course except 234D	<b>Business</b> - 127
<b>Problem Solving</b> - 0-4 credits	<b>Economics</b> - any
Student may demonstrate competency by testing out of Math 100A or by completing one of the following courses:	<b>English</b> - 130, 200, 201, 204, 205, 206, 207, 210, 211, 213, 218, 225, 226, 227, 228, 231
<b>Business</b> – 105, 126	<b>Foreign Language</b> - any
<b>Math</b> – 100A or any higher level Math course	<b>Geography</b> - 104, 103
<b>Technical Math</b> – any	<b>History</b> - any
<b>Science and Technology</b> - 3 credits	<b>Humanities</b> - any
<b>Anthropology</b> – 105D	<b>Music</b> - 103
<b>Astronomy</b> – any	<b>Philosophy</b> - 203, 210
<b>Biology</b> – any	<b>Political Science</b> - any
<b>Chemistry</b> – any	<b>Psychology</b> - any
<b>Computer Information Systems</b> – any	<b>Sociology</b> - any
<b>Geography</b> – 101A, 215	<b>Theater</b> - 201
<b>Geology</b> – any	<b>Women’s Studies</b> - any
<b>Introduction to Technology (AMT)</b> 129	
<b>Physical Science</b> – any	
<b>Physics</b> - any	
<b>Ethical Reasoning and Creativity</b> -6 credits	<b>Physical Education</b> – 2 credits
<b>Art</b> – 100A, 104, 105B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 211, 220, 240	One credit must be from the following: <b>Physical Education - 101A, 103, 104A, 118, 201</b>
<b>Communication</b> – 203	One credit must be from any other <b>Physical Education or Dance</b> course
<b>Dance</b> – any	
<b>English</b> – 208, 223	
<b>Music</b> – any	
<b>Philosophy</b> – 101, 102, 104, 202, 204, 205, 207	
<b>Theater</b> - any	
<b>Electives - 38-42 credits of student’s choice</b>	

# 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 occupational 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.	COURSES TAKEN AT BAY DE NOC COMMUNITY COLLEGE		
BIOL 104L&L.....		4	<b>SEMESTER 3</b>		<b>CR. HRS.</b>
INTRODUCTORY BIOLOGY II			WT110*	.....	4
CHEM 101LEC & 101A.....		5	WASTEWATER OPERATIONS & MANAGEMENT		
GENERAL AND INORGANIC CHEMISTRY, L&L			WT240 .....		5
CHEM 102LEC & 102A.....		5	ENVIRONMENTAL ANALYSIS		
GENERAL AND INORGANIC CHEMISTRY, L&L			WT260* .....		3
COM 101 .....		3	CURRENT ISSUES FOR MANAGERS		
ORAL COMMUNICATIONS			WT270* .....		4
ENG 101 .....		3	WATER IN MOTION		
ENGLISH COMPOSITION					<b>TOTAL 16</b>
MATH 109 or Higher.....		4	<i>*Courses offered online</i>		
COLLEGE ALGEBRA WITH APPLICATIONS			<b>SEMESTER 4</b>		<b>CR. HRS.</b>
PSCI 111 .....		4	WT120*	.....	4
INTRODUCTION TO AMERICAN GOVERNMENT			WATER OPERATIONS & MANAGEMENT		
Choice .....		3-4	WT220*	.....	3
ONE HUMAN EXPERIENCE OR			INDUSTRIAL SOLUTIONS		
HUMAN CULTURES ELECTIVE			WT230*	.....	3
		<b>TOTAL 31-32</b>	AQUATICS		
			WT250 .....		5
			WATER ANALYSIS & TECHNIQUES		
			WT255 .....		3
			MECHANICS & INSTRUMENTATION		
			WT272† .....		3
			PROFESSIONAL FIELD EXPERIENCE (WATER)		
			WT273† .....		3
			PROFESSIONAL FIELD EXPERIENCE (WASTEWATER)		
					<b>TOTAL 24</b>
			<i>*Courses offered online</i>		
			<i>†Classes taken second eight (8) weeks</i>		

## Ferris State University

([www.ferris.edu/muskegon](http://www.ferris.edu/muskegon))

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. This unique 3+1 program provides degree completion in Business Administration for students who have prior coursework in a professional or occupational emphasis (e.g., Accounting, Human Resources, Management, Marketing, Cosmetology, and many others).

### **Computer Information Systems**

Step into a position in computer programming/analysis, systems analysis, network administration, and microcomputers. Transfer your MCC courses and complete your bachelor's degree with Ferris courses in Grand Rapids or online.

### **Computer Information Technology**

This curriculum prepares you for several industry certifications such as: CompTIA's: A+, Network+, Linux+, Security+, and Microsoft's System Administration Certification (MCSA). Transfer

your MCC courses and complete your bachelor's degree with Ferris courses in Grand Rapids or online.

### **Criminal Justice**

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. Complete your entire Ferris bachelor's degree on the MCC campus.

### **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.

### **Nursing-RN to BSN**

This degree is designed for associate degree and diploma RNs who want to further their education. To participate in this program, you must have an RN license and a 2.5 minimum GPA. Financial aid is available and may include concurrent enrollment at both institutions (online format).

For more information about these programs and more, visit: [www.ferris.edu/Muskegon](http://www.ferris.edu/Muskegon). You may schedule an appointment with an academic advisor at this website or by calling (231) 777-0510. Visit our office in the Stevenson Center for Higher Education on the MCC Campus.

## Grand Valley State University

([www.gvsu.edu/ce](http://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.

## Nursing-RN to BSN

This degree is designed for associate degree and diploma RNs who want to further their education. To participate in this program, you must have an RN license and a 2.5 minimum GPA. Financial aid is available and may include concurrent enrollment at both institutions (online format).

## Western Michigan University

([www.wmich.edu/muskegon](http://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 bachelor's degree completion program provides the flexibility and control you need to complete your bachelor's degree on your own terms. This program maximizes previous college experience by integrating credits earned at WMU and other institutions into a generalized bachelor's degree. Earn your bachelor's degree at WMU in a manageable and straightforward fashion, without the constraints of a specialized curriculum. This degree can be completed entirely online, or you can take classes face-to-face when they 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. Through the Advantage program, each MCC transfer student can take one WMU-Muskegon course at MCC tuition rates. The program is available for one face-to-face or hybrid course offered at WMU-Muskegon.

More information about these programs is available at [wmich.edu/muskegon](http://wmich.edu/muskegon).

## 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](http://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 Michelle Taylor at  
(231) 777-0200, or  
toll-free at (1-888) 503-5151

# **COURSE DESCRIPTIONS**

COURSE DESCRIPTIONS



# 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.

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. All placement test scores are not valid after 3 years.	
COMPASS	Reading score of 76 or higher
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

**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

## ACC 100

### Fundamentals of Accounting (formerly BUS 100)

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

*Prereq:* ACC 100 (formerly BUS 100) or ACC 201 (formerly BUS 101) or instructor permission.

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. **FWS**

*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. **FW**

*Prereq:* ACC 201 with a 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. **D**

*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. **WS**

*Prereq:* ACC 100 (formerly BUS 100) or ACC 201

*(formerly 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.

# Allied Health

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(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.

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## AH 101

### Medical Terminology

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **F**

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. **FW**

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. **D**

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. **D**

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 107

### Nurse Aide/Home Health Aide

5 Cr. Hr. – 9 Contact Hrs. **FW**

*Note: The student must be free of communicable disease and demonstrate ability to meet the essential functions of the occupation for nurse aides and home health aides*

The individual who satisfactorily completes this course will be eligible to take the State Nurse Aide Competency Exam and Home Health Care Exam which must be completed within one year. Successful completion of the course and examination will place you on the State of Michigan Registry or allow you to use the training in another state to obtain certification for a “Nurse Aide” according to federal regulations. The Cost of the State Nurse Aide Competency Exam is currently \$176.50 and is subject to change.

## AH 111

### Environmental Stressors and Nutrition

1 Cr. Hr. – 1 Contact Hr. **F S**

Prereq: None

*Note: 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. **W**

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

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### ASL 101

#### American Sign Language I

3 Cr. Hrs. – 3 Contact Hrs. **F**

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 103

#### Finger Spelling

2 Cr. Hrs. – 2 Contact Hrs. **D**

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.

### ASL 102

#### American Sign Language II

3 Cr. Hrs. – 3 Contact Hrs. **W**

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.

# Anthropology

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## **ANTH 103 Cultural Diversity in Contemporary Society**

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

*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. **FW**

*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. **F**

*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.

## ART 100A

### Art Appreciation

3 Cr. Hrs. – 6 Contact Hrs. **F****W**

An introduction to the visual arts through lecture, projects, and written assignments. Students will explore various themes in art history, learn to analyze and interpret works of art, be exposed to a variety of different kinds of media, and gain an appreciation of the role that visual art plays in society.

## ART 104

### Drawing I

3 Cr. Hrs. – 6 Contact Hrs. **F****W**

*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. **F**

*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. **F****W**

*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. **F****W**

*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. **D**

*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. **W**

*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. **F****W****S**

*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. **FWS**

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. **W**

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. **W**

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. **F**

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. **FW**

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. **D**

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. **D**

Prereq: *Meet Ready to Succeed Requirement*

Experience through studio work with art materials and methods appropriate to grade school use.

## ART 213

### The Art of Gettysburg and the Civil War

1 Cr. Hr. – 2 Contact Hrs. (*fall of odd numbered years*)

From the photographs of Timothy O'Sullivan and Alexander Gardner produced just two days after the Battle of Gettysburg to the 1993 film "Gettysburg," artists working in a variety of media have sought to capture the tragic impact and heroic sacrifice of the American Civil War. Gettysburg National Military Park contains over 400 sculpted monuments dating from 1867 to the 21st century that detail many individuals, incidents, and fighting units; Paul Philippoteaux's huge cyclorama painting chronicles the epic sweep of Pickett's Charge. These artists' diverse results span educational, archival, personal, and philosophical purposes and will be studied in depth in the classroom and on the required field trip to Gettysburg.

## ART 220

### Figure Drawing

3 Cr. Hrs. – 6 Contact Hrs. **F**

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. **D**

*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.

## ART 250

### Gallery/Collection Practicum

3 Cr. Hrs. – 3 Contact Hrs. **D**

*Prereqs: Meet Ready to Succeed Requirement and secure instructor permission*

*Note: 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.

## Astronomy

### ASTR 101

#### General Astronomy

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

*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.

## ART 290CI

### Art Cooperative Internship

1-4 Cr. Hrs. – 1-4 Contact Hrs. **D**

*Prereq: Instructor permission*

*Note: 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.

### ASTR 105A

#### Cosmology

4 Cr. Hrs. – 4 Contact Hrs. **W**

*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. **FWS**

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 102

### Non-Structural Repair

3 Cr. Hr. – 6 Contact Hrs. *F*

This course introduces the student to elementary repairs that are completed in the collision repair industry. This course provides a variety of learning and assessment activities students can use to form the basis for all automotive non-structural repair work. Students will have hands-on experience in the repair process by learning surface replacement, surface repair, material selection and the use of hand and power tools will be covered.

## AT 104

### Autobody Welding and Cutting

3 Cr. Hr. – 6 Contact Hrs. *F*

This course will develop and enhance skills for collision welding and cutting. The course will present a comprehensive overview of light gage metal attachment and detachment processes. Oxy acetylene, arc welding, spot welding, brazing, soldering, adhesives and application skills will be covered in the field of collision repair. Proficiency in common welding and cutting practices in the collision field will be the goal.

## AT 106

### Introduction to Refinishing

3 Cr. Hr. – 6 Contact Hrs. *F*

This introductory course will create the foundation for the automotive refinishing field of study. The terminology, use of tools including spray guns, surface preparation and material selection will be covered.

## AT 108

### Collision Repair Estimating

2 Cr. Hr. – 4 Contact Hrs. *W*

This course introduces the student to the process of collision damage analysis. Total costs are determined through the use of computerized software designed to help the estimator with parts selection and labor allowances. Best practices from the collision industry through the ICAR program are used. Students will have hands on experience in the estimation process through real world examples.

## AT 109

### Automotive Plastic Repair

2 Cr. Hr. – 4 Contact Hrs. *W*

This course introduces the student to elementary repairs that are completed in the collision repair industry. This course covers repair techniques and materials for repairing the wide variety of plastic materials used in the manufacturing of current vehicles. Refinishing repaired parts is also included. Students will have hands on experience in the repair process by learning surface preparation, material selection and the use of hand and power tools will be covered.

## AT 114

### Automotive Power Plants (Engine Rebuilding)

3 Cr. Hrs. – 6 Contact Hrs. **FW**

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. **F**

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. **F** **W**

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. **W**

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. **W**

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. **F**

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. **F**

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.

## AT 160

### Automotive Air Conditioning

3 Cr. Hrs. – 6 Contact Hrs. **F**

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 201

### Advanced Non-Structural Repair

3 Cr. Hr. – 6 Contact Hrs. *W*

This course introduces the student to advanced non-structural repairs that are completed in the collision repair industry. This course provides a variety of learning and assessment activities students can use to form the basis for all automotive non-structural repair work. Students will have hands on experience in the repair process by learning surface preparation, material selection and the use of hand and power tools will be covered.

## AT 203

### Autobody Structural Repair

3 Cr. Hr. – 6 Contact Hrs. *S*

This course introduces the student to significant structural repairs that are completed in the collision repair industry. This course provides a variety of learning and assessment activities students can use to form the basis for all automotive structural repair work. Students will have hands on experience with frame straightening and replacement of both unibody and framed vehicles, diagnosis, measuring, and I-CAR acceptable repair practices. The use of specialized frame machines, computerized measuring equipment, hand and power tools will be covered.

## AT 205

### Advanced Refinishing

3 Cr. Hr. – 6 Contact Hrs W

This course will develop and enhance skills learned in AT-106 (Into to Refinishing). The course will concentrate on spot repairs and color matching as well as overall refinishing. Water based paint mixing and application skills will be enhanced. in the field of automotive refinishing.

## AT 207

### Collision Repair Internship

2Cr. Hr – 4 Contact Hrs D

This course introduces the student to the collision industry through an instructor supervised internship. Students will have hands on experience in the collision industry.

## AT 210

### Powertrains (Manual Drivetrains)

3 Cr. Hrs. – 6 Contact Hrs. F

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. W

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. W

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. D

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. S

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. S

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. **F**

*Prereq:* instructor permission

*Note:* 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. 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. **FWS**

*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. **FW**

*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. **FWS**

*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. **WS**

*Prereq:* BIOL 105L&L with a minimum grade of "C"

*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. **S**

*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. **FS**

*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.

## **BIOL 115**

### **Introduction to Anatomy and Physiology**

4 Cr. Hrs. – 4 Contact Hrs. **W**

*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. **S**

*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. **F**

*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. **F**

*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. **W**

*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. **W**

*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.

## BIOL 207A

### Microbiology Laboratory

1 Cr. Hr. – 3 Contact Hrs. **F****W**

*Prereq:* BIOL 105C & BIOL 105LEC or

BIOL 105L&L with a minimum grade of "C" or instructor permission.

*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 207LEC

### Microbiology Lecture

3 Cr. Hrs. – 3 Contact Hrs. **F****W**

*Prereq:* BIOL 105L&L with a minimum grade of "C" or instructor permission.

*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 290CI

### Biology Internship

Contact Life Science chairperson **D**

## BIOL 299

### Independent Study

Variable Credit **D**

*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

(Management, Marketing, Business Technology)

## BUS 104

### Accounting for Business Owners

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **FWS**

Prereq: MATH 100A (Formerly MATH 050) with a minimum grade of “C”

Note: A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://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. (This course is also listed as MATH 115.)

## BUS 114

### Personal Finance

3 Cr. Hrs. – 3 Contact Hrs. **F**

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. **FWS**

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. **FWS**

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. **FWS**

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. **D**

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. **F****W**

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. **F****W****S**

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. **F****W****S**

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. **F****W**

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.

## **BUS 161A**

### **Effective Selling**

3 Cr. Hrs. – 3 Contact Hrs. **F****W**

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. **W**

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. **F**

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. **F**

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. **F****W****S**

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.



## **BUS 180D**

### **Word Processing Part I**

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **FWS**

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. **FWS**

Prereqs: BUS 180D and BUS 181C with a 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. **FWS**

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. **FWS**

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. **FWS**

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 188F**

### **Introduction to Medical Transcription**

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **FWS**

Prereq: BUS 179 or BUS 181C

Note: 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. **FWS**

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. **FWS**

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. **FWS**

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. **F**

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. **W**

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 223**

### **Starting Your Business Plan**

4 Cr. Hrs. – 4 Contact Hrs. **F****W**

*Prereq: BUS 131 or instructor permission*

This hands-on course will help students learn about key finance and marketing concepts and how they apply to starting/running their own business. Students will identify their business idea and learn how to create and communicate the necessary marketing data and financial statements to support loan applications, start, and manage their business.

## **BUS 230**

### **Entrepreneurial Planning**

3 Cr. Hrs. – 3 Contact Hrs. **F****W**

*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. **W**

*Prereqs: BUS 223*

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. **F****W**

*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. **W**

*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. **F**

*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. **W**

*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. **W**

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. **D**

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. **FWS**

Prereqs: *BUS 180D and BUS 182C with a 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. **FWS**

Prereqs: *BUS 180D, CIS 101EW, CIS 119PP, and CIS 153A*

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. **D**

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

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## BCOM 101

### Business and Technical Communications

3 Cr. Hrs. – 4 Contact Hrs. **FWS**

*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. **FWS**

*Prereq: BCOM 101 with a 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

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*(See Business)*

## Chemistry

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*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. **FWS**

*Prereq: MATH 100A (Formerly MATH 050) with a 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. **FWS**

*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. **FS**

*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. **FWS**

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. **WSS**

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. **WSS**

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. **FWS**

Prereqs: MATH 040 and either MATH 041 or  
MATH 100A (formerly MATH 050) with a  
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. **FWS**

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. **D**

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. **D**

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. **D**

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. **D**

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

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### CHIN 101

#### Basic Chinese

4 Cr. Hrs. – 4 Contact Hrs. **F**

Prereqs: 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.

## College Success Center

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(See English, Mathematics, and Reading)

## College Success Seminar

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### CSS 100A

#### College Success Seminar

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **FWS**

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. **F**

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. **F**

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. **F**

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. **W**

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. **FWS**

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. **D**

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. **FWS**

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. **D**

Prereq: None

An introduction to the theory and practice of modern debate.

## COM 212

### Television Production

3 Cr. Hrs. – 4 Contact Hrs. **W**

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. **W**

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. **D**

Prereq: instructor permission

Note: 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

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### CAD 100

#### Introduction to Drafting

3 Cr. Hrs. – 6 Contact Hrs. **FWS**

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. **FWS**

Prereq: CAD 100 with a minimum grade of "C," or obtain 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. **FWS**

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. **D**

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. **F****W**

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. **D**

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. **F****W****S**

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. **D**

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. **D**

Prereq: CAD 110

This course involves the basic construction details for framed residential buildings.

## CAD 153

### Commercial Architecture

3 Cr. Hrs. – 6 Contact Hrs. **D**

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. **F**

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. **F****W**

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. **W**

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. **W**

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. **F**

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. **FWS**

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. **D**

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

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## CIS 100

### Introduction to Personal Computers

1 Cr. Hr. – 1 Contact Hr. **FWS**

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. **FWS**

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. **FWS**

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. **W**

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 I

2 Cr. Hrs. – 2 Contact Hrs. **FW**

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.

## CIS 110

### Computer Concepts

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

*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. **FWS**

*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. **FWS**

*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. **FWS**

*Prereq: Meet Ready to Succeed Requirement*

*Note: 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. **FW**

*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. **F** **W**

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. **F** **W**

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. **D**

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. **W**

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. **F**

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 153A****Database Management - Access**

1 Cr. Hr. – 1 Contact Hr. **F** **W** **S**

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. **F**

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. **F**

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. **F**

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. **W**

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. **W**

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. **F****W**

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. **F**

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. **W**

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. **D**

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. **W**

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. **F****W**

Prereq: 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.

## CIS 210

### Operating Systems Concepts

3 Cr. Hrs. – 3 Contact Hrs. **F** **W**

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. **F**

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. **F**

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.*)

## CIS 227

### Advanced JavaScript

3 Cr. Hrs. – 3 Contact Hrs. **W**

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. **F**

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. **F**

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. **F**

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. **W**

Prereqs: CIS 153 or CIS 153A 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. **F** **W**

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. **F**

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. **W**

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. **W**\*\*

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. **W**

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.

## CIS 270A

### Advanced RPG Programming

3 Cr. Hrs. - 3 Contact Hrs. **W**

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. **W**

Prereq: CIS 210

Note: 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. **D**

*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. **W**

*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. **W**

*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. **W**

*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. **W**

*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. **W**

*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. **W**

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. **W**

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

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### CJ 101

#### Introduction to Law Enforcement

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **WS**

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. **FWS**

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. **FWS**

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. **W**

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. ①*

*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. ①*

*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. ①*

*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. ①*

*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. ①*

*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. ①*

*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. ①*

*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. **FWS**

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. **F**

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. **F**

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.

## CJ 205

### Interrogation and Case Preparation

3 Cr. Hrs. – 3 Contact Hrs. **F**

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. **W**

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. **W**

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. **D**

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. **FS**

*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. **F**

*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. **WS**

*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. **W**

*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. **W**

*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. **FWSS**

*Prereq: Instructor permission*

*Note: 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. **D**

*Prereq: None*

*Note: 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

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## DNC 100

### Modern Dance I

1 Cr. Hr. – 2 Contact Hrs. **W**

*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. **F**

*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. **W**

*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. **F****W**

*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. **W**

*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. **W**

*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. **F**

*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. **F****W**

*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. **F****W**

*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

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## ECON 101A

### Principles of Macroeconomics

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

*Prereq:* 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 102A

### Principles of Microeconomics

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

*Prereq:* 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

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## ED 101A

### Introduction to Education

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

*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. **D**

*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. **F**

*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. **FWS**

*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.)

## ED 111

### Introduction to the Education of Young Children

3 Cr. Hrs. – 3 Contact Hrs. **F** **W**

Prereq: None

Note: An interview with the program coordinator is required for acceptance 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. **D**

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. **F** **W**

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. **W**

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. **F**

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. **D**

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. **W**

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. **F****W**

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 practice. Twenty-five hours of fieldwork are required. (May be used for CDA renewal.)

## ED 214

### Infants and Toddlers

3 Cr. Hrs. – 3 Contact Hrs. **F****W**

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. **W**

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. **D**

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.

## ED 220A

### Early Childhood Assessment

2 Cr. Hrs. – 2 Contact Hrs. **F****W**

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. **F**

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. **D**

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. **W**

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. **F****W****S**

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. **D**

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. **D**

*Prereqs: Meet Ready to Succeed Requirement, and ED 101A or 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 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. **D**

*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. **D**

*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. **F****W**

*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. **D**

*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. **D**

*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. **F****W**

*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. **W**

*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. **W**

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. **W**

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

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(These courses may be used for CDA renewal.)

## ART 211

### Art Education Workshop

3 Cr. Hrs. – 6 Contact Hrs. **D**

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. **F****W**

Prereq: MATH 100A (Formerly MATH 050) with a 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. **W**

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. **F****W**

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. **F****W**

Prereq: PSYC 201 with a 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.

# Electricity

## ELTC 101L&L

### Electricity-Basic

3 Cr. Hrs. – 4 Contact Hrs. **FWS**

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. **F**

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. **FW**

Prereq: *ELTC 101L&L or ELTR 101L&L with a 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. **S**

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. **FW**

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. **S**

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. **F**

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. **W**

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 111

### Electronics Mathematics

5 Cr. Hrs. – 5 Contact Hrs. **F**

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. **W**

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. **W**

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.

## ELTR 211A

### Microcomputer Interfacing

3 Cr. Hrs. – 5 Contact Hrs. **W**

Prereqs: ELTR 102A and ELTR 112

The principles and techniques of interfacing a microcontroller to peripheral hardware are examined. The student will design and construct software and circuits to interface data converters, stepper motors, and various AC/DC loads to a variety of I/O port configurations.

## ELTR 212

### Medical Instrumentation and Measurement

4 Cr. Hrs. – 6 Contact Hrs. **W**

Prereqs: ELTR 211A 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 with a minimum grade of “C” in each

NOTE: A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://www.muskegoncc.edu/calculatorhelp) for details.

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.

### ENGR 204 Engineering Dynamics

3 Cr. Hrs. – 3 Contact Hrs. **W**

Prereq: ENGR 202

NOTE: A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://www.muskegoncc.edu/calculatorhelp) for details.

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.

# English

## **IT IS IMPORTANT FOR STUDENTS TO TAKE ENGLISH CLASSES EARLY!**

Knowledge of the English language and skill in using it are required in many aspects of life, including one's employment and, consequently, many MCC courses, programs, and degrees require competency in English composition. If you are contemplating earning an ASA degree or are planning to earn a bachelor's degree at a four-year school, you are strongly advised to follow the guidelines below. If you are planning to enter another program or are unsure of your plans, see a counselor for specific requirements that may apply to you.

## **STUDENTS MUST TEST BEFORE ENROLLING IN ENGLISH CLASSES.**

Before enrolling in any college-level English courses, you must meet the Ready to Succeed requirement (*See next page*). Also, you must either submit an ACT Reading and Writing score, take the COMPASS Placement Test, or submit a level 1 or 2 on both reading and writing on the MME tests. Call the MCC Testing Center at (231) 777-0394 or go to Room 134 to schedule an appointment if you do not meet the ACT or MME requirements. Placement tests are required to facilitate placement in classes and/or programs. Such tests are not intended to prevent participation but to help students make appropriate choices.

## **GUIDELINES**

If you are required to take English 091, take it your first semester. Take English 101 in your second semester and English 102 in your third semester.

If you are not required to take English 091, take English 101 within your first 15 hours of coursework, even if you are required to take English 114 concurrently, and English 102 within your first 30 hours of coursework.

All English courses use computers for writing, so knowledge of some word processing program is helpful.

## **DEVELOPMENTAL COURSES**

Students testing into two or more developmental courses must complete the following before being allowed to enroll in their second semester:

- See an MCC Counselor to create an academic plan
- Enroll in CSS 100A.

The following is the priority sequence for completion of assigned developmental courses:

1. Reading
2. CSS 100A
3. MATH 036A
4. ENG 085 or 089, 091
5. Math 038 and 040 may be deferred until the second semester.

It is understood that part-time students may not be able to take all courses at once.

## READY TO SUCCEED

Before enrolling in many courses, you must meet the READY TO SUCCEED reading competency requirement by test scores or course completion. All placement test scores are not valid after 3 years.

COMPASS	Reading score of 76 or higher
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

## WRITING

COMPASS Writing	ACT Writing	MME	Placement
80-100	19 or higher	Level 1 or 2 on Reading & Writing	ENG 101 or BCOM 101 <i>(Ready to Succeed requirement must still be met.)</i>
69-79	18	N/A	ENG 101 or BCOM 101 and ENG 114 <i>(Ready to Succeed requirement must still be met.)</i>
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: All placement test scores are not valid after 3 years.*

## ENG 085

### Essential Writing Skills

2 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **FWS**

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. **FWS**

Prereq: *ENG 085 or ENG 089 with a 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.

## ENG 101

### English Composition

3 Cr. Hrs. – 4 Contact Hrs. **FWS**

Prereqs: *Meet Ready to Succeed Requirement and ENG 091 with a 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. **FWS**

Prereq: *ENG 101 with a 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. **FWS**

Prereq: None

Note: *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. **FWS**

Prereqs: *Meet Ready to Succeed Requirement and ENG 091 with a 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. **FWS**

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. **FWS**

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. **W**

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. **W**

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. **D**

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. **D**

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. **W**

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. **FWS**

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. **S**

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. **W**

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. **F****W**

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 Shakespeare'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. **W**

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. **D**

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. **F**

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. **W**

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. **F**

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. **W**

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. **F**

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. **W**

Prereq: ENG 102

Note: 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. **F**

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.

## Foreign Languages

(See Chinese, French, German and Spanish)

## ENG 234D

### Library Skills/Research Skills

1 Cr. Hr. – 1 Contact Hr. **D**

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. **D**

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.



# French

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## FR 101

### Basic French

4 Cr. Hrs. – 4 Contact Hrs. **F**

*Prereqs: 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. **W**

*Prereq: FR 101 with a 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. **D**

*Prereq: FR 102 with a 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. **D**

*Prereq: FR 201 with a 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.

# Geography

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## GEOG 101A

### Physical Geography

4 Cr. Hrs. – 5 Contact Hrs. **F****W**

*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. **F****W**

*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. **F****W**

*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. **F** **W**

*Prereq:* Meet Ready to Succeed Requirement

*Note:* 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. **D**

*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. **D**

*Prereqs:* Math 040 and CIS 120A and GEOG 230

*Note:* With instructor permission, concurrent enrollment in GEOG 230 is allowed.

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. **D**

*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.* ①

*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**

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### **GEOLOG 101A**

#### **Introduction to Physical Geology**

*4 Credit Hrs. – 5 Contact Hrs.* ② ③ ④

*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.

### **GEOLOG 102**

#### **Introduction to Earth History**

*4 Credit Hrs. – 5 Contact Hrs.* ④

*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.

### **GEOLOG 201**

#### **Oceanography**

*4 Cr. Hrs. – 4 Contact Hrs.* ⑤

*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

## GER 101

### Basic German

4 Cr. Hrs. – 4 Contact Hrs. **F****W**

*Prereq: 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. **W**

*Prereq: GER 101 with a 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. **D**

*Prereq: GER 102 with a 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. **D**

*Prereq: GER 201 with a 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.

# Graphic Design

## GRD 100ID

### Introduction to InDesign

1 Cr. Hr. – 2 Contact Hrs. **F****S**

*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. **F****W****S**

*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.

## GRD 100PS

### Introduction to Photoshop

1 Cr. Hr. – 2 Contact Hrs. **FWS**

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. **W**

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. **FWS**

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. **FWS**

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. **FWS**

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. **D**

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. **F**

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.

## GRD 167A

### Introduction to Internet Animation

1 Cr Hr. – 1 Contact Hr. **F**

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. **F**

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. **W**

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. **W**

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. **F**

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. **F**

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. **W**

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. **F**

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. **F**

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. **S**

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. **D**

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. **FS**

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. **FWS**

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. **FWS**

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. **FWS**

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. **FWS**

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. **W**

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. **FWS**

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

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## HIST 101

### Western Civilization - to 1500

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

*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. **FWS**

*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. **FW**

*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. **FW**

*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. **FWS**

*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. **FWS**

*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. **D**

*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. **F**

*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. **W**

*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. **D**

*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. **D**

*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 216

### Introduction to World War II

3 Cr. Hr. – 3 Contact Hrs. **W**

*Prereq: Meet Ready to Succeed Requirement*

This class will study the causes, the course, and the implications of World War II, this greatest of twentieth century conflicts. It will handle most of the geographic areas involved, the major diplomatic, political and military events, and some of the key figures of the war. It covers the time period of 1918 to the present, with an emphasis of course on the years 1939-1945.

## HIST 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.

## Humanities

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## HUM 195

### Introduction to Humanities

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

*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

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## ICS 101BEL

### International Cultural Studies and Biological Field Studies in Belize

2 Cr. Hrs. – 2 Contact Hrs. **F**

*Prereq:* instructor permission

*Note:* 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

*Note: 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.*

## Machining Technology

### MT 101A

#### Basic Machining

3 Cr. Hrs. – 5 Contact Hrs. **FWS**

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. **FWS**

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. FWS**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. D**Prereq: TMAT 101A with a 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. FWS**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. FWS**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. WS**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. WS**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. FWS**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. **W**

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. **FWS**

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. **FW**

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

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(See Business)

## Marketing

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(See Business)

# Materials Technology

## MET 101

### Industrial Materials

3 Cr. Hrs. – 4 Contact Hrs. **F****W**

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. **F****W**

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. **F****W****S**

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. **D**

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. **D**

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. **D**

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 & Risering

3 Cr. Hrs. – 6 Contact Hrs. **F****W**

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.

## **DEVELOPMENTAL COURSES**

Students testing into two or more developmental courses must complete the following before being allowed to enroll in their second semester:

- See an MCC Counselor to create an academic plan
- Enroll in CSS 100A.

The following is the priority sequence for completion of assigned developmental courses:

1. Reading
2. CSS 100A
3. MATH 036A
4. ENG 085 or 089, 091
5. Math 038 and 040 may be deferred until the second semester.

It is understood that part-time students may not be able to take all courses at once.



## 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	19-21	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: All placement test scores are not valid after 3 years.

### MATH 035F

#### Metrics

0.5 Cr. Hr. – 0.5 Contact Hr. **FWS**

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. **FWS**

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. **FWS**

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. **FWS**

Prereq: MATH 036A with a 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. **FWS**

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 040

### Beginning Algebra

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

Prereq: MATH 038 with a 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. As part of this course, you may be required to attend tutoring outside of regular class times.

## MATH 041

### Mathematics for Allied Health Sciences

1 Cr. Hr. – 1 Contact Hr. **FWS**

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. **FWS**

Prereq: Meet Ready to Succeed Requirement and MATH 040 with a 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. As part of this course, you may be required to attend tutoring outside of regular class times.

**MATH 105****Mathematics for Elementary Teachers**

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

Prereq: *MATH 100A or Math 107A with a minimum grade of “C” in either course*

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****Mathematics for Liberal Arts**

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

Prereqs: *Assignment by Math Placement Test or must have earned a grade of “C” in MATH 040*

A survey course for students whose program of study does not require College Algebra or higher coursework. This course satisfies general education requirements, and is a prerequisite to Probability and Statistics (Math 115 or Bus 105) and Math for Elementary Teachers (Math 105). Topics covered include: financial mathematics, symbolic logic, probability and counting principles, voting and apportionment methods, set theory and applications, 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. **FWS**

Prereq: *MATH 100A (Formerly MATH 050) with a minimum grade of “C”*

NOTE: *A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://www.muskegoncc.edu/calculatorhelp) for details.*

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.

**MATH 111****Algebra With Coordinate Geometry**

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

Prereq: *MATH 100A (Formerly MATH 050) with a minimum grade of “C”*

NOTE: *A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://www.muskegoncc.edu/calculatorhelp) for details.*

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.

**MATH 112****Trigonometric Functions with Coordinate Geometry**

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

Prereq: *MATH 111 with a minimum grade of “C”*

NOTE: *A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://www.muskegoncc.edu/calculatorhelp) for details.*

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.

**MATH 115****Probability and Statistics**

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

Prereq: *MATH 100A or Math 107A with a minimum grade of “C” in either course*

NOTE: *A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://www.muskegoncc.edu/calculatorhelp) for details.*

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. (*This course is also listed as BUS 105.*)

## MATH 151

### Survey of Calculus

4 Cr. Hrs. – 4 Contact Hrs. **D**

Prereq: MATH 111 with a minimum grade of “C”

NOTE: A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://www.muskegoncc.edu/calculatorhelp) for details.

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.

## MATH 161

### Calculus I

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

Prereq: MATH 112 with a minimum grade of “C”

NOTE: A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://www.muskegoncc.edu/calculatorhelp) for details.

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.

## MATH 162

### Calculus II

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

Prereq: MATH 161 with a minimum grade of “C”

Note: Concurrent enrollment in MATH 276 is recommended. A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://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.

## MATH 215

### Probability & Statistics for Engineering

3 Cr. Hrs. – 3 Contact Hrs. **D**

Prereq: MATH 161 with a minimum grade of “C”

Recommended Coreq: MATH 162

Note: A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://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.

## MATH 276

### Linear Algebra with Applications

3 Cr. Hrs. – 3 Contact Hrs. **D**

Prereq: MATH 161

Recommended Coreq: MATH 162

Note: A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://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. **FWS**

Prereq: MATH 162 with a minimum grade of “C”

Note: A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://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.

## MATH 295

### Differential Equations with Linear Algebra

4 Cr. Hrs. – 4 Contact Hrs. **W**

Prereq: MATH 162 with a minimum grade of “C”

Note: A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://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. Music

# Medical Assistant

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## MA 101

### Medical Assistant Administrative I

3 Cr. Hr. – 3 Contact Hrs FW

This course will provide an introduction to the field of medical assisting and the healthcare team. Basic administrative procedures performed in an ambulatory setting will be introduced. These include professional communications and behaviors, patient reception, office equipment, ethical and legal standards, and the office environment.

## MA 102

### Medical Assistant Clinical I

3 Cr. Hr. – 6 Contact Hrs FW

This course provides the student with an introduction to medical office practices, patient intake, screening measures (EKG, PFT) and vital signs, infection control measures, collecting and handling of samples and specimens, assisting the provider during examination, and general medical and environmental asepsis and sterilization of instruments. The student will practice non invasive CLIA waived hematology, chemistry, urinalysis, and immunology testing, and perform basic quality control measures.

## MA 105

### Medical Assistant Administrative II

2 Cr. Hr. – 2 Contact Hrs FW

This course is a continuation of Medical Assistant Administrative I. This course covers more advanced administrative topics such as financial management and also reviews medical office administrative procedures.

## MA 106

### Medical Assistant Clinical II

4 Cr. Hr. – 6 Contact Hrs FW

This course is a continuation of Medical Assistant Clinical I and further develops the student skills, abilities and behaviors in the role of Clinical Medical Assistant. This course prepares the student to assess of vital signs, prepare the patient for examination, assist the provider during examination, safely calculate drug dosages, administer medications by oral and injectable routes, perform venipuncture, set up and assist with minor office surgeries, and clean and sterilize instruments.

## MA 110

### Medical Assistant Seminar and Internship

4 Cr. Hr. – 4 Contact Hrs S

This course prepares the student for the current work environment as a medical assistant and gives the student the opportunity to use effective communication, ethical behaviors, and psychomotor, cognitive and affective competencies during the assigned internship placement consistent with the standards of practice for the Medical Assistant.

# Music

## MU 50PVT-89PVT

### Remedial Applied Music

2 Cr. Hrs. – 2 Contact Hrs. **FWS**

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 052PVT, 053PVT  
PIANO

MU 054PVT, 055PVT  
CORNET (TRUMPET)

MU 056PVT, 057PVT  
CLARINET

MU 058PVT, 059PVT  
TROMBONE

MU 060PVT, 061PVT  
BARITONE (EUPHONIUM)

MU 062PVT, 063PVT  
TUBA

MU 064PVT, 065PVT  
FRENCH HORN

MU 066PVT, 067PVT  
FLUTE

MU 068PVT, 069PVT  
OBOE (ENGLISH HORN)

MU 070PVT, 071PVT  
BASSOON

MU 072PVT, 073PVT  
SAXOPHONE

MU 074PVT, 075PVT  
PERCUSSION

MU 076PVT, 077PVT  
GUITAR

MU 078PVT, 079PVT  
ORGAN

MU 080PVT, 081PVT  
HARP

MU 082PVT, 083PVT  
VIOLIN

MU 084PVT, 085PVT  
VIOLA

MU 086PVT, 087PVT  
CELLO

MU 088PVT, 089PVT  
DOUBLE BASS

## MU 100

### Introduction to Music Theory

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **F**

Prereq: Meet Ready to Succeed Requirement

Coreqs: 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. **W**

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. **FW**

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. **FW**

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. **FW**

Prereq: Meet Ready to Succeed Requirement

An extension of MU 104CS.

**MU 106A**

**Collegiates**

1 Cr. Hr. – 2 Contact Hrs. **F** **W**

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. **F** **W**

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. **F** **W**

Prereq: Meet Ready to Succeed Requirement

An extension of MU 108CB.

**MU 118WMS**

**West Michigan Symphony**

1 Cr. Hr. – 2 Contact Hrs. **F** **W**

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. **F** **W**

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. **D**

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. **F** **W** **S**

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  
BARTONE (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. **FWS**

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  
JAZZ GUITAR

MU 150PVT, 151PVT  
VOICE

MU 152PVT, 153PVT  
PIANO

MU 154PVT, 155PVT  
CORNET (TRUMPET)

MU 156PVT, 157PVT  
CLARINET

MU 158PVT, 159PVT  
TROMBONE

MU 160PVT, 161PVT  
BARITONE (EUPHONIUM)

MU 162PVT, 163PVT  
TUBA

MU 164PVT, 165PVT  
FRENCH HORN

MU 166PVT, 167PVT  
FLUTE

MU 168PVT, 169PVT  
OBOE (ENGLISH HORN)

MU 170PVT, 171PVT  
BASSOON

(CONTRA-BASSOON)

MU 172PVT, 173PVT  
SAXOPHONE

MU 174PVT, 175PVT  
PERCUSSION

MU 176PVT, 177PVT  
GUITAR

MU 178PVT, 179PVT  
ORGAN

MU 180PVT, 181PVT  
HARP

MU 182PVT, 183PVT  
VIOLIN

MU 184PVT, 185PVT  
VIOLA

MU 186PVT, 187PVT  
CELLO

MU 188PVT, 189PVT  
DOUBLE BASS

**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. **FWS**

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. **FWS**

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. **W**

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. **FWS**

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. **FWS**

Prereq: MU 190B

A continuation of MU 190B.

## MU 192

### Music for the Classroom Teacher

4 Cr. Hrs. - 4 Contact Hrs. **W**

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. **W**

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. **W**

Prereq: MU 194

Coreqs: MU 102 and MU 191A

A continuation of MU 194.

## MU 201

### Advanced Theory

4 Cr. Hrs. – 5 Contact Hrs. **F**

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. **W**

Prereq: MU 201

Coreq: MU 291

A continuation of MU 201.

## MU 203

### Vocal and Instrumental

### Conducting Techniques

2 Cr. Hrs. – 2 Contact Hrs. **F**

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. **W**

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. **FWS**

Prereq: Instructor permission

Note: 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 270, 271 BASSOON (CONTRA-BASSOON)
MU 250, 251 VOICE	MU 272, 273 SAXOPHONE
MU 252, 253 PIANO	MU 274, 275 PERCUSSION
MU 254, 255 CORNET (TRUMPET)	MU 276, 277 GUITAR
MU 256, 257 CLARINET	MU 278, 279 ORGAN
MU 258, 259 TROMBONE	MU 280, 281 HARP
MU 260, 261 BARITONE (EUPHONIUM)	MU 282, 283 VIOLIN
MU 262, 263 TUBA	MU 284, 285 VIOLA
MU 264, 265 FRENCH HORN	MU 286, 287 CELLO
MU 266, 267 FLUTE	MU 288, 289 DOUBLE BASS
MU 268, 269 OBOE (ENGLISH HORN)	

## MU 290 Class Piano

2 Cr. Hrs. – 3 Contact Hrs. **W**

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. **W**

Prereq: MU 290

Coreq: MU 202

A continuation of MU 290.

## AH 111

### Environmental Stressors and Nutrition

1 Cr. Hr. – 1 Contact Hr. **FS**

Prereq: None

Note: 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. **FS**

Prereq: None

Note: 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 121A

### Basic Pharmacology

1 Cr. Hr. – 1 Contact Hr. **FW**

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 pharmacology throughout the 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. **FW**

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. **WS**

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.

## NUR 141B

### Care of the Maturing Family

8 Cr. Hrs. – 16 Contact Hrs. **FS**

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.

**NUR 211A****Care of the Family in Psychological Crisis**

4 Cr. Hrs – 8 Contact Hrs. **WS**

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. **FW**

Prereqs: NUR 141B and ANTH 103, BIOL 105L&L, BIOL 106L&L, ENG 101, PSYC 201

Note: 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.

**Philosophy****PHIL 101****Basic Concepts of Philosophy**

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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.

**NUR 222A****Managing the Care of the Family**

5 Cr. Hrs. – 11 Contact Hr. **WS**

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.

**PHIL 102****Principles of Logic**

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **W**

*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. **F**

*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. **F**

*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. **FWS**

*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. **FW**

*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. **W**

*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. **W**

*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. **FWS**

*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. **FWS**

*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. **FWS**

*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. **FWS**

*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. **F****W**

*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. **W**

*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. **F****S**

*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. **F****W****S**

*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. **F****W**

*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. **F****W**

*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. **F**

*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. **F**

*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. **F****S**

*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. **F**

*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. **F****S**

*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. **D**

*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. **D**

*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. **D**

*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. **D**

*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. **CS**

*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. **F****W**

*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*

*Note: 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. W**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. FS**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. F**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. FS**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. F**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. F**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. FW**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

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## PEP 100

### Foundations of Physical Education

2 Cr. Hrs. – 2 Contact Hrs. **F**

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. **F** **W**

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. **F** **W** **S**

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

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## PHSC 101A

### Introductory Physical Science Lecture and Lab

4 Cr. Hrs. – 6 Contact Hrs. **F** **W** **S**

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

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## PHYS 201L&L

### Principles of Physics

4 Cr. Hrs. – 6 Contact Hrs. **F**

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. **W**

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.

# Political Science

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## PSCI 111

### Introduction to American Government

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

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. **D**

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.

## PHYS 203L&L

### Engineering Physics

5 Cr. Hrs. – 7 Contact Hrs. **F**

Prereq: MATH 161

Recommended Coreq: MATH 162

NOTE: A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://www.muskegoncc.edu/calculatorhelp) for details.

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.

## PHYS 204L&L

### Engineering Physics

5 Cr. Hrs. – 7 Contact Hrs. **W**

Prereqs: MATH 162 and PHYS 203L&L

NOTE: A graphing calculator is required; see [www.muskegoncc.edu/calculatorhelp](http://www.muskegoncc.edu/calculatorhelp) for details.

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.

## PSCI 202

### International Relations

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **D**

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. **F** **W**

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 210A

### International Organizations – United Nations

1 Cr. Hr. – 1 Contact Hr. **F**

Prereq: PSCI 111 or instructor permission

This course concentrates on the objectives, functions and structure of international organizations, specifically the United Nations. This course will prepare and provide students an opportunity to participate in an off campus conference featuring simulations of the United Nations.

## PSCI 210B

### International Organizations – Arab League

1 Cr. Hr. – 1 Contact Hr. **W**

Prereq: PSCI 111 or instructor permission

This course concentrates on the objectives, functions and structure of international organizations, specifically the Arab League. This course will prepare and provide students an opportunity to participate in an off campus conference featuring simulations of the Arab League.

## PSCI 211

### Comparative World 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. **FWS**

*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. **FWS**

*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. **FW**

*Prereq: PSYC 201 with a 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. **FW**

*Prereq: PSYC 201 with a 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. **F**

*Prereq: PSYC 201 with a 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. **W**

*Prereq: PSYC 201 with a 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. **W**

*Prereq: PSYC 201 with a 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. **FW**

*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

## DEVELOPMENTAL COURSES

Students testing into two or more developmental courses must complete the following before being allowed to enroll in their second semester:

- See an MCC Counselor to create an academic plan
- Enroll in CSS 100A.

The following is the priority sequence for completion of assigned developmental courses:

1. Reading
2. CSS 100A
3. MATH 036A
4. ENG 085 or 089, 091
5. Math 038 and 040 may be deferred until the second semester.

It is understood that part-time students may not be able to take all courses at once.

## READY TO SUCCEED

Before enrolling in many courses, you must meet the READY TO SUCCEED reading competency requirement by test scores or course completion. All placement test scores are not valid after 3 years.

COMPASS	Reading score of 76 or higher
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

COMPASS Reading	ACT Reading	MME	Placement
76-100	19 or higher	Level 1 or 2 on Reading & Writing	No Reading course required. ( <i>Ready to Succeed</i> 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: All placement test scores are not valid after 3 years.

## **RDG 040**

### **Essential Reading Skills (formerly RDG 040C)**

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **FWS**

Prereq: None

This course is designed for students scoring 56-75 on the Compass Reading Test. Course instruction includes vocabulary and comprehension strategy development. Additional lab time and/or small group meetings may be required.

## **RDG 130**

### **Advanced Reading Skills I**

1 Cr. Hr. – 1 Contact Hr. **FWS**

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. **FWS**

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.

# Real Estate

## RE 101

### Real Estate I

3 Cr. Hrs. – 3 Contact Hrs. **D**

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. **F S**

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. **W**

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. **W**

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. **D**

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	



## REC 215

### Recreation and Special Populations

2 Cr. Hrs. – 2 Contact Hrs. **D**

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

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### RT 101

#### Respiratory Therapy Physics

1 Cr. Hr. – 1 Contact Hr. **F**

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. **W**

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. **W**

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. **W**

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. **W**

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. **W**

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. **S**

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. **S**

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. **S**

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. **S**

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. **F**

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. **F**

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 Mechanical 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. **F**

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. **F**

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. **W**

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. **S**

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. **W**

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. **F**

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. **F**

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. **F**

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. **D**

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. **FWS**

*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. **F**

*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. **W\*\***

*Prereq: SOC 101*

*Note: 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. **F**

*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. **W\*\***

*Prereq: SOC 101 with a minimum grade of "C"*

*Note: 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. **D**

*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.

## SOC 210 Social Psychology

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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

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### SPAN 090

#### Workplace Conversational Spanish I

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **D**

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. **FWS**

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. **FWS**

Prereq: SPAN 101 with a 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. **F**

*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. **F** **W**

*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.

## Sports Officiating

### OFC 111

#### Sports Officiating for Baseball, Basketball and Football

3 Cr. Hrs. – 3 Contact Hrs. **W**

*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.

## SPAN 202

### Intermediate Spanish

4 Cr. Hrs. – 4 Contact Hrs. **W**

*Prereq:* SPAN 201 with a 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.

### OFC 112

#### Sports Officiating for Softball, Basketball and Volleyball

3 Cr. Hrs. – 3 Contact Hrs. **F**

*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. **FWS**

*Prereq: MATH 036A with a 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. **FWS**

*Prereq: TMAT 101A with a 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. **FWS**

*Prereq: TMAT 102A with a 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. **F****W**

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. **W**

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. **W****S**

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. **F****W**

Prereq: TMAT 101A or ELTR 101, or MATH 100A  
or higher; a minimum grade of “C” is  
required for whichever course is chosen.

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. **F****W**

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. **W**

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. **F**

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. **D**

Prereq: *Instructor permission*

Note: *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

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### TH 101

#### Theater Appreciation

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

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. **F**

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. **FWS**

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. **D**

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. **FWD**

*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. **D**

*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. **FWD**

*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. **FWD**

*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. **FWD**

*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. **FWD**

*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. **F**

*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. **F**

*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. **W**

*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. **W**

*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. ①

*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. ①

*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. ①

*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. **F** **W**

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. **F** **W**

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. **F** **W**

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. **FW**

Prereq: W 102

A course designed for advanced welders who want to improve their skills in stick welding or who are preparing for certification 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. **FW**

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. **FW**

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. **FW**

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.

# Women's Studies

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## WS 101

### Introduction to Women's Studies

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

*Prereqs: Meet Ready to Succeed Requirement and  
ENG 091 with a 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**



# 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 cumulative 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 than 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 an academic counselor.

## 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
<b>TOTAL</b>	<b>14</b>		<b>35</b>

35 Grade Points divided by 14 Credits equals 2.50  
Grade Point Average (GPA)  
( $35 \div 14 = 2.50$ )

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 Financial Services. 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, 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](http://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](http://www.muskegoncc.edu) for dates and times.

## 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 drop courses by submitting a Add/Drop form, in-person or by fax, to the Student Welcome Center prior 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 Add/Drop 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. Although 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

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## 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 “WP” 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 Add/Drop 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 Add/Drop 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.

# College Affordability

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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.....	\$864.00
Technology Fee.....	\$180.00
Registration Fee.....	\$35.00
Lab/Course Fee (if applicable).....	n/a
<b>Total Payment Due.....</b>	<b>\$1,044.00</b>

**Technology Fee:** \$20.00 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](http://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 2015:

Contact Hours	In-District	Out-of-District	Out-of-State	Technology Fee
0.5	\$48.00	\$89.00	\$122.00	\$10.00
1.0	\$96.00	\$178.00	\$244.00	\$20.00
2.0	\$192.00	\$356.00	\$488.00	\$40.00
3.0	\$288.00	\$534.00	\$732.00	\$60.00
4.0	\$384.00	\$712.00	\$976.00	\$80.00
5.0	\$480.00	\$890.00	\$1,220.00	\$100.00
6.0	\$576.00	\$1,068.00	\$1,464.00	\$120.00
7.0	\$672.00	\$1,246.00	\$1,708.00	\$140.00
8.0	\$768.00	\$1,424.00	\$1,952.00	\$160.00
9.0	\$864.00	\$1,602.00	\$2,196.00	\$180.00
10.0	\$960.00	\$1,780.00	\$2,440.00	\$200.00
11.0	\$1,056.00	\$1,958.00	\$2,684.00	\$220.00
12.0	\$1,152.00	\$2,136.00	\$2,928.00	\$240.00
13.0	\$1,248.00	\$2,314.00	\$3,172.00	\$260.00
14.0	\$1,344.00	\$2,492.00	\$3,416.00	\$280.00
15.0	\$1,440.00	\$2,670.00	\$3,660.00	\$300.00
16.0	\$1,536.00	\$2,848.00	\$3,904.00	\$320.00
17.0	\$1,632.00	\$3,026.00	\$4,148.00	\$340.00
18.0	\$1,728.00	\$3,204.00	\$4,392.00	\$360.00
19.0	\$1,824.00	\$3,382.00	\$4,636.00	\$380.00
20.0	\$1,920.00	\$3,560.00	\$4,880.00	\$400.00



# 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](http://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	1 <sup>st</sup> - 8 <sup>th</sup> day of Semester/Session	100% Refund
	9 <sup>th</sup> - 12 <sup>th</sup> day	50% Refund
	After 12 <sup>th</sup> day	0% Refund
14-13 Week Classes	1 <sup>st</sup> - 7 <sup>th</sup> day of Semester/Session	100% Refund
	8 <sup>th</sup> - 11 <sup>th</sup> day	50% Refund
	After 11 <sup>th</sup> day	0% Refund
12-11 Week Classes	1 <sup>st</sup> - 6 <sup>th</sup> day of Semester/Session	100% Refund
	7 <sup>th</sup> - 9 <sup>th</sup> day	50% Refund
	After 9 <sup>th</sup> day	0% Refund
10-9 Week Classes	1 <sup>st</sup> - 5 <sup>th</sup> day of Semester/Session	100% Refund
	6 <sup>th</sup> - 8 <sup>th</sup> day	50% Refund
	After 8 <sup>th</sup> day	0% Refund
8-7 Week Classes	1 <sup>st</sup> - 4 <sup>th</sup> day of Semester/Session	100% Refund
	5 <sup>th</sup> - 6 <sup>th</sup> day	50% Refund
	After 6 <sup>th</sup> day	0% Refund
6-5 Week Classes	1 <sup>st</sup> - 3 <sup>th</sup> day of Semester/Session	100% Refund
	4 <sup>th</sup> - 5 <sup>th</sup> day	50% Refund
	After 5 <sup>th</sup> day	0% Refund
4-3 Week Classes	1 <sup>st</sup> - 2 <sup>nd</sup> day of Semester/Session	100% Refund
	3 <sup>rd</sup> - 4 <sup>th</sup> day	50% Refund
	After 4 <sup>th</sup> day	0% Refund
2-1 Week Classes	1 <sup>st</sup> day of Semester/Session	100% Refund
	2 <sup>nd</sup> day	50% Refund
	After 2 <sup>nd</sup> day	0% Refund

*In the event of a canceled course, refunds are automatic.*

# Academic/Classroom Conduct

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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

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## 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](http://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**

Firstname.Lastname

**Password Format**

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](http://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](http://mymcc.muskegoncc.edu).

## How to Access Blackboard

- Open browser and go to the MyMCC Portal at [mymcc.muskegoncc.edu](http://mymcc.muskegoncc.edu).
- 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.

# Non-Discrimination, Sexual Harassment and Sexual Misconduct

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Muskegon Community College (MCC) is committed to developing and sustaining a healthy and diverse learning and working community environment that recognizes the value of each individual and advances a safe, pleasant and respectful culture for all free from prohibited discrimination and harassment. It is the policy of Muskegon Community College to provide equal opportunities and not discriminate in enrollment, education, employment, public accommodations, activities, or services, and the College prohibits discrimination based on the basis of age, citizenship, color, disability, ethnicity, gender identity or expression, genetic information, height, marital status, national origin, political persuasion, race, religion, sex (including the condition of pregnancy), sexual orientation, veteran status, weight, or other legally protected categories.

## Prohibited Activity and Complaint Procedure

MCC will not tolerate harassment of any kind. Sexual harassment and sexual misconduct are forms of sex discrimination and are prohibited by the college. All matters reported will be treated with the utmost concern and urgency. Violations of this policy may result in disciplinary action up to and including expulsion for students or disciplinary action up to and including termination for employees.

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(s) fall within the definition outlined below.

## DEFINITIONS

### Consent

Consent is a clear, freely given, verbalized “yes” to sexual activity. The absence of “no” is not consent. Silence, in and of itself, cannot be interpreted as consent. Furthermore, a verbalized “yes” which has been coerced, does not

constitute a freely given “yes”. Individuals who consent to sex must be able to understand what they are doing. A person may not be able to give consent if she or he is:

- Under the age of 16; or
- Legally mentally incapable, mentally incapacitated or physically helpless, including impairment due to drug or alcohol use.

Consent can be given by words or actions, as long as those words or actions create mutually understandable clear permission regarding willingness to engage in (and the conditions of) sexual activity.

Consent to any one form of sexual activity does not automatically imply consent to any other forms of sexual activity.

Previous relationships or prior consent does not imply consent to future sexual acts.

**Sexual Misconduct** is an umbrella term to refer to any of the prohibited behaviors defined below.

### Sexual Harassment

Sexual harassment of employees and 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 admission or advancement.
- Submission to or rejection of such conduct is used as the basis for employment or academic decisions affecting that individual.
- Such conduct is unwelcome and is sufficiently severe or so pervasive that it interferes with an individual’s work performance, educational experience, academic status, or creates an intimidating, hostile, or offensive work/ educational environment such that a reasonable person of that person’s gender would be affected similarly.

Although this definition focuses on sexual harassment, harassment or discrimination based on any of the protected categories listed above which meets the standards outlined is prohibited.

Examples of sexual harassment include but are not limited to:

- Direct solicitation of sexual activity or other sex-related behavior accompanied by promise of reward or threat of punishment.
- Unwelcome, inappropriate sexual expressions including sexual comments about a person's body, dress, appearance or sexual activities; display of sexually offensive posters, pictures, words, or messages; unwelcome use of sexually degrading language, jokes or innuendoes; unwelcome suggestive or insulting sound or whistles; obscene phone calls, emails or text messages.
- Introduction of sexually explicit materials into the workplace or classroom without an educational or work related purpose.
- Unwelcome, inappropriate touching and/or unwanted sexual contact of any kind, or threat of such contact. Threats or insinuations which lead the victim to reasonably believe that granting or denying sexual favors will affect his/her reputation, education, employment, advancement, or standing within the College. Sexual contact will be considered unwanted or without consent if no clear consent is freely given; if inflicted through force or coercion; or if inflicted upon a person who is unconscious or otherwise without the mental or physical capacity to consent.
- Unwelcome and persistent sexually explicit statements or stories which are not legitimately related to employment duties, course content, research, or other College programs or activities
- Repeatedly using sexually degrading words or sounds to describe a person.
- Recurring comments or questions about an individual's sexual prowess, sexual deficiencies, sexual orientation or sexual behavior. Unsolicited, offensive behavior may involve harassment of women by men, harassment of men by women, and harassment between persons of the same sex.

**Dating Violence:** Violence committed by a person who is or has been in a social relationship

of a romantic or intimate nature with the victim. Violence includes, but is not limited to, sexual or physical abuse or the threat of such abuse. The existence of a social relationship of a romantic or intimate nature with the victim is determined based on:

- The reporting party's statement;
- The length of the relationship;
- The type of relationship; and
- The frequency of interaction between the persons involved in the relationship.

**Domestic Violence:** A felony or misdemeanor crime of violence committed by any of the following individuals:

- A current or former spouse or intimate partner of the victim; or
- A person with whom the victim shares a child in common; or
- A person who is cohabitating with or has cohabitated with the victim as a spouse or intimate partner; or
- A person similarly situated to a spouse of the victim under the domestic or family laws of the jurisdiction in which the crime of violence occurred; or
- Any other person against an adult or youth victim who is protected under the domestic or family violence laws of the jurisdiction in which the crime of violence occurred.

**Stalking:** Engaging in a course of conduct directed at a specific person that would cause a reasonable person to fear for their safety or the safety of others or suffer substantial emotional distress. MCC considers acts of cyberstalking, recording or transmitting sexual images, and voyeurism to be a violation of this policy.

A course of conduct is two or more acts, including but not limited to:

- Acts in which the "stalker" directly, indirectly, or through third parties by any action, method, device or means,
- Follows, monitors, observes, surveils, threatens, or communicates to or about a person or interferes with a person's property.

Substantial emotional distress means significant mental suffering or anguish that may, but does not necessarily require medical or other professional treatment or counseling.

## Sexual Exploitation

Sexual Exploitation occurs when a student takes non-consensual or abusive sexual advantage of another for his/her own advantage or benefit, or to benefit or advantage anyone other than the one being exploited, and that behavior does not otherwise constitute one of other sexual misconduct offenses.

Examples of sexual exploitation include, but are not limited to:

- Invasion of sexual privacy;
- Prostituting another student;
- Administering alcohol or drugs (such as “date rape” drugs) to another person;
- Non-consensual video or audio-taping of sexual activity;
- Going beyond the boundaries of consent (such as letting your friends hide in the closet to watch you having consensual sex);
- Engaging in voyeurism;
- Knowingly transmitting an STI or HIV to another student;
- Exposing one’s genitals in non-consensual circumstances; inducing another to expose their genitals;
- Sexually-based stalking and/or bullying may also be forms of sexual exploitation.

## Sexual Assault

Sexual assault is any non-consensual sexual contact including rape.

- Non-Consensual Sexual Contact is any intentional sexual touching, however slight, with any object, by a man or a woman upon a man or a woman that is without consent and/or by force.
- Sexual Contact includes intentional contact with the breasts, buttock, groin, or genitals, or touching another with any of these body parts, or making another touch you or themselves with or on any of these body parts; any intentional bodily contact in a sexual manner, though not involving contact with/of/by breasts, buttocks, groin, genitals, mouth or other orifice.
- Non-Consensual Sexual Intercourse is any sexual intercourse however slight, with any object, by a man or woman upon a man or a woman that is without consent and/or by force.

- Intercourse includes vaginal penetration by a penis, object, tongue or finger, anal penetration by a penis, object, tongue, or finger, and oral copulation (mouth to genital contact or genital to mouth contact), no matter how slight the penetration or contact.

For reference to the pertinent state statutes on sex offenses, please see the State of Michigan Penal Code.

## Retaliation

No act of retaliation shall occur to any person filing a complaint, responding to a complaint or participating in any investigation or proceedings. An individual or group of individuals violating this will be subject to disciplinary action up to and including expulsion (student) and/or termination of employment.

## Reporting

Anyone subject to this policy who believes he or she has experienced or witnessed sexual misconduct or related retaliation is encouraged to report such behavior promptly to the Administrative Director of Human Resources [human.resources@muskegoncc.edu](mailto:human.resources@muskegoncc.edu) 231-777-0447 or Co-Chair of the Behavior Intervention Team [OfficeofVPofStudentServices@muskegoncc.edu](mailto:OfficeofVPofStudentServices@muskegoncc.edu) 231-777-0266. All reports or complaints should be made as promptly as feasible after the occurrence. Please see Procedures for more details on reporting.

Title IX Coordinator and Deputy Coordinators

Kristine Anderson, (Title IX Coordinator)  
Administrative Director of Human Resources  
231-777-0447, Room 400

Deputy Title IX Coordinators  
Sally Birkam, Dean of Student Success and  
Campus Engagement  
231-777-0216, Room 103

Marty McDermott, Director of Athletics  
231-777-0462, Gym Offices

Larry Visconti, Counselor  
231-777-0356, Room 101



## Classroom Speech and Content

MCC's sexual harassment policies do not prohibit instructors from bringing relevant sexual content into their courses. It is understood that the academic setting is distinct from the typical workplace in that latitude is required in determining the appropriate content of academic material. However, speech that is not necessary to teach the material, or is objectively offensive and severe or pervasive is prohibited by College Policy and may lead to discipline.

## General Student Complaints

The General Student Complaint Form is available at [mymcc.muskegoncc.edu/Documents/General\\_Complaint\\_Form.pdf](http://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.

# 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](http://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.

<b>Reports</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>
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
<b>Arrests</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>
Liquor	0	0	0
Drugs	0	0	0
Weapons	0	0	0
<b>Judiciary Referrals</b>	<b>2009/10</b>	<b>2010/11</b>	<b>2011/12</b>
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](http://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

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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/E-Cigarette Free Environment

Muskegon Community College is committed to the health, comfort, and safety of students, employees and the general public, thereby, minimizing the harmful effects and discomfort smoking produces in the workplace. In compliance with Federal and State laws, fire regulations, and Board of Trustees policy, the use, distribution or sale of tobacco, electronic cigarettes (e-cigarette) in addition to the possession, use or smoking of medical marijuana is prohibited in college buildings, extension centers, on college premises and in vehicles owned, rented

or leased by the college. If College facilities are rented by non-College individuals or groups, they and their participants/guest shall be required to comply with this policy. 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.

## Dress Code

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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

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## 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

# Muskegon Community College Code of Conduct

- 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.

## 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.
- 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.

## 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.

- 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.

## 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.

# 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](http://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](http://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](http://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 than 1/2 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](http://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](http://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](http://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](http://www.benefits.va.gov/gibill).



### **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 \$676 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](http://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 ASA	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.

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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.

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.

### 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

# Transferring Credit to MCC

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## 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 grade of 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.org](http://www.collegeboard.org).

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.org](http://www.collegeboard.org).

## 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](http://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](mailto: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](http://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](http://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. 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.

# Reverse Transfer

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## What is Reverse Transfer?

Reverse transfer is an agreement between Muskegon Community College and other four-year universities within Michigan that allows students to receive an associate degree by combining credits completed at Muskegon Community with credits earned at the four-year university. An associate's degree from MCC requires 62 credits, with various requirements, depending on your elected program. Reverse transfer is not applicable to certificates offered at MCC, only associate's degrees.

## What are the benefits of Reverse Transfer?

Reverse transfer provides students with an opportunity to add a marketable credential to their resume that will help give them an edge in the workforce. Obtaining an associate degree also allows students to receive full credit for their academic achievements. Students who receive their associate's degree are more likely to finish their bachelor's degree, increase their earning power, and increase their hire ability by showing competency and a dedication to finishing an educational milestone.

## Reverse Transfer Partners:

<i>Institution</i>	<i>Minimum MCC Credits</i>
Ferris State University	30
Grand Valley State University	30
Western Michigan University	45

## How do I know if I am eligible?

If you recently transferred to a four year institution from Muskegon Community, the university's Registrar Office will notify you via email that you are eligible for review based on the number of credit hours you have completed, typically at the end of a semester.

## What happens next?

If you are eligible, fill out Reverse Transfer Release Form, included in your email and turn it into your university's Registrar Office. The form and your transcripts will be released to Muskegon Community College and they will be reviewed to see if you have qualified to be awarded the associate's degree. All correspondence regarding the results of the review will be sent directly to you from Muskegon Community College.

## Am I guaranteed a degree from Muskegon Community College?

No. The sending of your transcript to MCC does not guarantee the granting of a degree. The courses you have completed will be evaluated and is subject to the degree and residency requirements of Muskegon Community College, which will be the degree granting institution. A minimum grade point average of a 2.0 is required.

## How will I be notified to know if I qualify?

You will be informed by mail if you meet or do not meet the degree requirements.

## For more information:

Muskegon Community College  
Email: [officeoftheregistrar@muskegoncc.edu](mailto:officeoftheregistrar@muskegoncc.edu)



# Transcripts

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Transcript request forms are available from the Student Welcome Center. There is no charge for transcripts. Transcript requests are normally processed within two or three days, 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.

## **No Exceptions**

Muskegon Community College does not fax transcripts. Transcript requests cannot be accepted verbally or from friends, spouse or relatives in accordance with the Family Educational Rights and Privacy Act of 1974.

# Confidentiality of Records

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## *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

*Continued on Next Page*

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](http://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](http://collegecost.ed.gov/catc).

# Institutional Governance for Internal Communication

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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
- ♦ Joint Substability 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.

# 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 on the

MyMCC portal 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 on the MyMCC Portal*

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 on the MyMCC Portal.

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 on the MyMCC Portal.

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.

## Tuition Refund Appeals Due to Verifiable Error of MCC

Form available at the Student Welcome Center or on the MyMCC Portal.

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 on the MyMCC Portal.

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 on the MyMCC Portal.*

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.





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# Education Planning Worksheet

Degree or certificate I am working toward \_\_\_\_\_

Catalog year I am following \_\_\_\_\_

Page number my program is on \_\_\_\_\_

MCC Counselor I am working with \_\_\_\_\_

**Things I need to be aware of:**

*A minimum of 62 credits are required for most associate degrees. The following courses do **not** count toward a degree:*

*RDG 040, RDG 050, RDG 060, ENG 085, ENG 089, ENG 091, MATH 036A, MATH 036FT, MATH 038, MATH 038FT, MATH 040, MATH 041*

Prerequisites needed to go on to the next class (course sequences):


Classes offered only in specific semesters: \_\_\_\_\_

1 <sup>st</sup> Semester				2 <sup>nd</sup> Semester				3 <sup>rd</sup> Semester			
Semester: Fall Winter Summer				Semester: Fall Winter Summer				Semester: Fall Winter Summer			
Year:				Year:				Year:			
Class:		Credits:		Class:		Credits:		Class:		Credits:	
Total Credits:				Total Credits:				Total Credits:			

4 <sup>th</sup> Semester				5 <sup>th</sup> Semester				6 <sup>th</sup> Semester			
Semester: Fall Winter Summer				Semester: Fall Winter Summer				Semester: Fall Winter Summer			
Year:				Year:				Year:			
Class:		Credits:		Class:		Credits:		Class:		Credits:	
Total Credits:				Total Credits:				Total Credits:			

































## Muskegon Community College

Main campus: 221 S Quarterline, Muskegon MI 49442  
(231) 773-9131 ♦ toll-free (866) 711-4622

**Learn more at [muskegoncc.edu](http://muskegoncc.edu)**

