

2020-2021
COURSE CATALOG

MCC

Of course you can.



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

Equal Opportunity

Muskegon Community College continues to promote staff diversity, and is an equal opportunity employer. MCC does not discriminate on the basis of race, color, religion, sex, national origin, marital status, sexual orientation, gender identity, transgender status, political persuasion, disability, height, weight, veteran status, age or any other protected class in any of its educational programs, activities or employment. Minorities, women, veterans, and the physically challenged are encouraged to apply. Anyone with a disability will be reasonably accommodated by the College. If you have a disability and need an accommodation or assistance in applying for this position, please contact the Human Resources Office.

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 2020 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.

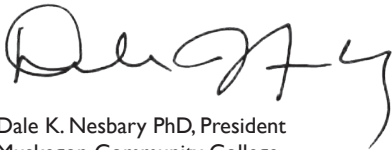
Muskegon Community College is on the move. Thanks to the generosity of the Muskegon County residents and support from Lansing to Washington D.C., our MCC continues its most significant fundraising and facilities upgrade since the opening of our current main campus in 1967. Our state-of-the-art Science Center, Sturuss Technology Center, Health and Wellness Center, Automotive Center, Ottawa Center, and Art and Music Building were constructed to provide you with the best resources in a highly competitive learning environment.

Just as importantly, MCC is a leader in student success, recently named the top community college in Michigan and among the top community colleges nationally by BestColleges.com and ValueColleges.com. This is no surprise as you, our students, have performed on stage in New York's famed Carnegie Hall, set world records, and won state, regional, and national championships on athletic fields and in the classroom. We stand committed to remain nationally and internationally competitive by connecting our exceptional faculty and staff with new state-of-the-art facilities.

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 succeed.

Take the first step today by calling us at (866) 711-4622, or by visiting www.muskegoncc.edu. We appreciate your interest in Muskegon Community College and look forward to working with you to achieve your goals.

Regards,



Dale K. Nesbary PhD, President
Muskegon Community College



Our Mission at Muskegon Community College

Muskegon Community College, dedicated to equity and excellence, prepares students, builds communities, and improves lives.

Introduction

Successful Students, Successful Communities, Muskegon Community College's 2017-2022 Strategic Plan, focuses on continually creating, building, and improving an environment to foster and celebrate student success. Students come to MCC for many reasons: to finish an associate degree and transfer to a four-year university, to complete a certificate or degree to enter the workforce, to build skills for career advancement, to enrich the experience of high school, to engage in learning for the joy of learning, and, sometimes, because they don't know what else to do. Whatever your reason for choosing MCC, please know that you, your goals, and your MCC experience are vitally important to us.

We have many educational and career pathways, and we have many people and services in place to help you select the one that is best for you, support you as you start and stay on your path, and celebrate with you as you complete important milestones. Every member of the MCC community, from facilities staff to the college president, will be rooting for you when times get tough, when things are going well, and when you have accomplished all you came to do at MCC.

Located near the shores of Lake Michigan, MCC is a vital part of a growing community, providing learning opportunities on our main campus, at our Sturris Technology Center in downtown Muskegon, our new Ottawa Center in Grand Haven, and at several off-campus locations in Ottawa and Newaygo Counties. MCC also offers many online and hybrid classes.

Accreditation

Muskegon Community College is accredited by the Higher Learning Commission, 230 S. LaSalle Street, Suite 7-500, Chicago, Illinois, 60604. The Commission may be contacted by phone, (800) 621-7440, by fax, (312) 263-7462, or by email, info@hlcommission.org. They may also be contacted online at www.hlcommission.org. Interested persons may review a copy of the accreditation documents online at www.muskegoncc.edu/academic-affairs/accreditation.

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RESOURCES AT MCC

About Us

History of Muskegon Community College

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 and 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 its namesake, local businessman and philanthropist Charles H. Hackley, after fire had destroyed the original Central School.

In the years after World War II, enrollment climbed quickly and the 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.

Until June 1951, Muskegon Junior College was primarily geared to those students intending to complete at least four years of college. After an enabling act by the Michigan Legislature, the name and educational scope of the College was changed. Muskegon Junior College was renamed Muskegon Community College to reflect 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 with their two years of training beyond high school.

By the early 1960s, enrollment had topped 2,000. 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 made several proposals: 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 1963, the Muskegon County overwhelmingly approved the recommendations of the committee and elected the first Board of Trustees, which went to work immediately and by September had purchased the tract of land upon which the College exists today.

Alden B. Dow and Associates were named architect. By the summer 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, which was completed in 1968 and named for A. Harold Frauenthal, the Muskegon industrialist whose gift 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 1969 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 Center for Higher Education addition to provide upper-level courses and programs offered by Ferris State, Grand Valley State, and Western Michigan universities. The 90,000 square foot facility, named in honor of former MCC President James L. Stevenson, is home to classrooms, a lecture hall, MCC-TV, Graphics and Printing.

In January 2006, the 40,000 square foot Hendrik Meijer Library Information Technology Center was added to the main building to offer 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 upon its two decades of offering classes in Grand Haven, MCC opened its Ottawa County Center in 2012 in the Grand Haven Community

Center. That same year, MCC and the Muskegon Area Intermediate School District (MAISD) launched the Early College of Muskegon County 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 four MCC facilities expansion projects outlined in the College's 2010-2015 Master Plan. MCC signed a purchase agreement in September 2014 to acquire the former Muskegon Chronicle building and an adjacent parking lot for a downtown campus. In December 2017, the Peter and Carolyn I. Sturuss Technology Center opened as the new home to MCC's Applied Technology programs in CAD, Electronics/Automation, Engineering, Machining, Metal Casting, Materials, and Welding, as well as to MCC's Experiential Learning Program. In June 2015, local developer Jonathan Rooks donated the former Masonic Temple to MCC for its Entrepreneurial Studies program and related business-generating activities. Nick Sarnicola, a West Michigan native and highly successful entrepreneur, and his wife, Ashley, then created a \$200,000 permanent endowment through their Next Gen Foundation to the Foundation for Muskegon Community College to support an annual \$10,000 cash award for the best business idea generated by an MCC entrepreneurial program graduate. The Rooks-Sarnicola Entrepreneur Institute opened in June 2018 and is home to the Lakeshore Fab Lab.

In August 2015, MCC opened its \$9.6 million Science Center, home to the MCC Life Sciences Department and the College's biology labs and research areas. The facility earned the Leadership in Energy and Environmental Design (LEED) Gold Certification - one of only four buildings in Muskegon to have received this high honor - for its sustainable strategies used in its design and construction.

The same year, MCC purchased the Muskegon Family YMCA's West Western Avenue property on Muskegon Lake for \$1.17 million as part of the College's community-focused health and wellness initiative, which also included the construction of a new center on campus. The former YMCA facility was re-opened in 2016 as the MCC Lakeshore Fitness Center.

In November 2018, the 52,000 square foot MCC Health and Wellness Center opened on the main campus. The facility houses the College's Health, Physical Education and Recreation Department; the Medical Assistant Program; the Athletic Department Office; a state-of-the-art Health Simulation Lab for MCC students in nursing, respiratory therapy, and medical assistant programs; learning spaces and classrooms; the Ron Gaffner Multipurpose Room; a regulation wood floor gymnasium; a one-tenth mile indoor running track; and a fitness center. The Mercy Health Partners Primary Care Center, a collaboration between MCC and its Mercy Health and Grand Valley State University educational partners, is also located there.

In August 2019, the \$9 million renovation project that transformed the vacated Applied Technology Building into a state-of-the-art Art and Music Building was completed. The music section contains a Medium Ensemble Room, Keyboard Lab, Teaching Suites, Practice Rooms, Student Instrument Storage, Music Library, and College Instrument Storage. A floor-to-ceiling window paneled Student Lounge is located at the confluence of the art and music wings of the building. The art section includes a 3-D Art Studio, Painting Studio, Advanced Drawing Studio, Printmaking Studio, Ceramics Studio, Kiln Room, Woodshop, Spray Booth, Faculty Studio, Student Open Studio, Matting and Collection Room and Art Supply Room. Both art and music have access to the tiered Lecture/Viewing Classroom.

During the reporting periods from July 1-Dec. 31, 2018 and from April-September 2017, MCC Nursing Program graduates ranked among the nation's best on the National Council Licensing Examination for the RNs (NCLEX-RN) and the National Council Licensing Examination for PNs (NCLEX-PN). On both exams, MCC graduates had a 100% first time pass rate versus 85% nationwide.

MCC was the top-ranked Michigan community college in 2017 by BestColleges.com for its gainful employment, graduation rates, and earnings outcomes. MCC has earned acclaim as a national leader in student success as an Achieving the Dream Leader College. In 2016, MCC was ranked 27th nationally among the 1,711 community and other two-year colleges by Value Colleges in its Top 50 Best Value Community Colleges in the U.S. rankings.

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, Nurse Aide, Medical Assistant 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, including transfer students transferring with fewer than 12 earned credits. New Dual Enrolled/Early College students please speak with your Counselor/Dean regarding the orientation you should attend. Studies have shown that students who attend orientation attain higher GPA's 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 explore the campus and discover key locations, including the Library, Student Life, Bookstore, College Success Center, and more. You will learn how to navigate your MyMCC, use your MCC-student email, how to plan and register for classes, and locate and use blackboard.

NOTE: Students who have transferred 12+ credits with a 2.0 GPA or higher may request a waiver. Please complete the orientation waiver form (if you are eligible to waive your NSO). Reserve your orientation spot at 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

Photos for the Student ID/My MCC OneCard will be taken during orientation or in the Information Commons located on the second floor of the Hendrik Meijer Library.

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 BankMobile, 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 BankMobile Vibe checking account then the My MCC OneCard will act as a debit card (it is NOT a credit card). For more information on the “My MCC OneCard” visit www.mymcconecard.com.

Full-time Student

If you are enrolled for 12 or more credit hours per semester, you are considered a full-time student. Note, however, earning the associate degree (62 credits) in four semesters will mean carrying an average of 15 ½ credit hours per semester. If you wish to graduate in two years you must carry more than the 12 credit hours each semester or plan on attending Summer sessions.

Part-time Student

If you are carrying fewer than 12 credit hours per semester you will be a part-time student. If you are enrolled for 9-11 credit hours per semester, you are classified as “three-quarter” time, and six-eight credit hours per semester you are a “half-time” student. If you are applying for financial aid as a part-time student, you should consult the Financial Aid Office for details on just how much help is available to you each semester.

Regular Admission

If you are seeking admission to Muskegon Community College, applications are available online at www.muskegoncc.edu. Submit official high school or GED transcript and include ACT, SAT and/or MME scores. It is free to apply!

Apprentice Student

Apprentice students need to complete the application as a community guest student. 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.

Transfer Student

If you attended another institution and plan to transfer credits to Muskegon Community College please complete the online application as a transfer student and have all official transcripts forwarded for evaluation. All College transcripts must be sent directly to MCC. MCC will not accept transcripts hand delivered. Transfer students who wish to receive a degree from Muskegon Community College must complete no less than 30 or the last 15 hours at MCC and attain a 2.0 or better overall grade-point average. Transcripts should be sent for evaluation directly to:

Transfer Evaluation, Room 1048H
Muskegon Community College
221 S Quarterline Rd
Muskegon, MI 49442

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, SAT and/or MME scores to MCC's Enrollment Services Office, and then complete an Early Admission/Dual Enrollment form;

www.muskegoncc.edu/dualenrollment.

A dual-enrolled student may have to complete Placement 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

Students attending other colleges or universities within the state may be admitted as guests by filing a Michigan Uniform Undergraduate Guest Application in addition to the online application. Guests should develop a program of study with an advisor at their home institution to insure proper course selection and credit transfer. College Guest status must be renewed each semester. Please follow the following steps to ensure an effortless college guest experience:

1. Apply for admission, and the Michigan Uniform Undergraduate Guest Application.
2. Complete Part I of the Michigan Uniform Undergraduate Guest Application by printing clearly or typing, then signing the application.
3. Ask an official at your current institution to complete Part II and submit the application to MCC's Enrollment Services office.
4. Consult your advisor at your primary institution to ensure appropriate course selection to meet your transfer requirements.
5. Register and pay for classes. Guest students pay all tuition and fees, they do not qualify for financial aid.
6. Request an official transcript be sent to your home institution after completion of the class.

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.

Readmitted Students

The following information is designed for students who have not attended MCC within the last three years or have earned a degree or certificate from Muskegon Community College (someone who does not have an active program code). You will need to complete the following information:

- ♦ Reapply to Muskegon Community College. Your new and previous student information will be merged together. If you have changed any fundamental student information please fill out the Student Personal Data Change Request Form and submit it to the Student Welcome Center.
- ♦ If you haven't already, submit an official high school or GED transcript to MCC, which can be sent to us through the online Docufiled or Parchment systems, or mailed directly from your high school. Please send official high school transcripts to:

*Enrollment Services, Room 1043
Muskegon Community College
221 S. Quarterline Rd.
Muskegon, MI 49442*
- ♦ 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 Veterans, Military Personnel, and Eligible 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, or to dependents who do not reside at the same address but are identified as a dependent per VA Benefit guidelines. Students seeking a military veteran residency waiver need not have lived in Michigan prior to military service.

Student shall provide one of the following:

- ♦ Department of Defense 214, Separation from Active Duty Form
- ♦ 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.
- ♦ Eligible dependents can show relation through birth certificate, marriage license, VA benefit eligibility letter, or other official document dependent on verification by an MCC official

Additionally, the following individuals shall be charged in-state tuition:

Any individual using educational assistance under either Chapter 30 (Montgomery GI Bill® – Active Duty Program), Chapter 31 (Vocational Rehabilitation), Chapter 33 (Post-9/11 GI Bill®), Chapter 35 (Dependents Educational Assistance),

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.

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.

or Chapter 1606 (Montgomery GI Bill® – Select Reserve), of title 38, United States Code, and/or the Marine Gunnery Sergeant John David Fry Scholarship (38 U.S.C. § 3311(b)(9)) who lives in the State of Michigan while attending Muskegon Community College (regardless of his/her formal state of residence).

International Student Enrollment

International students that would like to be considered for enrollment at MCC must complete an International Student Application which may be found at www.muskegoncc.edu/internationalstudents. Official translated high school transcripts, bank statement, and TOEFL scores must also be submitted before an admission decision is made. Additional information can be obtained by calling (231) 777-0230.

Senior Citizen Tuition Waiver Policy

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 Senior Citizen Tuition Waiver. Interested senior

citizens must: present a valid Michigan Driver's license or State ID to the Student Welcome Center for verification; meet all MCC admission requirements; and meet all course requirements, which may include placement testing.

Senior citizens may register as degree seeking or auditing (non-credit seeking) students in courses on a space-available basis without payment of tuition. However, students will be responsible for the cost of supplies, course fees, registration fee, technology fee, and infrastructure fee. If degree seeking, students using the Senior Citizen Tuition Waiver must meet the MCC degree requirements and are recommended to attend New Student Orientation.

The Senior Citizen Tuition Waiver does not cover secondary admit programs, including Medical Assistant, Nursing, and Respiratory Therapy. This waiver cannot be applied retroactively; verifying documentation must be presented to the Student Welcome Center prior to the first day of the semester in which admission is sought.

Resources

Your Educational Success

The goal in higher education is not only what you learn, but how you learn it – to go beyond rote memorization and into a full understanding of the subject at hand. To help in this process, MCC has a multitude of resources including academic, career, and personal counseling; tutoring; College Success Center; services for students with special needs; career assessments and many others. Take advantage of any or all of these services to make sure your education is well-rounded and successful.

There are many ways to maximize your learning potential as you start your college education. MCC recommends the “College Success Seminar (CSS 100A)” as a start-up course to help you develop the necessary skills, abilities, attitudes and behaviors that provide academic and personal success.

Care Report and Care Team Intervention

The Care Report is a support system designed to ensure student success at MCC. Please pay attention to these emails and consider taking the actions they recommend – they are intended to help you succeed! Your instructor may submit a Care Report, and you will then be contacted by a member of the Care Team or the Tutoring Center. The purpose of this system is to get you the help you need, when you need it. Care Team staff members are available via email and phone for all students at MCCCareTeam@muskegoncc.edu or (231) 777-0216.

Counseling and Advising

Room 1050 • www.muskegoncc.edu/counseling

Counseling is available in the Counseling and Advising Center, Room 1050. Muskegon Community College's counseling faculty offers a wide variety of educational, career, and personal counseling services.

Academic advising provided by MCC counselors is especially important as you work through a pathway that aligns with your personal career goals and abilities. MCC offers six pathways for students to choose from:

- (1) Arts, Humanities & Communication
- (2) Engineering, Manufacturing & Technology,
- (3) Health Services
- (4) Human Services,
- (5) Business & Information Technology and
- (6) Math & Science.

Counselors have specific pathways in which they advise, so please specify your pathway of interest when setting up an appointment. If you are an undecided student you may set up an appointment with any of the counselors. Meeting with a counselor is especially important as you work through the pathway that aligns with your personal career goals and abilities. Counselors will work with you to create an educational map to assist you in reaching your educational and vocational goals. Counselors work closely with academic departments and transfer colleges to help advise you on the best course selections for your program. If you plan to transfer after your degree at MCC, it is strongly encouraged you meet with a counselor each semester, because suggested courses will vary with each college/university.

Testing Center

Room 1032 • www.muskegoncc.edu/testing

The Testing Center provides the following testing services for students, faculty and guests: placement tests, make-up tests, online tests, independent study examinations, workplace skills assessments,

Our Licensed Professional Counselors can assist you in exploring your personality, interests, values, and how these help build a foundation for career exploration. Educational and personal counseling can help you adjust to a new academic environment and resolve problems that may interfere with success at Muskegon Community College.

Counselors provide free, confidential and professional mental health counseling services, resources, and referrals to support the academic and personal success, health, and well-being of our students. Students often visit the Counseling and Advising Center to discuss a wide variety of topics that include, but aren't limited to: depression, anxiety, relationship concerns, stress management, suicidal ideation, indecision about a major or career path, academic concerns such as failing grades or struggling with a subject.

Beyond individual services, the Counseling and Advising Center offers a variety of workshops, presentations, and activities supporting wellness and health promotion.

Counselors are available, by appointment, Monday through Friday, days and evenings. Appointments may be made in Room 1050 or by calling (231) 777-0362. Current Muskegon Community College students can log into MyMCC and self-schedule appointments.

Walk-in counseling is available Monday through Friday. 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. Contact the Counseling and Advising Center for hours. The Office hours are posted on our website www.muskegoncc.edu/counseling.

proctoring services for distance learning programs, and CLEP testing and Pearson-Vue certification testing. The Testing Center is located in Room 1032 or you may call (231) 777-0394 or email testingcenter@muskegoncc.edu.

External Testing Fees

With the exception of workplace skills testing, CLEP, Pearson-Vue and, in some cases, external exam proctoring, testing services are free of charge to MCC students.

Fee schedule for tests with associated fees:

- Exams for other institutions: \$25 charged for test takers without an MCC student ID number or MCC students who have earned less than 50 credit hours from MCC
- Placement tests for other institutions: \$25
- CLEP tests: See clep.collegeboard.org/ register for current fee information
- Pearson-Vue tests: See pearsonvue.com for current fee information

Placement Guidelines Using MCC Placement Tests, SAT, ACT and MME

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. To help you plan and be successful in your classes, MCC requires that you

complete placement tests before registering for classes. Refer to the Placement Guidelines Chart for required scores and accepted tests. Please note that MCC Placement Guidelines are based on the smaller ACT and SAT sub-scores. SAT and Accuplacer scores earned on or after 4/1/16 are accepted. Placement scores have a 3-year time limit.

Students with low scores are required to complete refresher/developmental 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.

The College also offers basic computer competency tests 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.

To view current placement guidelines, go to <https://www.muskegoncc.edu/testing/mcc-placement-test/> and click on the Placement Guidelines link.

Developmental Courses

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

- Schedule an appointment and meet with 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.

Financial Aid

Muskegon Community College, through its financial aid programs, attempts to assist students who would not otherwise be able to pursue their educational goals. Numerous federal and state programs, as well as College-sponsored and privately funded programs are available to assist qualified students. Most of these programs are described in the following paragraphs.

Students must meet the criteria for particular programs, be in good academic standing, and make normal progress toward a degree in order for funds to be awarded or renewed.

Federal regulations require that, in order for an award to be renewed under a federal program, the student must not owe a repayment on a previous loan or grant. The College also reserves the right to withhold all services—including the issuing of academic transcripts—from any students who have not met their financial obligations to the College.

Applications, Procedures and Deadlines

In order to be considered for financial assistance, students must do the following:

1. Be accepted for admission to the College as a regular student (new students must submit a completed Application for Admission online at www.muskegoncc.edu).

2. Complete and submit a FAFSA (Free Application For Federal Student Aid). Request that a copy be sent to Muskegon Community College (College Code #002297). This is required for all aid programs based on financial need. See www.fafsa.ed.gov for more information.
3. Immediately respond to any requests. Additional documentation, including signed copies of Federal tax returns, may be needed to complete your financial aid file.

In order to receive full consideration for financial assistance, completed applications must be on file at the College by the following dates:

for FALL SEMESTER	May 1
for WINTER SEMESTER	October 1
for SUMMER SESSION	March 1

Applications received after these dates will be considered on a first-come, first-served basis, if funds are available.

Most financial aid is awarded for only one academic year at a time. Students must submit new applications in order to receive consideration in a subsequent year.

Federal Programs

Pell Grant

Pell Program grants are available to students in financial need. Grants range from \$657 to \$6,195. The actual amount of each grant depends upon the student's eligibility number and the number of credit hours being carried each semester. Students attending Summer Semester are allowed to receive Federal Pell Grant funds up to 150 percent of the student's Pell Grant Scheduled Award for an award year. 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 will need to complete the Free Application for Federal Student Aid (FAFSA) to determine eligibility.

For more information, refer to MCC's website at: www.muskegoncc.edu

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.

State Programs

Michigan Competitive Scholarship Program

The Michigan Competitive Scholarship Program provides tuition grants of up to \$1,000 per academic year. Eligibility is based on both financial need and academic achievement. Students must achieve a qualifying SAT score of at least 1200 prior to entering college, and complete their Free Application For Federal Student Aid (FAFSA) by the first of March. Students may receive up to ten full semesters of assistance, provided they renew their application each academic year. Further information may be obtained from the high school guidance office or the State of Michigan website (www.Michigan.gov).

Michigan Tuition Incentive Program (TIP)

The TIP Program provides grants to cover tuition and some fees for eligible low-income students who graduate from high school or complete a GED before their 20th birthday. The TIP Program may cover up to 24 credit hours per year, with a maximum of 80 credit hours. TIP students who complete an associate's degree or at least 56 credits at the community college level may be eligible for additional funding if they transfer to a four-year Michigan college or university.

The TIP application must be completed prior to the deadline of August 31 of the academic year in which the student graduates from high school or its recognized equivalent.

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.

Muskegon Community College Scholarships

MCC Adult and Re-entering Scholarship Achievement-Based Scholarships In

Amount: up to \$1,000 annually. This scholarship is for non-traditional students. Requirements:

1. Must be in a degree seeking program.
2. Must be enrolled in a minimum of 6 credit hours.
3. If re-entering, there must be a three-year break in your education at Muskegon Community College for you to be considered for this award.
4. Must complete FAFSA to demonstrate financial need.
5. Minimum 2.0 high school or last college attended GPA.
6. General Essay Required.

Senior Citizen Tuition Waiver

Muskegon County Residents who are 60 years of age or older may enroll under the Senior Citizen Tuition Waiver program. This program waives tuition for both credit and audited courses, except for Medical Assistant, Nursing, Respiratory Therapy. Financial need is not a criterion for this program. You must provide proof of eligibility prior to the start of the semester at the Student Welcome Center. You may still be eligible for Financial Aid. For more details about the requirements and procedures for this tuition waiver, visit www.muskegoncc.edu

Academic and Performance Areas

This program provides tuition grants to all 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 and books, 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.

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 1356.

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 1356) 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 international, travel and study opportunities at MCC, visit www.muskegoncc.edu. MCC offers three travel study opportunities: the German Exchange program to Stuttgart, Germany to explore international business and German culture; the Tropical Coral Reef Ecology class on the Caribbean island of Nevis; and a class

under development which will allow students to visit and learn about the culture and society in Belize.

Honors Program

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.

You may register for honors options when you receive instructor permission. 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 at karin.burrell@muskegoncc.edu.

Phi Theta Kappa

Room 1055

Phi Theta Kappa is the international honor society for community college students. Eligibility requirements include:

- Earn 12 or more 100-level college credits at Muskegon Community College OR six or more 100-level college credits at MCC if in a certificate program

- Earn and maintain a 3.25 GPA or higher
- Be currently enrolled

Interested students can contact advisors at PTK@muskegoncc.edu.

College Success Center

Room 3081

www.muskegoncc.edu/college-success-center

The College Success Center's goal is to assist students in attaining academic success. We do this by helping them discover how they learn best and by helping them develop the skills necessary for becoming independent learners. We attempt to meet students where they are in their academic journeys and support them on their paths to becoming fully prepared for college-level coursework.

The College Success Center offers students a variety of support services:

- basic skills courses in reading, writing, and math
- a course on college success strategies
- advanced reading skills courses

- an individualized writing course to expand writing skills
- access to a writing center staffed by faculty
- supplemental one-on-one and small-group instruction
- a math placement test retake preparation program
- peer tutoring

CSC courses may be taught in traditional classroom settings, 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 and/or student tutors, who provide constant support of skill development. The College Success Center is open at a variety of convenient times to provide students with flexibility in their scheduling.

Tutoring Center

Room 2046 • www.muskegoncc.edu/tutoring

If you are having difficulty in a class, we suggest you first talk to your instructor. 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 should 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 to help increase 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 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. Appointments can be made by calling (231) 777-0393. Walk-in help can be accessed online by:

1. Logging into MY MCC
2. Clicking into any Blackboard Shell
3. Clicking on "Tools"
4. Clicking on "NetTutor Online Help"
5. Then clicking into subject in which you need help.

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.

Training Certification

The MCC Tutoring Center is a certified tutoring center under the (ITTPC) International Tutor Training Program of The College Reading and Learning Association. Tutors who complete the training process receive certification, which can be transferred to other tutoring centers. This training includes Level 1 for new tutors, Level 2 for advanced tutors and Level 3 for Lead Tutors. Some of the training topics include Active Listening, Role Modeling, Questioning, and Assessment. The training prepares tutors for helping MCC students.

Becoming a Tutor

Students who wish to become tutors should contact an instructor for a written recommendation, and then report to the Tutoring Center.

Disability Support Services

Room 2046

Phone number: (231) 777-0309

E-mail: mccdss@muskegoncc.edu

Website: <https://www.muskegoncc.edu/dss>

Disability Support Services (DSS) collaborates with students to provide accommodations and assistance to all qualified students with documented disabilities whether they are physical, psychological, or educational. Muskegon Community College is committed to ensuring the legal requirements of Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA), as amended (ADAAA).

Muskegon Community College strives to reduce the impact of a disability on a student's opportunity to learn by providing accommodations to eligible students. Accommodations available are based on the individual documentation and student's need.

Occupational Support Services Grant

The Occupational Support Services Grant is designed to provide financial assistance to eligible students who are enrolled in occupational programs at MCC. To qualify for the grant students must have at least one of the following qualifications:

- Pell eligible
- A single parent
- A student with a disability
- In a gender-based non-traditional career path

Career and Transfer Services

Career Services

Room 1055

The Career Services Office is here to help with your employment needs while you are enrolled and after you graduate. We provide personalized guidance and assistance in the career decision making process by helping you identify your talents, interests and values while setting clear educational goals. For more information and upcoming events visit, www.muskegoncc.edu/career

Assistance is available every step of the way. Students are encouraged to take advantage of the following services:

- Resume and Cover Letters
- Interview Skills
- Workshops
- Recruitment Events
- Job Fairs
- Hire a Jayhawk (Online Job Board)

Want to see current job openings or post a job? Visit: <https://muskegoncc-csm.symplicity.com/>

Transfer Services

Room 1055

The transfer process can be complex with information coming from all directions: admissions applications, college visits, official transcripts, credit evaluation, essays, references, academic requirements, financial aid, housing arrangements, major choice, etc. We can help with it all.

We can provide the following services:

- Schedule an appointment to help you determine which college or university will best meet your needs
- Assist you with creating a plan to ensure you meet the transfer requirements of your chosen institution
- Navigate the application process and offer tips on essays and references
 - Provide resources such as transfer guides, course equivalencies, scholarship information, college directories and catalogs to help you make the best choice
- Connect you with representatives on campus from four-year colleges and universities during Transfer Fairs and Information Sessions

For more information and upcoming events, visit www.muskegoncc.edu/transferservices

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 an active internship program. The goal of the internship program is to provide the student with on-the-job experiences supervised by successful, experienced professionals. This experience shall directly support the development of a student's technical skills, knowledge, and career path. The employer shall gain a reliable, flexible, and enthusiastic potential employee while assisting in the student's career preparation goals.

For more information, visit the internship page <http://www.muskegoncc.edu/student-life/internships/> or contact internship coordinators.

For information on Business and Applied Technology internships - Jared Olson, Workforce Training and Internship Coordinator in the Office of Academic Affairs in Room 1309, at (231) 777-0300 or jared.olson@muskegoncc.edu.

For information on Education Department internships - Jennifer Jones at (231) 777-0397 or Jennifer.jones@muskegoncc.edu.

Student Housing Resources

www.muskegoncc.edu/housing

Although Muskegon Community College does not provide on-campus housing for students, the Student Life Office does offer a student housing resource listing on our website at www.muskegoncc.edu/housing. There is also a bulletin board in the Student Union where those that have rentals available or those who are looking for roommates can post flyers.

MCC students, staff, and community members may also list properties free of charge on our student bulletin board on the north end of the Student Union. For more information visit www.muskegoncc.edu/housing, or call the Student Life Office at (231) 777-0216.

Hendrik Meijer Library and Information Technology Center

Room 1065

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, DVDs and Webcams.

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. There is a librarian available all hours the library is open.

Library Catalog

All books, instructor reserved materials, print periodical subscriptions, video cassettes, DVDs and CDs are listed in the online catalog. The catalog, which is mobile friendly, provides location information which enables users to quickly determine where the material is located and if it is available. If you need assistance in finding materials, ask at the reference desk or the public services desk.

Classification System

A collection of approximately 65,000 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. Most of these databases are also available off campus. Access the library databases via the MyMCC library page. The majority of our periodicals are available only in electronic format via our numerous databases.

Interlibrary Loan

Books and journal articles 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. Rooms may be checked out at the Public Services desk.

Quiet Reading Room

The quiet reading room is intended for quiet study.

Computers for Student Use

For students who desire research assistance, there are computers, including one MAC, near the reference desk on the first floor.

Information Commons Room 2069

The Information Commons, located on the second floor, contains personal computers, Macintosh computers, 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 copy machine is available on the first floor.
- The Cybercafe with vending machines is on the first floor.
- A microfilm/microfiche reader is located on the first floor near the reference desk.

For more information regarding library services, contact:

- Library Information: (231) 777-0269
- Reference Services: (231) 777-0326
- Circulation/Public Services: (231) 777-0270
- Interlibrary Loan: (231) 777-0205
- Information Commons: (231) 777-0645 or (231) 777-0119

Office of Information Technology

Room 1031

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

The **Brookside Café** (located in the Student Union, 2nd level of the Main Building) is home a variety of food offerings. At the grill, you will find made-to-order items such as wraps, burgers, fries, chicken, etc. The café also has a large selection of ready-to-eat salads, sandwiches and soup. You will also find a salad bar with a variety of toppings and salad choices. If you're looking for a quick snack or beverage, check out their baked goods, fresh cut fruit, coffee (hot and iced) and cold beverages. The Brookside Café accepts cash, credit cards and your MyMCC One Card.

Check out our full menu at <https://www.muskegoncc.edu/conference-and-catering/campus-dining-services/>

A full catering service is also available on campus to service all events and activities. If you are looking for a venue to hold a meeting, training, special event and more, our conference site is available online at www.muskegoncc.edu/catering.



Vending Services

Founded in 1960, AVI Foodsystems has evolved into one of the most respected and trusted food service companies in the nation. Providing comprehensive food services with a focus on the highest quality and freshest ingredients, impeccable service and total value is the reputation they have earned and live up to every day. AVI serves thousands of clients and millions of customers daily through contemporary cafés, innovative micro markets, state-of-the-art vending, premier catering services, superior concession venues and exclusive beverage and coffee systems. AVI is proud to serve Muskegon Community College.



Muskegon Community College Bookstore

Located on the Main Campus

muskegoncc.bncollege.com

(231)777-0235

- Rent your textbooks from us and save 50%
- Buy used and save 25% (when available)
- Your best source for new and used textbooks
- Bring in your course schedule and MCC photo ID and get the books you need
- Pre-order your textbooks online at muskegoncc.bncollege.com
- Course textbooks are available at the beginning of each semester and session
- All students need a MCC ID card to purchase their textbooks on student financial aid
- Student financial aid begins 10 days before first day of class
- **Sell Your Used Books for Cash**
- 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 textbooks not purchased at the MCC Bookstore
- All Students need MCC ID card, and schedule 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 receipt for details on our Return Policy.

Veterans Office

Room 1055

The MCC Veterans Office is here to serve all military-connected students in our community. Whether a current servicemember, a veteran, a reservist, or a child or spouse of military personnel, the office is here for you. The office provides current benefit information, connections to community and national programs, and assistance in completing VA forms for educational benefits. The MCC Veterans Office also provides support for the Student Veteran Organization. The Manager of Student Life and Veterans Services can be reached at (231) 777-0342.

Our mission

- Help clear up any uncertainties about VA's current benefit 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 Programs

U.S. military 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 most federal programs are found at www.va.gov.

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.

Federal G.I. Bill® Chapters and Eligibility Requirements

CHAPTER 30 — This federal program provides educational benefits for veterans who entered military service after July 1, 1985. Veterans who entered military service before January 1, 1977 and served actively for at least two years after July 1, 1985 may also be eligible (Montgomery G.I. Bill).

CHAPTER 31 — This federal program provides educational benefits to eligible disabled veterans (Veterans Vocational Rehabilitation) with at least a 10% service connected disability to be considered for Vocational Rehabilitation and Employment. To get more information regarding this program, please go to www.vetsuccess.gov.

CHAPTER 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®).

For more information visit www.va.gov/education

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

Michigan Child of Veterans Tuition Grant

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). The grant is administered by the Michigan Department of Treasury. More information available at www.michigan.gov/ssg, or call 888-447-2687. Assistance is also available by making an appointment in the Veterans Office.

MINGSTAP

Public Act 259 of 2014 established the Michigan National Guard State Tuition Assistance Program (MINGSTAP) to provide tuition assistance to members of the Michigan National Guard who are attending any public or private college, university, vocational school, technical school or trade school located in Michigan. Currently, qualified soldiers can apply for up to \$6,000 in tuition assistance per year. For more information about the program, please visit <https://mingstapapp.state.mi.us/> call (517) 481-7640.

Responsibilities for Students with VA & Military Education Benefits (GI Bill®)

United States Department of Veterans Affairs (VA), the United States Department of Defense (DoD), the State of Michigan and the Michigan National Guard offer educational benefits to qualified veteran and military students and/or their dependents provided the beneficiary meets guidelines put forth by the program. To use these educational benefits, students must fulfill the responsibilities below.

1. I agree to request official transcripts from all previously attended institutions, including the Joint Services Transcript (JST) or Community College of the Air Force, be sent to the MCC Records Office for evaluation.
2. I agree to choose a valid program at MCC, and understand my benefits will only pay for classes that are within that program. If appropriate, I will officially change my program of study at the Counseling and Advising Center and notify the Veterans Office. I understand that only courses outlined in my program of study will be certified for payment, if the courses are within VA guidelines.
3. I agree to complete a Certification Request for VA Educational Benefits online in MyMCC for every semester I wish to draw VA Educational Benefits. I understand that submitting this request less than eight weeks prior to the term beginning will likely delay my benefit payment.
4. I will meet the MCC Standards of Academic Progress (SAP) and maintain at minimum a cumulative 2.0 GPA (detailed SAP requirements are available on page 319). I understand that if my GPA falls below 2.0

and/or I do not meet SAP, I will be placed on probation and be allowed one semester to get back into good standing. If I fail to do so, the VA will be notified of unsatisfactory progress and I understand that my benefits will be suspended.

5. I will complete the classes I start. I understand that if I stop attending class, withdraw, or drop classes, a debt will be established in my name.
6. I understand that the VA does not permit a course to be repeated in which I have earned a grade of D or better except in special circumstances where a higher grade is specifically required for me to graduate with my degree.
7. I understand that taking courses that start late or end early in the standard semester will impact my pay.
8. It is my responsibility to self-verify attendance monthly through www.gibill.va.gov/wave/ (Ch 33, Ch 35, MINGSTAP & CVTG excluded).
9. I will maintain responsible communication to inform the Veterans Office of any updates or correspondence pertaining to my VA educational benefits to ensure accuracy and efficiency, and I will stay up to date with information posted on the MyMCC Veterans Portal page.

For additional information regarding VA, certification, paperwork, or general information please visit the MCC Veteran website at www.muskegoncc.edu/veterans and in MyMCC.

Veteran Residence

See Residency Policy on page 12.

VA Student Payment Dates

Students who are receiving VA Education Benefits are expected to pay tuition and fees by the payment deadline date established by the College each semester, with exception to the following:

- Students receiving Post 9/11 Benefits and have a Certificate of Eligibility (COE) or Statement of Benefits on file in the MCC Veterans Office will receive a deferment on tuition and fee payment until payment arrives from the VA. Students shall complete a Certification Request in their MyMCC account each semester to indicate plans to use Post 9/11 Benefits.

- Students participating in the Vocational Rehabilitation Program, Chapter 31, and have a current VAF 28-1905 form on file from their Voc Rehab Counselor will receive a deferment on tuition and fee payment until payment arrives. Student shall complete a Certification Request in their MyMCC account each semester to indicate plans to use funding from Vocational Rehabilitation to cover tuition and fees payments.
- Students using Post 9/11 (Chapter 33) or Vocational Rehabilitation & Employment (Chapter 31) shall be entitled to all privileges as a Muskegon Community College student, and shall not be penalized for payments arriving after payment due date so long as Certification Request is submitted by payment due date each semester.

Student Life

Room 1055

The Muskegon Community College Office of Student Life, as a division of the Student Success Department, seeks to engage students through

- celebrating Jayhawk pride,
- out-of-classroom programing,
- leadership development, and
- community connections

Students are encourage to enrich their college experience by participating in college-sponsored events and activities. These activities help students meet peers, learn new skills, connect with resources, mentor others, and ultimately persevere through the challenges of college life. The Office of Student Life oversees the planning

of the annual Jayhawk Frenzy welcome events at the beginning of each Fall Semester, in addition to monthly events and programs throughout the academic year. Staff from Student Life are housed on campus in a student lounge where students can study on campus computers, access allotted free printing, and find campus and community resource literature. Student Life is also where students can start or join a student organization, and build leadership through this involvement. The Office also facilitates wider strategic partnerships by inviting community organizations which may benefit diverse student needs and interests onto our campus.

Registered Student Organizations and Clubs

Student Life adds to the college experience by offering the opportunity to join the many diverse clubs and organizations on campus. Our goal is to empower students by providing social and leadership roles with the purpose of creating tomorrow's leaders.

Student organizations 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 student organization, stop by the Student Life Office. The Student Life page on MyMCC makes current forms available for student groups. Full-time faculty advisors oversee each club. Members must be enrolled as students at MCC.

Lists and contact information for currently recognized student groups are available online at www.muskegoncc.edu/student-life

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 office of Student Life, Room 1055. Postings will be done on appropriate bulletin boards furnished for this purpose.

Student Government Association (SGA)

Room 1055

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 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.

The Jayhawk Hub

The Jayhawk Hub can help connect you and your family with resources to help relieve or even eliminate personal challenges. These could be things like food scarcity, housing insecurity, financial hardships, and more. To get help just stop by the Jayhawk Hub in Room 1071! You will be connected to an MCC Care Team member who will meet with you; get to know you and your life circumstances in a safe, affirming, private, and

friendly environment. We will provide support and help you identify ways to overcome obstacles. We also offer different student support groups, community partnerships, and a food pantry. If you are feeling like you need to withdraw from your classes or take a leave from the college, come see us first!

Carr-Fles Planetarium

The Carr-Fles Planetarium has been in operation since 1972, assisting in the study of astronomy with sky movies and projections of the stars, planets, and constellations on a domed ceiling. A \$4 million renovation in 2012 upgraded the facility to a digital theater with seating for 44, plus 5 wheelchair spaces. Free public shows, suitable for ages 8 and up, are available on Tuesday and Thursday evenings at 7:00 p.m., September-

June. A complete schedule is available on the MCC website for these 35-minute shows, and no reservations are needed. Private shows may be also scheduled for groups of 15-44, and teachers or group leaders are encouraged to schedule two to three weeks in advance. For more information, or to schedule a private show, please call (231) 777-0289 or email tamera.owens@muskegoncc.edu

Community Observatory

Although primarily for MCC's Astronomy and Cosmology students doing project work, 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, wrestling and track & field. Women's sports include basketball, softball, cross country, bowling, soccer, volleyball and track & field. 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 scholarships are available 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. Men's and women's soccer and track & field contests are held off-campus at local high schools.

Please check www.muskegoncc.edu and click on "Athletics" for up-to-date schedules and other information.

MCC Recreation

The brand new Health and Wellness Center is home to the HPER and Athletic Department offices as well as a state of the art fitness center, weight room, walking/jogging indoor track, gymnasium, fitness lab, and men's and women's locker rooms. The facility is free to use for current MCC students, staff, and faculty members.

MCC is committed to providing activities that match the interests and desires of its students. The MCC Intramural Sports program shares in those efforts by providing multiple free co-ed sports leagues that include basketball, golf, volleyball, tennis, and bowling.

Athletic Director

Marty McDermott
(231) 777-0462

Head Coaches

Nate Glant <i>Men's Baseball</i>	Brent Kowalski <i>Men's Soccer</i>
Jimmy Booth <i>Men's Basketball</i>	Jeff Lohman <i>Women's Soccer</i>
Jason Cooper <i>Women's Basketball</i>	Kevin Dalson <i>Women's Softball</i>
Bill Bowen <i>Men & Women's Bowling</i>	Rick Rykse <i>Women's Volleyball</i>
Mike Smith <i>Men & Women's Cross Country</i>	Travis Piccard <i>Men's Wrestling</i>
Marty McDermott <i>Men's Golf</i>	Ashley Porter <i>Men & Women's Track & Field</i>

Campus Facilities

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 coaching offices. The baseball and softball fields are located south of the gymnasium.

Health and Wellness Center

The 52,400 square foot Health and Wellness Center is next to the gymnasium. It includes classroom and learning space for Physical Education, Recreation, Nursing, Nurse Aid and Respiratory Therapy. Mecry Health also has a patient care facility in the building.

Classrooms

More than 100 classrooms, laboratories and conference facilities are available on campus, completely furnished to meet the needs of their particular disciplines.

Cash/ATM Machine

For your convenience, there are two ATM machines on campus. The PNC ATM is located between the bookstore and the library. Students who open a BankMobile account with their My MCC OneCard should use the BankMobile ATM outside the Barnes and Noble Bookstore.

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.

Distribution and Display of Materials

Advance approval must be obtained from the Dean of Student Success (or designee) for the distribution or display of posters, signs, pamphlets and handbills, newspapers or other form of printed material or visual aids originating from sources not connected with the college. Material should be brought to room 1055 for approval in distribution.

Golf Course

University Park Golf Course is a public golf course owned and operated by Muskegon Community College. Established in 1968 and located across the street from the main campus, the nine-hole course was designed by Bruce Matthews. The course features two different tee-off areas to make for an interesting and challenging 9-holes of golf. Open seven days a week from April until November, the course has a driving range and putting green. University Park Golf Course is home to numerous leagues, catering to every caliber of player.

Duplicating Services

A coin-operated copy machine is located in the library.

Elevators

Elevators are located in the lobby of the Hendrik Meijer Library and Information Technology Center, at the Stevenson Center for Higher Education on the first floor near the main entrance, at the northwest corner of the main building near the English department, and in the Overbrook Theater lobby.

Frauenthal Foundation Fine Arts Center

At the heart of the Fine Arts Center is the 300-seat Overbrook Theater and adjacent Art Gallery, where works by students, faculty, and guest artists are exhibited. The Center also includes a large rehearsal room for band, orchestra, and chorus, practice rooms, and a listening library where students may enjoy recordings. The Center also has 12 electronic pianos for instruction and practice.

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.

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.

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 1356.

Room Numbers

The 1000's will run sequentially across the main floor of the main campus, with the 2000's in the same sequence below on the second floor and the 3000's in the same order beneath on the third floor. The 1200's will be located in the Art and Music Building. The 1300's, 2300's and the 3300's are on the Stevenson Center first, second and third floors, respectively. The 1400's are in the Science Center. The 1500's are located in the Automotive Building. The stairwells are denoted with capital letters, from A-L. The main entrance to the Stevenson Center for Higher Education can best be accessed by utilizing the east 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, and Grand Valley State 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.

Sturrs Technology Center

The Sturrs Technology Center is an extension site of MCC located in downtown Muskegon at 388 W. Clay Ave. STC houses Applied Technology, Entrepreneur (Lakeshore Fab Lab), and Experiential learning programs, as well as an Best Financial Credit Union. Over 75,000 square feet of finished space include machining, welding, materials testing, computer aided design, foundry and numerous other classrooms.

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 at (231) 777-0461 or alumnirelations@muskegoncc.edu. Alumni and other community members are invited to receive a free subscription to Reflections magazine; simply contact the Alumni Relations office to be included in the mailing list.

The MCC Alumni Relations Committee holds an Alumni Awards Dinner annually before Commencement and celebrates two awards given to select alumni. The Distinguished Alumni Award 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. The Alumni Achievement Award honors those alumni within 15 years of graduation who have made their mark in the world with professional achievement.

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 Alumni Awards dinner and participate in the commencement ceremony.

For more information about these alumni awards, *Reflections* magazine, or other aspects of Alumni Relations, call (231) 777-0461 or visit www.muskegoncc.edu/alumni.

Center for Theater

The Center for Theater operates with the Arts and Humanities Department. It provides theater classes for MCC students as well as a diversified schedule of performances. Performances are presented on the Overbrook Theater stage and include a season of plays produced by the Overbrook Players, music and dance concerts by the MCC Music and Dance Departments, and various lectures, speakers, and performers. The Center for Theater offers something for every MCC student, whether it be the development of artistic talents, investigation of a career in professional theater, or simply the enjoyment and excitement of a live performance. All MCC students are encouraged to participate in the activities of the Center.

Community Outreach

The Office of Community Outreach consists of Marketing, Communications, Graphics/Printing Services, MCC TV, Outreach, and Continuing Education. Our goal is to develop strong relationships with the communities we serve.

Continuing Education

The Continuing Education Office provides lifelong learning opportunities to meet the needs of the community. These non-credit classes emphasize professional development, personal enrichment and community outreach. These courses are offered on campus, as well as online.

- **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.
- **State Continuing Education Clock Hours (SCECHs)** may be earned by professionals who require regular certification upgrading. Trainings or professional development workshops, approved by the State of Michigan Department of Education, may be arranged by calling 231-777-0532. Your program must be approved by the State of Michigan and MCC before you begin your training.
- **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 can be viewed online at www.muskegoncc.edu/ce.

Lakeshore Business and Industrial Service Center

The Muskegon Lakeshore area has a long history of creating prosperity for residents through meaningful employment. The Lakeshore Business and Industrial Service Center (LBISC) works to continue this proud tradition. LBISC offers businesses connections to many services including custom training, internships and technical related apprenticeships. For information as to the various services available, visit the LBISC's website as <http://www.muskegoncc.edu/workforce-training/> or contact Cyndi Langlois, Associate Dean of Workforce and Talent Development in the Office of Academic Affairs, at (231) 777-0456 or cyndi.langlois@muskegoncc.edu.

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 98 and 902, and in Ottawa County, Oceana County, northern Muskegon County and northern Allegan County on Charter Channel 190.

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 Amy Swope, Foundation Director, at (231) 777-0571, email amy.swope@muskegoncc.edu, or visit www.muskegoncc.edu/foundation.

Faculty

AMMOND, CHARLES

Electronics

*BSEE University of Michigan
MBA Grand Valley State University*

ANDERSON, LISA

Library

*BA Lake Superior State University
MLIS Wayne State University
MA Western Michigan University*

BARRETO, ADOLFO

Criminal Justice

*BS Bemidji State University
MS Trinity College and University*

BATES, KATHLEEN

Nursing, RN, CNE

*BSN Grand Valley State University
MSN Michigan State University*

BENDER, NATHAN

Machine Technology

*BS Ferris State University
MA Western 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*

BUDIMIR, NICHOLAS

Sociology

*BA University of Michigan
MA Wayne State University*

BURRELL, KARIN

Mathematics

BS, MA Western Michigan University

BURRIS, YOLANDA

Nursing

*ADN West Shore Community College
BSN University of Phoenix
MSN University of Phoenix*

CASEY, DIANA L

Geography

*BA Western Michigan University
MS Eastern Michigan University*

CHANDLER, SHERRI A DEBOEF

Psychology/Sociology

*BS Central Michigan University
MA Western Michigan University
PhD Capella University*

CHELESVIG, TREFNY

Counseling

*BA University of Northern Iowa
MA Western Michigan University*

CHURCH, IRENE

Business Communication

BA MA Central Michigan University

COLCLEASURE, SEAN

English

*BA California State University
MA California State University*

COLLINS, SHAE

Nursing, RN

*ADN Muskegon Community College
BSN Ferris State University
MSN Ferris State University*

DATTA, ARUN K

Chemistry

*BS University of Utah
MS Auburn University
PhD University of Utah*

DILLEY, ALYSSA

Nursing

*BA Ferris State University
MA Walden University*

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*

GREENE, DARRYL

Business

*BA Dakota Wesleyan University
MBA Heidelberg University*

GRIFFITH, CHARLOTTE L

Librarian and Faculty Liaison

*BA University of Texas at Austin
MLIS Wayne State 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, SHAUNA*English*

*BA Grand Valley State University
MA College of Charleston*

HAYES, SYLVIA M*Counseling, LPC, NCC*

*BA Western Michigan University
MA Michigan State University*

HERRINGTON, AMY*Nursing*

ADN, BSN, MSN Ferris State University

HOFFMAN, ERIN E*Art*

*BFA University of Northern Iowa
MFA University of Georgia*

HOOD, LINDA*Instructional Designer, CTL*

*BA University of Michigan
MA Baker College Center for Graduate Studies*

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

JONES, JENNIFER*Education*

*BBL Baker College
MEd Grand Valley State University*

KANOZA, THERESA M.*English*

*BA Grand Valley State University
MA Michigan State University
PhD Michigan State University*

KENDALL, SCOTT*Biology*

*BS Central Michigan University
MS University of Georgia*

KLINGENBERG, JENNIFER L*English*

*BA Lake Superior State University
MA Northern Michigan University*

KNUE, KEEGAN*Respiratory Therapy*

BA Grand Valley State University

KROLL, ELIZABETH*Nursing, CMSRN*

*BSN Wayne State University
MSN Michigan State University*

KUMPF, AMBER*Geology*

*BS Michigan Technological University
MS University of Rhode Island*

KYSER, KEVIN*Graphic Design*

BFA Grand Valley State University

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*

LARSON, JONATHAN*Electronics*

*BS Electrical Engineering Kettering University
BS Mechanical Engineering Kettering University
MS Engineering Kettering University*

LIEFER, KATHLEEN*Advanced Technology*

*BS Michigan State University
MS Western Michigan University*

MACAULEY, SHAWN P*Biology*

*BS, MS, PhD University of Florida
College of Medicine*

MANIATES, GEORGE*History*

*BA University of Wisconsin - Madison
MA DePaul University*

MARZAK, GREGORY*Chemistry*

*BA University of Michigan
MA Western Michigan University*

MARTIN, THOMAS L*Manufacturing*

BS, MA Western Michigan University

MATONE, DARREN C*Biology*

*BS, MEd Aquinas College
MS Columbia University*

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***MOLESKI, TOBIAS B***Physics**BS Grand Valley State University**MS Oregon State 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***PALMER, NICHOLAS***Arts & Humanities**BA University of Chicago**MA University of Chicago***PARKER, CHARLYNE***Computer Information Systems**BS Aquinas College**MA Western Michigan University***PLATT, DAWN***Medical Assistant**ADN Baker College**BSN Ferris State University***POLLOCK, KATHY R***Biology**BS Oakland University**MS, MA Michigan State University***PRETZER, BRAD***Math**BA Lake Superior State University**MA Oakland University***RIBBE, LISA***Counselor**BS Grand Valley State University**MA Western Michigan University***RIGGS, JENNIFER***Respiratory Therapy**BA Ferris State University**MEd Ferris State University***RODDY, CONOR***Philosophy**BA Trinity College**MA University of Hawaii at Manoa**PhD University of Texas at Austin***RODKEY, EVIN***Social Sciences**BA Indiana University**PhD University of Illinois at Chicago***RUSCO, CATHERINE***College Success Center English**BA Alma College**MA Central Michigan University***RYPMA, DAN E***Physical Education/Recreation**BS, MS Grand Valley State University***SHARP, GEORGE***Counseling**BA Northern Arizona University**M. Ed Grand Valley State University***SHAUGHNESSY, JASON***HPER**BA Western Michigan University**MA Azusa Pacific University***SOMERVILLE, JOSHUA***Nursing, RN**BSN, Lake Superior State University**MSN, Grand Canyon University***SPANIOLO-DEPOUW, ANGELA***Psychology**BS, MA Central Michigan University**Edd Eastern Michigan University***STRADAL, DAVID***Entrepreneurial Studies**Marketing & Management**BS Lehigh University**MBA University of Connecticut***SUMERIX, THOMAS***Welding**AAS Muskegon Community College**BS Western Michigan University**M.Ed. Concordia University***THOMAS, ALLEN J***Automotive**AAS Muskegon Community College**BS MS Ferris State University***TROUTMAN, KURT***Political Science/History**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*

VANDERZANDEN, HEATHER*Nursing, RN**ADN Westshore Community College**BSN University of Phoenix**MSN Michigan State University***VANOOSTERHOUT, CHRISTOPHER T***Business/Computer Information Systems**BSBA, MBA Cornerstone University***VANVEELEN, THERESA E***Biology**BS Grand Valley State University**MS Michigan State University***VERHOEVEN, MARK***Business**BCS, MBA Baker College***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***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****PRESIDENT***Nesbary, Dale K**BA Michigan State University**MPA Western Michigan University**PhD Northeastern University***PROVOST/EXECUTIVE****VICE PRESIDENT***Selmon, John**BS University of Nebraska at Lincoln**MA, EdD Eastern Michigan University***VICE PRESIDENT FOR****ACADEMIC AFFAIRS***Conrad, Kelley L.P.C**BA Alma College**MA Western Michigan University***VICE PRESIDENT FOR FINANCE AND****CHIEF ADVANCEMENT OFFICER***Long, Ken**BSBA Central Michigan University***EXECUTIVE DIRECTOR OF****HUMAN RESOURCES***Anderson, Kristine**BS Western Michigan University***DIRECTOR OF STRATEGIC INITIATIVES***Dee, Tina, CFRM**BA, MS Grand Valley State University***DIRECTOR OF INSTITUTIONAL****RESEARCH AND GRANTS***Bedoya, Eduardo**BA Grand Valley State University***DEAN OF COLLEGE SERVICES AND****ATHLETICS DIRECTOR***McDermott, Marty**BA University of North Dakota**MSE Wayne State College***DEAN OF COMMUNITY OUTREACH***Lottie-Harps, Trynette**BA Michigan State University**MA Grand Valley State University*

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BA, MS Central Michigan University

DIRECTOR OF PHYSICAL PLANT

Sturgeon, David

Cornerstone University

DEAN OF STUDENT SERVICES

Roberts, Jean M

BBA Grand Valley State University

MPA Western Michigan University

DIRECTOR OF FINANCIAL AID

Wierda, Bruce

AA Muskegon Community College

BS Michigan Technological University

DEAN OF ACADEMIC AFFAIRS

Rinsema-Sybenga, Dan

BA Calvin College

MPA Grand Valley State University

DEAN OF INSTRUCTION AND ASSESSMENT

Breitenbach, Edward

BA Cornerstone University

MEd Grand Valley State University

PhD Western Michigan University

DIRECTOR OF HEALTH PROGRAMS

DEVELOPMENT

Patterson, Chris

ADN, BSN Angelo State University

MSN University of Phoenix

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 2020 printing of this catalog are the following persons:



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Chair



Sean Mullally
Vice Chair



Kathy Moore
Treasurer



Nancy Frye
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Ann D. Oakes
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Trustee



Dale Nesbary, Ph.D.
President

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The Purposes of General Education

Introduction

The College shares the view held by many that an education should prepare you not only for a career, but also for life. General education encourages the 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. 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), Associate in Science and Associate in General Studies (AGS) degrees require at least 62 credits with the exception of some secondary admit programs. A full-time student could complete an Associate's 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 require fewer credits than the degrees.

Contact Hours

Tuition is assessed on the number of weekly contact hours. The contact hours for a course are the number of hours per week 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. For online classes, the standard of class time shall be one hour of instructor designed and facilitated online instruction and two hours student work per week over a semester. For hybrid classes, the hour of standard class-time will be partly met face to face and partly met through online instruction; with the same additional two hours of student work expected.

For distance education, academic engagement is defined as, but not limited to: asynchronous or synchronous lecture presentation; an interactive tutorial, or computer-assisted instruction; attending a study group that was assigned by the institution; contributing to an academic online discussion; submitting an academic assignment; taking an exam; 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 for 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 <http://www.muskegoncc.edu/online-instruction/about-distance-education/>

Internships

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

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

MCC ACADEMIC DEGREES AND CERTIFICATES

Associate in Science and Arts Degree & Associate in Science Degree

These degrees are for students intending to transfer to a four-year college or university. If you wish to major in a program that requires a bachelors degree, such as Social Work or Computer Science, the courses you need to take are outlined in the transfer guides available online at www.muskegoncc.edu. These programs are planned to enable students to transfer to bachelor degree-granting colleges and universities with advanced standing. Students graduating from Muskegon Community College with an Associate in Science and Arts or an Associate in Science 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 MCC 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 and 120A. The following courses will not count toward graduation: ENG 085, 089, 091; RDG 040, 050, MATH 035F, 036A, 036FT, 038, 038FT, 040, 041.

For students uncertain about their major, the College recommends completing the General Education Requirements first. All students, regardless of major, must complete the general education requirements.

Students planning to transfer to a four-year college in Michigan may find a great deal of information at www.mitransfer.org.

Associate in Science Degree

This degree is for students intending to transfer to a four-year college or university in Engineering. This program includes general education courses necessary to satisfy the Michigan Transfer Agreement (MTA). The core courses will

develop understanding of abstract mathematics, introductory physics and engineering, and other related disciplines.

Associate in Applied Science Degree

If you wish to major in an occupational program that requires 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 were designed in conjunction with active advisory committees, so that a student may reasonably expect employment upon successful completion of the degree. The Associate in Applied Science Degree may also be used as a transfer degree to a limited number of baccalaureate programs, but it is 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 MCC 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. They are not as comprehensive and require fewer classes than a degree. Certificate programs were developed with the assistance of advisory committees, and students may reasonably expect employment upon completion of these programs.

It is strongly recommended that students see a MCC 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

A minimum of 62 credit hours with a minimum cumulative 2.0 GPA, 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

General Education Requirements Minimum – 35 credits	
Communication – 6 credits with grades of “C” or better	American Culture – 3 credits with grades of “C” or better
English – 101, 102	Art - 213A
Science – 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>	History - 201, 202, 207, 211, 212B, 214, 220 Political Science - 111, 205, 220
Lab classes: Biology – any MCC Biology course with a lab Chemistry – any MCC Chemistry course with a lab Geography - 101A, 215 Geology - 101A, 102, 250Lab Physical Science - 101A Physics - 201CL&L, 202CL&L, 203L&L, 204L&L	International Culture – 3 credits with grades of “C” or better
Non-Lab: Anthropology - 105D Astronomy - 101, 105A Biology - 115, 200, 207LEC, 250LEC Geography - 214, 260 Geology - 100, 201, 250LEC	Anthropology - 103, 110 Chinese - 101, 102 English - 207, 211, 218A French - 101, 102, 201, 202 Geography - 104, 105 German - 101, 102, 201, 202 History - 150, 151, 216 International Cultural Studies - 101GERA (Germany) Philosophy - 210 Political Science - 202, 210A, 210B, 211 Spanish - 101, 102, 201, 202
Math – 3 credits with grades of “C” or better	Aesthetic Values – 3 credits
Math - 105, 107A, 109, 111, 112, 115A, 151, 161, 162A, 215, 276, 283, 295	Art - 100A , 104, 105B, 106B, 107, 108, 109, 117, 118, 204B, 207, 208, 209, 214, 215, 220,
Ethics and Logic – 3 credits with grades of “C” or better	Dance - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D
Philosophy - 101, 102, 104, 202, 203, 204, 205, 207	English - 216, 223
Social Relationships – 3 credits with grades of “C” or better	Music classes numbered 100 and above except Music 240
Economics - 101A, 102A Psychology - 102, 201, 203, 207, 209, 210 Sociology - 101, 102A, 202A, 203, 205, 206 Women’s Gender Studies - 101, 201	Music - 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202 Theater - 101, 102, 108, 121, 122 , 141, 142, 144, 145, 147, 148, 160, 202 , 203, 204, 217, 260
Western Culture -3 credits with grades of “C” or better	Physical Education – minimum 2 credits Choose ONE of the following options:
Art - 198, 199, 202, 230 English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231 History - 101, 102 Humanities - 195 Theater - 201	Option 1: Prior to Fall 2017: Physical Education Choose one of the following - 101A, 103, 104A, 118, 201 and one credit from any Physical Education or Dance course Option 2: Fall 2017 onwards catalog: Physical Education 121
Computer Competency	
Pass any 3-credit-hour or greater CIS class with a “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test.	
Electives – Minimum 27 credits, chosen from courses above, or others reflecting your major or personal interests.	

Michigan Transfer Agreement

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.

English/Communication – 2 courses	Humanities and Fine Arts - 2 courses Courses must be in two or more disciplines (subjects).
English – 101 One course from: English 102; Communications 101, 107, 201	Art - 100A, 198, 199, 202, 213A, 230 English - 200A, 201A, 205, 206, 207, 210, 211, 213, 216, 218A, 223, 225, 226, 227, 228, 231
Natural Science – 2 courses Courses must be in two or more disciplines (subjects). <i>Must include at least one lab science</i>	Foreign Language (all foreign languages count as one subject)
Lab classes: Biology – any MCC Biology course with a lab Chemistry – any MCC Chemistry course with a lab Geography - 101A, 215 Geology - 101A, 102, 250Lab Physical Science - 101A Physics - 201CL&L, 202CL&L, 203L&L, 204L&L Non-Lab: Anthropology - 105D Astronomy - 101, 105A Biology - 200, 207LEC, 250LEC Geography - 214, 260 Geology - 100, 201, 250LEC	Chinese - 101, 102 French - 101, 102, 201, 202 German - 101, 102, 201, 202 Spanish - 101, 102, 201, 202 History - 101, 102, 150, 151, 216 Humanities - 195 International Cultural Studies - 101 GERA (Germany) Music - 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202 Philosophy - 101, 102, 104, 202, 203, 204, 205, 207, 210 Theater - 101, 102, 108, 121, 122, 160, 201, 202, 217
Math – 1 course Math - 105, 107A, 109, 111, 112, 115A, 151, 161, 162A, 215, 276, 283, 295	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.
Social Sciences - 2 courses Courses must be in two or more disciplines (subjects).	A grade of “C” or better is required in each course used to fulfill the requirements of this Agreement.
Anthropology - 103, 110 Economics - 101A, 102A Geography - 104, 105 History – 201, 202, 207, 211, 212B, 214, 220 Political Science – 111, 202, 205, 210A, 210B, 211, 220 Psychology - 102, 201, 203, 207, 209, 210 Sociology - 101, 102A, 202A, 203, 205, 206 Women’s Gender Studies - 101, 201	

PROGRAMS

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

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

General Education Requirements Minimum – 35 credits	
Communication – 6 credits with grades of “C” or better	Western Culture – 3 credits with grades of “C” or better
English – 101, 102	Art - 198, 199, 202, 230 English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231 History - 101, 102 Humanities - 195 Theater - 201
Science – 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>	American Culture – 3 credits with grades of “C” or better
Lab classes: Biology – any MCC Biology course with a lab Chemistry – any MCC Chemistry course with a lab Geography - 101A, 214, 215 Geology - 101A, 102, 250Lab Physical Science - 101A Physics - 201CL&L, 202CL&L, 203L&L, 204L&L	Art - 213A History - 201, 202, 207, 211, 212B, 214, 220 Political Science - 111, 205, 220
Non-Lab: Anthropology - 105D Astronomy - 101, 105A Biology - 200, 207 – lecture only Geology - 100, 201 Geography - 214, 260	International Culture – 3 credits with grades of “C” or better
Math – 3 credits with grades of “C” or better	Anthropology - 103, 110 Chinese - 101, 102 English - 207, 211, 218A French - 101, 102, 201, 202 Geography - 104, 105 German - 101, 102, 201, 202 History - 150, 151, 216
Math - 105, 107A, 109, 111, 112, 115A, 151, 161, 162A, 215, 276, 283, 295	International Cultural Studies - 101GER (Germany) Philosophy - 210 Political Science - 202, 210A, 210B, 211 Spanish - 101, 102, 201, 202
Ethics and Logic – 3 credits with grades of “C” or better	Aesthetic Values – 3 credits with a grade of “C” or better
Philosophy - 101, 102, 104, 202, 203, 204, 205, 207	Theater - 160
Social Relationships – 3 credits with grades of “C” or better	Physical Education and Health – 2 credits
Economics - 101A, 102A Psychology - 102, 201, 203, 207, 209, 210 Sociology - 101, 102A, 202A, 203, 205, 206 Women's Gender Studies - 101, 201	<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 Or PEA 121

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:
TH 102 - Introduction to Acting
TH 203 - Readers Theater

Recommended Electives - Minimum 2 credits

BUS 263 – Advertising Dynamics
CIS 119PP – Introduction to Presentation Graphics

CIS 287A – Digital Video Editing
COM 203 – 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

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

General Education Requirements Minimum – 35 credits	
Communication – 6 credits with grades of “C” or better	Western Culture - 3 credits with grades of “C” or better
English – 101, 102	Art - 198, 199, 202 English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231 History - 101, 102 Humanities - 195 Theater - 201
Science – 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>	American Culture – 3 credits with grades of “C” or better
Lab classes: 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 - 201CL&L, 202CL&L, 203L&L, 204L&L	Art - 213A History - 201, 202, 207, 211, 212B, 214, 220 Political Science - 111, 205, 220
Non-Lab: Anthropology - 105D Astronomy - 101, 105A Biology - 115, 200, 207LEC, 250LEC Geology - 100, 201, 250LEC Geography - 214, 260	International Culture – 3 credits with grades of “C” or better Anthropology - 103, 110 Chinese - 101, 102 English - 207, 211, 218A French - 101, 102, 201, 202 Geography - 104, 105 German - 101, 102, 201, 202 History - 150, 151, 216 Philosophy - 210 Political Science - 202, 210A, 210B, 211 Spanish - 101, 102, 201, 202
Math – 3 credits with grades of “C” or better	Anthropology - 103, 110 Chinese - 101, 102 English - 207, 211, 218A French - 101, 102, 201, 202 Geography - 104, 105 German - 101, 102, 201, 202 History - 150, 151, 216 Philosophy - 210 Political Science - 202, 210A, 210B, 211 Spanish - 101, 102, 201, 202
Math - 105, 107A, 109, 111, 112, 115A, 151, 161, 162A, 215, 276, 283, 295	Aesthetic Values – 3 credits (those courses requiring a “C” or better are in bold)
Ethics and Logic – 3 credits with grades of “C” or better	Art - 100A , 101, 104, 105B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 220 Dance - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, English - 216, 223 Music classes numbered 100 and above except Music 240 and 193 Music - 100, 101, 102, 103A, 192, 194, 195, 201, 202 Theater - 101, 102, 108 , 121, 122, 141, 142, 144, 145, 147, 148, 160, 202 , 203, 204, 217, 260
Philosophy 101, 102, 104, 202, 203, 204, 205, 207	Physical Education – 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
Social Relationships – 3 credits with grades of “C” or better	
Economics - 101A, 102A Psychology - 102, 201, 203, 207, 209, 210 Sociology - 101, 102A, 202A, 203, 206, Women's Gender Studies - 101, 201	

Computer Competency	
Any 3-credit hour or greater CIS class with a "C" or better, or MCC's CIS 110/120A Computer Competency Test.	
Criminal Justice Requirements - 15 credits Must complete all with a grade 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 Electives - 12 credits Select a minimum of four courses from the following options. Must complete all with a "C" or better	
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/Law Enforcement with Michigan Transfer Agreement

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

General Education Requirements Minimum – 35 credits	
Communication – 6 credits with grades of “C” or better	Western Culture -3 credits with grades of “C” or better
English – 101, 102	Art - 198, 199, 202 English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231
Science – 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>	History - 101, 102, 204 Humanities - 195 Theater - 201
Lab classes: 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 - 201CL&L, 202CL&L, 203L&L, 204L&L	American Culture – 3 credits with grades of “C” or better Art - 213A History - 201, 202, 207, 211, 212B, 214, 220 Political Science - 111, 205, 220
Non-Lab: Anthropology - 105D Astronomy - 101, 105A Biology - 115, 200, 207LEC, 250LEC Geology - 100, 201, 250LEC Geography - 214, 260	International Culture – 3 credits with grades of “C” or better Anthropology - 103, 110 Chinese - 101, 102 English - 207, 211, 218A French - 101, 102, 201, 202 Geography - 104, 105 German - 101, 102, 201, 202 History - 150, 151, 216 Philosophy - 210 Political Science - 202, 210A, 210B, 211 Spanish - 101, 102, 201, 202
Math – 3 credits with grades of “C” or better	
Math - 105, 107A, 109, 111, 112, 115A, 151, 161, 162A, 215, 276, 283, 295	
Ethics and Logic – 3 credits with grades of “C” or better	
Philosophy - 101, 102, 104, 202, 203, 204, 205, 207	Aesthetic Values – 3 credits (those courses requiring a “C” or better are in bold)
Social Relationships – 3 credits with grades of “C” or better	Art - 100A , 101, 104, 105B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 220
Economics - 101A, 102A	Dance - 100, 101, 102, 106, 200, 201, 206, 210A, 210B,
Psychology - 102, 201, 203, 207, 209, 210	English - 216, 223
Sociology - 101, 102A, 202A, 203, 206,	Music classes numbered 100 and above except Music 240 and 193
Women’s Gender Studies - 101, 201	Music - 100, 101, 102, 103A, 192, 194, 195, 201, 202 Theater - 101, 102, 108, 121, 122, 141, 142, 144, 145, 147, 148, 160, 202, 203, 204, 217, 260
	Physical Education and Health – 2 credits
	One credit must be from: Physical Education - 101A, 103, 104A, 118, 201
	One credit from: any Physical Education or Dance course or HE 100A

Computer Competency

Any 3-credit hour or greater CIS class with a "C" or better, or MCC's CIS 110/120A Computer Competency Test.

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

Select a minimum of four courses from the following options:

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

Students are focused on understanding the development of children from birth to eight years of age through hands-on practical fieldwork and classroom instruction. An emphasis will be placed on an anti-bias curriculum covering the physical, intellectual, emotional and social domains of development. Students will be prepared for the Child Development Associate (CDA) assessment process, as part of the national credential recognized by the Council for Early Childhood Professional Recognition. The degree prepares students to be preschool teachers, child care center directors, Head Start teachers, teacher aides and classroom assistants. In addition it fulfills the Michigan Transfer Agreement (MTA) requirement as part of continued education towards the ZS (Early Childhood Education) major/endorsement or elementary studies degree.

General Education Requirements Minimum – 36 credits	
Communication – 6 credits with grades of “C” or better	Western Culture -3 credits with grades of “C” or better
English – 101, 102	Art - 198, 199, 202
Science – 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>	English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231
Lab classes:	History - 101, 102
Biology – any MCC Biology course with a lab	Humanities - 195
Chemistry – any MCC Chemistry course with a lab	Theater - 201
Geography - 101A, 215	American Culture – 3 credits with grades of “C” or better
Geology - 101A, 102	Art - 213A
Physical Science - 101A	History - 201, 202, 207, 211, 212B, 214, 220
Physics - 201CL&L, 202CL&L, 203L&L, 204L&L	Political Science - 111, 205, 220
Non-Lab:	International Culture – 3 credits with grades of “C” or better
Anthropology - 105D	Anthropology - 103, 110
Astronomy - 101, 105A	Chinese - 101, 102
Biology - 115, 200, 207LEC, 250LEC	English - 207, 211, 218A
Geology - 201	French - 101, 102, 201, 202
Geography - 214, 260	Geography - 104, 105
Math – 3 credits with grades of “C” or better	German - 101, 102, 201, 202
Math - 105, 107A, 109, 111, 112, 115A, 151, 161, 162A, 215, 276, 283, 295	History - 150, 151, 216
Ethics and Logic – 3 credits with grades of “C” or better	International Cultural Studies - 101GER (Germany)
Philosophy - 101, 102, 104, 202, 203, 204, 205, 207	Philosophy - 210
Social Relationships – 3 credits with grades of “C” or better	Political Science - 202, 210A, 210B, 211
Economics - 101A, 102A	Spanish - 101, 102, 201, 202
Psychology - 102, 201, 203, 207, 209, 210	
Sociology - 101, 102A, 202A, 203, 206,	
Women’s Gender Studies - 101, 201	

Aesthetic Values – 3 credits (those courses requiring a “C” or better are in bold)

Art - 100A, 104, 105B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 220
Dance - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D
English - 216, 223
Music classes numbered 100 and above except Music 240 and 193
Music - 100, 101, 102, 103A, 192, 194, 195, 201, 202
Theater - 101, 102, 108, 121, 122, 141, 142, 144, 145, 147, 148, 160, 202, 203, 204, 212, 217, 260

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) ED 250 – Human Growth and Learning ED 210 – Child Care and Guidance ED 252A – Child Development Practicum
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Electives - 3 Credits

PROGRAMS

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

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

General Education Requirements Minimum – 35 credits	
Communication – 6 credits with grades of “C” or better	American Culture – 3 credits with grades of “C” or better
English – 101, 102	History - 201, 202, 207, 211, 212B, 214, 220 Political Science - 111, 205, 220
Science – 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>	International Culture – 3 credits with grades of “C” or better
Lab classes: Biology – 105L&L, 106L&L, 207LEC and 207A Choose one: Chemistry 100LEC and 100A Chemistry 109LEC and 109A	Anthropology - 103, 110 Chinese - 101, 102 English - 207, 211, 218A French - 101, 102, 201, 202 Geography - 104, 105 German - 101, 102, 201, 202 History - 150, 151, 216 International Cultural Studies - 101GER (Germany) Philosophy - 210 Political Science - 202, 210A, 210B, 211 Spanish - 101, 102, 201, 202
Math – 3 credits with grades of “C” or better	Aesthetic Values – 3 credits
Math - 105, 107A, 109, 111, 112, 115A, 151, 161, 162A, 215, 276, 283, 295	Art - 100A, 101, 104, 105B, 106B, 107, 108, 109, 117, 204B, 205, 207, 208, 209, 214, 215, 220 Dance - 100, 101, 102, 106, 200, 201, 206, 210A, 210B, 210C, 210D English - 216, 223 Music classes numbered 100 and above except Music 240 and 193 Music - 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202 Theater - 101, 102, 108, 121, 122, 141, 142, 144, 145, 147, 148, 160, 202, 203, 204, 212, 217, 260
Ethics and Logic – 3 credits with grades of “C” or better	Physical Education and Health – 2 credits
Philosophy - 204	Physical Education - 101A and one credit from any Physical Education OR Dance course Or Physical Education 121
Social Relationships – 3 credits with grades of “C” or better	
Psychology - 201	
Western Culture - 3 credits with grades of “C” or better	
Art - 198, 199, 202 English - 200A, 201A, 205, 206, 210, 213, 225, 226, 227, 228, 231 History - 101, 102, 204 Humanities - 195 Theater - 201	
Computer Competency	
Pass any 3 credit hour or greater CIS class with a grade of “C” or better, or pass MCC’s CIS 110/120A Computer Competency Test.	
Electives - Minimum 15 credits	
Choose additional courses from General Education courses listed above, or other courses related to your health science major.	

Associate in Science

Engineering

with Michigan Transfer Agreement

This program is designed to prepare you for transfer to a four-year degree in all types of engineering (civil, mechanical, chemical, electrical, and others). This program also includes general education courses necessary to satisfy the Michigan Transfer Agreement (MTA). The core courses will help you develop your understanding of abstract mathematics, introductory physics and engineering, and other related disciplines.

Engineering 62 credits	
English/Communication – 2 courses	Humanities and Fine Arts – 2 courses Courses must be in two or more disciplines (subjects).
English – 101 One course from: English 102; Communications – 101, 107, 201	Art - 100A, 198, 199, 202, 213A, 230 English - 200A, 201A, 204, 205, 206, 207, 210, 211, 213, 216, 218, 223, 225, 226, 227, 228, 231
Math – Met by Engineering Requirements	Foreign Language – All Foreign Languages count as one subject Chinese - 101, 102 French - 101, 102, 201, 202 German - 101, 102, 201, 202 Spanish - 101, 102, 201, 202
Natural Science – Met by Engineering Requirements	History - 101, 102, 150, 151, 216 Humanities - 195 International Cultural Studies - 101GERA (Germany) Music - 100, 101, 102, 103A, 192, 193A, 194, 195, 201, 202 Philosophy - 101, 102, 104, 202, 203, 204, 205, 207, 210 Theater - 101, 102, 108, 121, 122, 160, 201, 202, 204, 217
Social Sciences – 2 courses Courses must be in two or more disciplines (subjects).	
Anthropology - 103, 110 Economics - 101A, 102A Geography - 104, 105 History - 201, 202, 207, 211, 212B, 214, 220 Political Science - 111, 202, 205, 210, 211, 220 Psychology - 102, 201, 203, 207, 209, 210 Sociology - 101, 102A, 202A, 203, 205, 206 Woman's Gender Studies - 101, 201	<p>Thirty credits are required for the MTA. If courses selected do not total 30 credit hours for more, additional courses must be taken from the MTA categories on this page. A grade of "C" or better is required in each course used to fulfill the requirements of this Agreement.</p> <p style="text-align: right;"><i>(CONTINUED ON NEXT PAGE)</i></p>

PROGRAMS

ENGINEERING REQUIREMENTS

MATH REQUIREMENTS

Choose Four (4) Course From:	16
MATH 112	TRIGONOMETRIC FUNCTION WITH COORDINATE GEOMETRY
MATH 161	CALCULUS I
MATH 162A	CALCULUS II
MATH 283	CALCULUS III
MATH 295	DIFFERENTIAL EQUATIONS WITH LINEAR ALGEBRA

PHYSICS REQUIREMENTS 10 CR.HRS.

PHYS 203L&L	5
ENGINEERING PHYSICS	
PHYS 204L&L	5
ENGINEERING PHYSICS	

CHEMISTRY REQUIREMENTS 5 CR.HRS.

CHEM 101LEC & CHEM 101A	5
GENERAL AND INORGANIC CHEMISTRY L&L	

ENGINEERING RELATED REQUIREMENTS 13 CR.HRS.

ENGR 105	4
INTRODUCTION TO ENGINEERING	
ENGR 202	3
STATICS	
Choose Two (2) Courses From:	6
CIS 120A	INTRO TO COMPUTER INFORMATION SYSTEMS
CIS 162	VISUAL C# PROGRAMMING
CIS 185C	PROGRAMING
ENGR 204	DYNAMICS
GEOL 101A	INTRO TO PHYSICAL GEOLOGY
MATH 215	PROBABILITY AND STATISTICS FOR ENGINEERING
MATH 276	LINEAR ALGEBRA WITH APPLICATIONS

TOTAL 62

Additional courses recommended for transfer: Additional CHEM courses, additional MATH courses, CAD 110 or higher.

Associate in Applied Science

Broadcasting and Multimedia/Technical

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

GENERAL EDUCATION REQUIREMENTS		20-22 CR. HRS.	
ENG 101		3	COM 212
<i>ENGLISH COMPOSITION</i>			<i>TELEVISION PRODUCTION</i>
BCOM 102.....		3	COM 290CI*
<i>ADVANCED BUS & TECH COMMUNICATIONS</i>			<i>COOPERATIVE INTERNSHIP</i>
Choose One (1) Course From:		3-4	GR 160
BUS 126 <i>BUSINESS MATH</i>			<i>DIGITAL IMAGING</i>
MATH 109 <i>COLLEGE ALGEBRA WITH APPLICATIONS</i>			GRD 120
Choose One (1) Course From:		3	<i>INTRODUCTION TO GRAPHIC DESIGN</i>
BUS 127 <i>HUMAN RELATIONS</i>			TH 121
BUS 166 <i>QUALITY CUSTOMER SERVICE</i>			<i>INTRODUCTION TO TECHNICAL THEATER</i>
Choose One (1) Course From:		3	
CIS 110 <i>COMPUTER CONCEPTS</i>			RECOMMENDED ELECTIVES
CIS 120A <i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>			6-8 CR. HRS.
Choose One (1) Course From:		3-4	BUS 200
GEOG 104 <i>CULTURAL GEOGRAPHY</i>			<i>INTERNATIONAL BUSINESS</i>
PHIL 205 <i>BUSINESS ETHICS</i>			BUS 263
PSCI 111 <i>INTRO TO AMERICAN GOVERNMENT</i>			<i>ADVERTISING DYNAMICS</i>
PSCI 211 <i>COMPARATIVE GOVERNMENTS</i>			COM 107
PSYC 102 <i>APPLIED PSYCHOLOGY</i>			<i>INTRODUCTION TO JOURNALISM</i>
PSYC 201 <i>GENERAL PSYCHOLOGY</i>			COM 201
PEA/DNC		2	<i>PUBLIC SPEAKING</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>			COM 203
			<i>INTRODUCTION TO CINEMA</i>
			ENG 221
			<i>ADVANCED WRITING</i>
			ENG 222
			<i>CREATIVE WRITING</i>
BROADCASTING AND MULTIMEDIA/TECHNICAL CORE REQUIREMENTS		34 CR. HRS.	TOTAL 62
CIS 109A.....		2	
<i>COMP TIA A+ - PART A</i>			
CIS 143A.....		3	
<i>WINDOWS SERVER ADMIN I</i>			
CIS 287A.....		3	
<i>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 113.....		2	
<i>PRACTICAL RADIO</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.

CERTIFICATE REQUIREMENTS	17 CR. HRS.
CIS 257A.....	3
<i>HTML FOR INTERNET WEB PAGE DESIGN</i>	
CIS 287A.....	3
<i>DIGITAL VIDEO EDITING</i>	
COM 112.....	2
<i>AUDIO PRODUCTION</i>	
COM 212	3
<i>TELEVISION PRODUCTION</i>	
GR 160	3
<i>DIGITAL IMAGING</i>	
Choose One (1) Course From:	3
CIS 110 <i>COMPUTER CONCEPTS</i>	
CIS 120A <i>INTRO TO COMPUTER</i>	
<i>INFORMATION SYSTEMS</i>	
	TOTAL 17

PROGRAMS

Allied Health Programs

(Degrees, Certificates, & Diplomas)

Admission to the College does not guarantee admission to all programs within the College. Admission to the Community Health Worker class is with instructor permission. Students wishing to enter the Nurse Aide Training Class and/or programs of Nursing, Respiratory Therapy, and Medical Assisting, must submit additional applications. These applications may be obtained in the Counseling and Advising Center, Room 1050.

Nursing

- ♦ AAS Nursing Degree
- ♦ Practical Nurse Diploma

Medical Assisting

- ♦ Medical Assistant Certificate

Respiratory Therapy

- ♦ AAS Respiratory Therapy

Business Technology Programs

- ♦ Healthcare Support Assistant Certificate

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 healthcare settings or in the home. Students must achieve a passing grade in each course in the certificate to earn this certificate.

CERTIFICATE REQUIREMENTS	23-25 CR. HRS.
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>	
AH 196	3
<i>ELECTRONIC HEALTH RECORDS</i>	
BUS 166	3
<i>QUALITY CUSTOMER SERVICE</i>	
BUS 179	1
<i>KEYBOARDING</i>	
CIS 100	1
<i>INTRODUCTION TO PERSONAL COMPUTERS</i>	
CIS 115WW	1
<i>INTRODUCTION TO WORD PROCESSING</i>	
HE 100A	2
<i>COMMUNITY FIRST AID AND SAFETY</i>	
HE 106	3
<i>CONCEPTS OF HEALTH AND WELL-BEING</i>	
TOTAL 23-25	

* See AH 107 Nurse Aide/Home Health Aide for requirements specific to completion of this certificate.

Please see the Counseling and Advising Center for the recommended sequence of classes.

Medical Assistant Certificate

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, and 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.

The goal of the Medical Assistant Program is to prepare competent entry-level Medical Assistants in the cognitive (knowledge), psychomotor (skills) and affective behavior) learning domains. All Medical Assistant (MA) courses must be passed with a minimum grade of C+ (77%) or better. In addition, students must successfully pass 100% of the psychomotor and affective competencies in order to pass the course and/or progress in the program. A student who passes 100% of the psychomotor and affective competencies in a Medical Assistant course will receive the letter grade received in the theory component of the course as a course grade. Students should review the MCC Student Handbook, MCC Medical Assistant website, and Medical Assistant Program Handbook for admission requirements, course progression, grade requirements, and additional information. Students must complete a 160-hour unpaid, supervised practicum (MA110) in order to receive credit for the course.

The Muskegon Community College Medical Assistant Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

Commission on Accreditation of Allied Health Education Programs

25400 US Hwy 19 N., Suite 158
Clearwater, FL 33763
727-210-2350
www.caahep.org

Graduates of the Muskegon Community College Medical Assistant Certificate Program are eligible to take the Certified Medical Assistants (CMA) examination through the American Association of Medical Assistants (AAMA). To contact AAMA, go to www.aama-ntl.org, call 312-899-1500, or send mail to 20 N. Wacker Drive, Suite 1575, Chicago, IL 60606.

Graduates of the Muskegon Community College Medical Assistant Certificate Program are also eligible to take the Registered Medical Assistant (RMA) examination through American Medical Technologists (AMT). To contact American Medical Technologists go to www.americanmedtech.org, call 847-823-5169, or send mail to 10700 W. Higgins Rd., Set. 150, Rosemont, IL 60018.

Note: The Medical Assistant Certificate flows directly into the Associate in Science and Arts degree.

Note: All MA courses must be completed with a C+ or better.

Non MA courses must be completed with a C or better.

Admission Prerequisites

Testing/entrance competencies: see MCC's Medical Assistant website for more information:

<http://www.muskegoncc.edu/degrees-and-certificates/certificate-programs/medical-assistant-certificate/>

(CONTINUED ON NEXT PAGE)

CERTIFICATE REQUIREMENTS**32-36 CR. HRS.****FIRST SEMESTER 13/15**

AH 101 3/3

MEDICAL TERMINOLOGY

AH 104 2/2

MEDICAL INSURANCE BILLING

MA 101 3/3

MEDICAL ASSISTANT ADMINISTRATIVE I

MA 102A L&L 5/7

*MEDICAL ASSISTANT CLINICAL I***SECOND SEMESTER 12/14**

BIOL 115 4/4

INTRODUCTION TO ANATOMY AND PHYSIOLOGY

MA 105 2/2

MEDICAL ASSISTANT ADMINISTRATIVE II

MA 106A L&L 6/8

*MEDICAL ASSISTANT CLINICAL II***THIRD SEMESTER 7/7**

AH 196 3/3

ELECTRONIC HEALTH RECORDS

MA 110 4/4

*MEDICAL ASSISTANT SEMINAR PRACTICUM (160 HOURS)***TOTAL 32/36**

Pre-Practicum Requirements: ability to meet the requirements of the occupation of Medical Assistant, clear drug screen, required immunizations and negative 2-step tuberculin test, clear criminal background check, current CPR card (Basic Life Support, ARC Professional Rescuer)

Nursing

Accreditation

Muskegon Community College is accredited by:

Higher Learning Commission,
230 S. LaSalle St.,
Chicago, IL, 60604-1413,
(800) 621-7440
www.hicommision.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

Mission Statement

Approved 31 April 2017

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), or the Grand Valley State University Bachelor of Science in Nursing (BSN).

Students who successfully complete the Practical Nurse Diploma will be eligible to take the National Council Licensure Examination for Practical Nurses (NCLEX-PN) to practice as a Licensed Practical Nurse (LPN). The Practical Nurse Diploma flows directly into the Associate of Applied Science Nursing Degree.

Students who successfully complete the Associate in Applied Science Nursing (AAS) degree will be eligible to take 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 or the GVSU 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 have 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 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. Students who opt out with only the Practical Nurse Diploma are not considered graduates of an ACEN accredited nursing program.

The Michigan State University Bachelor of Science in Nursing (BSN) program and the Grand Valley State University program are 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.

	2019	2018	2017
RN NCLEX PASS RATE	94.29%	98.28%	100%
RN JOB PLACEMENT RATE	100%	100%	100%

MUSKEGON COMMUNITY COLLEGE NURSING PROGRAM CAREER LADDER

(Revised and Approved 5/23/16)

LEVEL II		MUSKEGON COMMUNITY COLLEGE ASSOCIATE IN APPLIED SCIENCE NURSING DEGREE (AAS)				Total 65 Credits (17 NUR / 8 Non-NUR)
Term 6	NUR	222A	Managing the Care of the Family	5 Cr.		
	NUR	211A	Care of the Family in Psychological Crisis	4 Cr.		
Term 5	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.		
LEVEL I		PRACTICAL NURSE DIPLOMA				Total 40 Credits 25 NUR / 15 Non-NUR
Term 4	NUR	141B	Care of the Maturing Family *** MEET CHEMISTRY REQUIREMENT ***	8 Cr.		
	*CHEM	109 LEC/109A	Chemistry for Health Sciences /Lab OR	5 Cr.		
	*CHEM	100 LEC/100A	Fundamentals of Chemistry/Lab OR	5 Cr.		
	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.					
Term 3	NUR	131B	Care of the Childrearing Family	8 Cr.		
	*BIOL	106 L&L	Anatomy & Physiology II Prereq: BIOL 105 L&L	4 Cr.		
Term 2	NUR	126	Family Health and Nursing Care	7 Cr.		
	NUR	121A	Basic Pharmacology	1 Cr.		
Term 1	NUR	100	Overview of the Nursing Profession	1 Cr.		
	AH	111	Environmental Stressors and Nutrition	1 Cr.		
	BIOL	105 L&L	Anatomy & Physiology I	4 Cr.		
	ANTH	103	Cultural Diversity in Contemporary Society	3 Cr.		
	PSYC	201	General Psychology	4 Cr.		
	ENG	101	English Composition	3 Cr.		

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

Students must make an appointment with the MCC Counseling and Advising Center (231.777.0362) to review requirements, to develop a course plan, and to receive a Nursing Program application. See Requirement Checklist for Ready List Requirements.

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

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

R 5/23/16

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

PROGRAMS

MICHIGAN STATE UNIVERSITY NURSING	MICHIGAN STATE UNIVERSITY BACHELOR OF SCIENCE NURSING – 120+ TOTAL CREDITS			
	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.
		NUR 325	Transitions to BSN Practice	2 Cr.
	MUSKEGON COMMUNITY COLLEGE NURSING	MCC ASSOCIATE IN APPLIED SCIENCE NURSING DEGREE (AAS)		
Terms 4, 5, & 6		ISS 300	Social Science	4 Cr.
MCC PRACTICAL NURSE DIPLOMA				
		NUR 300	Pathophysiology	4 Cr.
Term 3		MCC Course: MATH 115A Probability and Statistics		3 Cr.
APPLY AND BE ACCEPTED TO MSU BSN PROGRAM				
Term 2		MCC Courses – select one:		
		HIST 101	Western Civilization to 1500	4 Cr.
		HIST 102	Western Civilization 1500 to Present	4 Cr.
		MU 103A	Music Appreciation	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.
MSU PREREQUISITES				
Term 1		MCC Courses:		
	ENG 102	English Composition	3 Cr.	
	MATH 109	College Algebra w/ Applications	4 Cr.	
	Select one:			
	PSYC 207	Life Span Development	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 http://reg.msu.edu/AcademicPrograms/ProgramDetail.aspx?Program=4008 for more information.</p>				

R 4/2017

MUSKEGON COMMUNITY COLLEGE – GRAND VALLEY STATE UNIVERSITY CONCURRENT BSN NURSING PROGRAM LADDER

GRAND VALLEY STATE UNIVERSITY BACHELOR OF SCIENCE NURSING – 122/123 TOTAL CREDITS			
GVSU NURSING	Term 10 Fall Cohort Term 11 Summer Cohort	* Issues / Electives	3 Cr.
		NUR 456 Nursing Leadership	4 Cr.
	Term 9 Fall Cohort Term 10 Summer Cohort	* Issues	3 Cr.
		NUR 412 Nursing Care for Populations	4 Cr.
	Term 8 Fall Cohort Term 9 Summer Cohort	NUR 407 Collaboration for Nurses	2 Cr.
		NUR 411 SWS Community Based Nursing Care	4 Cr.
	Term 7 Fall Cohort Term 8 Summer Cohort (no classes Terms 7 for Summer Cohort)	BMS 310 Basic Pathophysiology	3 Cr.
		NUR 265 Intro to Nursing Research & Evidence-based Practice	3 Cr.
	MCC ASSOCIATE IN APPLIED SCIENCE NURSING DEGREE (AAS)		
	MCC LEVEL II	Term 6 Fall Cohort Term 6 Summer Cohort	NUR 312 Professional Nursing Issues
		NUR 311 Dimensions of Nursing Practice	2 Cr.
Term 5 Fall Cohort Term 5 Summer Cohort		NUR 311 Dimensions of Nursing Practice	2 Cr.
		NUR 312 Professional Nursing Issues	2 Cr.
MCC PRACTICAL NURSE DIPLOMA			
MCC LEVEL I	Term 4 Term 3	Courses taken at MCC	3 Cr.
		* HISTORY PERSPECTIVE	
	APPLY AND BE ACCEPTED TO GVSU BSN PROGRAM		
	Term 2	Courses taken at MCC	
		MATH 115A Probability & Statistics	3 Cr.
		* PHIL / LIT	3 Cr.
		* WORLD PERSPECTIVE	3 Cr.
	GVSU PREREQUISITES		
	Term 1	Courses taken at MCC	
		MATH 100A Intermediate Algebra	4 Cr.
	PSYC 207 Life Span Development	4 Cr.	
	or		
	ED 250 Human Growth and Learning	3 Cr.	
	* ARTS	3 Cr.	

PROGRAMS

* Can be satisfied with several course options – see Counselor.

The Kirkhof College of Nursing (KCON) is accredited by the Commission on Collegiate Nursing Education (CCNE), and the undergraduate curriculum is based on the American Association of Colleges of Nursing's (AACN) Baccalaureate Essentials. Students apply as a degree-seeking student with declaration of nursing as their major to the baccalaureate program using the GVSU Office of Admissions application form and apply to the RN-BSN program by completing the KCON secondary application form. It is recommended that students apply during the first semester they are enrolled in the MCC AAS-Nursing Program if they wish to pursue concurrent enrollment between MCC and GVSU. Admission to the program is competitive; the most qualified candidates will be selected from the pool of candidates meeting the minimum criteria. Students must meet established admission requirements. Information regarding admission requirements is featured in the GVSU Course Catalog at: http://catalog.gvsu.edu/preview_program.php?catoid=44&poid=7034 or the KCON website at: <http://www.gvsu.edu/kcon/rn-to-bsn-admission-process-331.htm>

R 6.2017

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 1050, (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.

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

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

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

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

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

Requirement Checklist

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

Ready List Requirements

- ♦ Active Muskegon Community College student status.
- ♦ If you have attended other colleges, request official transcripts be sent from their Records Office to Muskegon Community College, Attn: Transfer Evaluation. Transfer credit will be given only for equivalent courses in which a “C” (2.0) or above was achieved.
- ♦ Provide proof of high school completion or GED to the Enrollment Services Office, Room 1043.
- ♦ MCC cumulative GPA must be at least a C (2.0).

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

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

Ready List Communication

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

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

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

Reading Skills Competency

Complete **one** of the following:

- ♦ Score 25 or above on SAT Reading (19 or above on ACT Reading) score.
- ♦ Score 90 or above on the Accuplacer Classic Reading test. (Formerly 81 or above on the COMPASS Reading test.)
- ♦ Score 265 or higher on the Accuplacer Nextgen Reading test.

Writing Skills Competency

Complete **one** of the following:

- ♦ Score 26 or above on SAT Writing (19 or above on ACT English) test.
- ♦ Score 85 or above on the Accuplacer Classic Sentence Skills test. (Formerly 80 or above on COMPASS Writing test) or
- ♦ Score 255 or higher on the Accuplacer Nextgen Writing test.

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 64-98 on the Accuplacer Classic Arithmetic test (formerly 50 or better on the COMPASS Pre-Algebra test) or score 251-270 on the Accuplacer Nextgen Arithmetic test, AND pass MATH 038, Pre-Algebra with a C (2.0) or above, AND pass the MATH 035, Metric Test Module F, or
- ♦ Score 99 or above on the Accuplacer Classic Arithmetic test (formerly 50 or better on the COMPASS Pre-Algebra test) or score 271 on the Accuplacer Nextgen Arithmetic 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.
- ♦ 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.
- ♦ A letter from current employer that indicates 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 for health requirements, essential functions of the occupation, and occupational risks.

Criminal Background Check

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

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

Nursing Program Application

- ◆ Schedule an appointment with a MCC counselor, Room 1050 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 1048 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 are ex-officio members of the Advisory Committee.

Associate in Applied Science

Respiratory Therapy

(2 1/2 Year Program)

Muskegon Community College currently offers students the therapist level of instruction. The goal of the Respiratory Therapy (RT) Program is to prepare students who graduate with the ability to demonstrate competence in the areas of cognitive (knowledge), psychomotor (skills), and affective (behavior) learning domains of respiratory therapy that is expected and performed by registered respiratory therapists (RRT's). The student will have exposure to adult, neonatal and pediatric critical care as part of the program. This program is accredited by the Commission on Accreditation for Respiratory Care (CoARC) and prepares graduates to take the national credentialing examinations. These exams lead to certification and registry, and provides a pathway for state licensure.

Commission on Accreditation for Respiratory Care
1248 Harwood Road
Bedford, Texas 76021
817-283-2835
www.coarc.com

After completing an application to Muskegon Community College and being accepted, the Respiratory Therapy (RT) Program has a separate admissions process and an application to the RT Program is required. Potential RT students can visit the Respiratory Therapy Department in Room 2090, or call (231) 777-0223, or email at: rt@muskegoncc.edu.

Pre-Requisites	CR. HRS.
ENG 101	3
<i>ENGLISH COMPOSITION</i>	
MATH 100A.....	4
<i>INTERMEDIATE ALGEBRA</i>	
BIOL 105L&L.....	4
<i>ANATOMY & PHYSIOLOGY I</i>	
BIOL 106L&L.....	4
<i>ANATOMY & PHYSIOLOGY II</i>	
CHEM 109L&L.....	5
<i>CHEMISTRY FOR HEALTH SCIENCE</i>	
<i>OR</i>	
CHEM 100L&L.....	5
<i>FUNDAMENTALS OF CHEMISTRY</i>	

YEAR I

Semester 1 (Fall: September - December)	CR. HRS.
RT 101.....	3
<i>RESPIRATORY THERAPY PHYSICS</i>	
RT 102.....	3
<i>BASIC PATIENT CARE SKILLS</i>	
AH 101.....	3
<i>MEDICAL TERMINOLOGY</i>	
PHIL 204.....	3
<i>BIOMEDICAL ETHICS</i>	
Semester 2 (Winter: January - February)	CR. HRS.
RT 111B.....	2
<i>INTRODUCTION TO RESPIRATORY THERAPY</i>	
RT 110L&L.....	3
<i>EQUIPMENT & PROCEDURES I</i>	
Semester 2 (Winter: March - April)	CR. HRS.
RT 120L&L.....	3
<i>EQUIPMENT & 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 & 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.
RT 210.....	4
<i>CARDIOVASCULAR & RENAL PHYSIOLOGY</i>	
RT 220C.....	4
<i>PEDIATRIC-NEONATAL CRITICAL CARE</i>	
PSYC 201.....	4
<i>GENERAL PSYCHOLOGY</i>	
Semester 6 (Summer: May - August)	CR. HRS.
RT 212A.....	7
<i>ADVANCED CLINICAL PRACTICUM I</i>	
Semester 7 (Fall: September - December)	CR. HRS.
RT 222A.....	3
<i>CLINICAL ROTATION VII</i>	
RT 230B.....	2
<i>PULMONARY DIAGNOSTICS & REHABILITATION</i>	
RT 240.....	1
<i>THE HEALTH CARE ENVIRONMENT</i>	
BUS 122.....	3
<i>PRINCIPLES OF MANAGEMENT</i>	

TOTAL: 79
TOTAL CREDITS FOR PROGRAM: 99

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 Therapist program is a 28-month associate degree program, which began in January 1980. It is fully accredited by the Commission on Accreditation for Respiratory Care (CoARC, www.coarc.com). The curriculum design offers the student the Associate of Applied Science Degree (AAS). Students who graduate and receive the AAS Degree will be eligible to sit for the National Board for Respiratory Care Examinations. Upon successful completion of the examination at the Certified Respiratory Therapist (CRT) level, the graduate will be able to apply for licensure. Once a graduate has successfully passed the Therapist Multiple Choice and Clinical Simulation exams, they will earn the Registered Respiratory Therapist (RRT) credential.

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. All students have access to the same classroom, laboratory and clinical education, no matter the location.

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 1050, or call (231) 777-0362. Prospective students are strongly advised to make an appointment with the Respiratory Therapy Department (Room 2090, or call (231) 777-0223.

Individuals interested in pursuing admission are advised to make early application, as spaces are limited. Potential students must apply and be accepted to Muskegon Community College and must also apply to the Respiratory Therapy program separately. A new class starts each Fall semester. When applicants complete the entry-level requirements they are placed on a ready list. Students who have completed the entry-level requirements and have also completed non-professional courses (or non-respiratory Therapy courses), will be given preference into the program over those students who have not done so. Any applicants remaining after the available spaces are filled will need to re-apply for admission for the following year. Students who are notified of admission may defer admission once, but will need to re-apply for the following year.

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

Entry Level Requirements

- ♦ Submit a completed Muskegon Community College Admission Application. (*Online at www.muskegoncc.edu*)
- ♦ Submit a completed Muskegon Community College Respiratory Therapy Program Admission Application. (*Online at <http://www.muskegoncc.edu/respiratory-therapy/rt-program-admission-application/>*)
- ♦ Submit official evidence of high school graduation or successful completion of the General Education Development (GED) tests. Enrollment Services, Room 1043, or call (231) 777-0366
- ♦ Show proficiency in Reading, Writing and Math. For testing services contact the Testing Center, Room 1032 or (231) 777-0394. For Reading Placement a student must score 76-120 on Accuplacer Classic, 250-300 on Accuplacer Nextgen, 19 or higher on ACT or 25 or higher on SAT. For the Writing Placement for ENG-101, a student must score 85-120 on Accuplacer Sentence Skills, 255-300 on Accuplacer Nextgen Writing, 19 or higher on ACT English, or 26 or higher on SAT Writing & Language. For Mathematics Placement for **Math-100A**, a student must score 40-62 on Accuplacer College-Level Mathematics, 86-120 on Accuplacer Elementary Algebra, 200-229 on Accuplacer Nextgen Adv. Algebra & Functions, 261-300 on Accuplacer Nextgen QAS, 19-21 on ACT Math, and 26-28.5 on SAT Math.
- ♦ Students must have the ability to meet the Program Technical Standards (www.muskegoncc.edu/pages2283.asp), pass a criminal background check and drug screen, and provide immunization records.
- ♦ The following courses, or their transferred equivalencies, are required to be completed and passed prior to starting the RT courses: ENG-101 English Composition, Math-100A Intermediate algebra, BIOL-105 Anatomy & Physiology I L&L, BIOL-106 Anatomy & Physiology II L&L, CHEM-109 Chemistry for Health Sciences L&L or CHEM-100 Fundamentals of Chemistry L&L, and AH-101 Medical Terminology, (which can be taken in the Fall semester of entry into the Respiratory Therapy Program).

Advanced Placement Applicants

Applicants with prior post-secondary respiratory education are candidates for advanced placement admission into the Muskegon Community College Respiratory Therapy Program. Admission requirements:

- ♦ Submit a completed Muskegon Community College Admission Application. (*Online at www.muskegoncc.edu*)
- ♦ Submit a completed Muskegon Community College Respiratory Therapy Program Admission Application (*Online at <http://www.muskegoncc.edu/respiratory-therapy/rt-program-admission-application/>*).
- ♦ Meet with the Director of Respiratory Therapy. Room 2090-B or call (231) 777-0389.
- ♦ 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 Office of the Registrar for credit evaluation Room 1048J, or call (231) 777-0310.

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 prior to the Fall semester they are entering the Program. Failure to do so could extend

the student's expected completion date or prevent them from entering the Program.

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. This does not guarantee a student a seat in the program simply because they re-apply. Failure to attain a passing grade in a repeated Respiratory Therapy course will render students ineligible for readmission. For the full Readmission Policy, visit the RT website or the link listed. In all instances where a student is considering readmission, the student must meet with the Program Director to determine eligibility. (<http://www.muskegoncc.edu/degrees-and-certificates/wp-content/uploads/sites/127/2017/10/RT-Program-Re-admission-Policy.pdf>)

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 at the Student Welcome Center at the beginning of the semester of the anticipated graduation.

Health Status Evaluation

Students in the Muskegon Community College Respiratory Therapy Program are required to have a health status evaluation (a physical), done by a licensed health practitioner prior to beginning the first clinical RT course. Each student admitted into the program will be given specific health information requirements during a **mandatory orientation**. Along with the health requirements each student will be given instructions for obtaining a required Drug Screen. A student must have a clean drug screen to remain in the program. Random drug screens may be administered any time throughout the program. Since all students will be in clinical rotations throughout various hospitals, it is recognized they may come in contact with various organisms in the environment that can cause illness. Therefore, a strict immunization and health policy is followed.

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 state 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 and criminal background check.

Business Programs

(Degrees and Certificates)

Business Technology and Business

- ♦ Administrative Medical Assistant Certificate
- ♦ Administrative/Office Management
- ♦ Administrative/ Office Management-Medical
- ♦ Bookkeeping Services Entrepreneur
- ♦ Digital Game Development
- ♦ Entrepreneurship Certificate
- ♦ Office Assistant Certificate
- ♦ Management
- ♦ Marketing

Computer Information Systems

- ♦ C/Java Programming Certificate
- ♦ Computer Networking Certificate
- ♦ Computer Networking CISCO Certificate
- ♦ Computer Networking Entrepreneur
- ♦ Computer Networking Technology
- ♦ Customer Service Specialist Certificate
- ♦ Information Technology Support
- ♦ Midrange Programming Certificate
- ♦ Personal Computer Maintenance Entrepreneur
- ♦ Software Development
- ♦ Web Design Certificate
- ♦ Web Design
- ♦ Web Game Development Entrepreneur
- ♦ Website Development Entrepreneur

Graphics Degrees

- ♦ Graphic Design
- ♦ Graphic Design Entrepreneur
- ♦ Graphic Design Video/Audio Certificate

Entrepreneur Degrees

- ♦ Music Performance Entrepreneur
- ♦ Visual Art Entrepreneur

Criminal Justice

- ♦ Criminal Justice/Corrections
- ♦ Criminal Justice/Law Enforcement
- ♦ Corrections Certificate

Associate in Applied Science

Bookkeeping Services Entrepreneur

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

GENERAL EDUCATION REQUIREMENTS	18 CR. HRS.	DEGREE REQUIREMENTS	25 CR. HRS.
ENG 101	3	ACC 201	4
<i>ENGLISH COMPOSITION</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 290CI.....	3
		<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
ENTREPRENEUR CORE REQUIREMENTS	11 CR. HRS.	CIS 101EW	1
BUS 131.....	1	<i>INTRODUCTION TO ELECTRONIC SPREADSHEETS</i>	
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>		CIS 102EW	1
BUS 223.....	4	<i>INTERMEDIATE ELECTRONIC SPREADSHEETS</i>	
<i>STARTING YOUR BUSINESS PLAN</i>		RECOMMEND ELECTIVES	(Minimum 8 CR. HRS.)
BUS 240.....	3	ACC 220	4
<i>ENTREPRENEURSHIP CAPSTONE</i>		<i>FEDERAL TAXATION I</i>	
Choose One (1) Course From:	3	BUS 166.....	3
BUS 161A <i>EFFECTIVE SELLING</i>		<i>QUALITY CUSTOMER SERVICE</i>	
BUS 220 <i>E-BUSINESS</i>		BUS 179.....	1
		<i>KEYBOARDING</i>	
		BUS 204.....	3
		<i>eMARKETING</i>	
		CIS 153A.....	1
		<i>DATABASE MANAGEMENT - ACCESS</i>	
			TOTAL 62

PROGRAMS

Associate in Applied Science

Management

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

GENERAL EDUCATION REQUIREMENTS		18-20 CR. HRS.	CAREER PROGRAM REQUIREMENTS	22 CR. HRS.	
ENG 101		3	BUS 122	3	
<i>ENGLISH COMPOSITION</i>			<i>PRINCIPLES OF MANAGEMENT</i>		
BCOM 102		3	BUS 123	3	
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			<i>BUSINESS LAW I</i>		
BUS 127		3	BUS 125	3	
<i>HUMAN RELATIONS</i>			<i>SUPERVISION</i>		
Choose One (1) Course From:		3-4	BUS 166	3	
BUS 126	<i>BUSINESS MATH</i>		<i>QUALITY CUSTOMER SERVICE</i>		
MATH 109	<i>COLLEGE ALGEBRA WITH APPLICATIONS</i>		BUS 167	1	
MATH 115A	<i>PROBABILITY AND STATISTICS</i>		<i>PROFESSIONALISM IN YOUR CAREER</i>		
Choose One (1) Course From:		3	BUS 222	3	
CIS 110	<i>COMPUTER CONCEPTS</i>		<i>FUNDAMENTALS OF ORGANIZATIONAL BEHAVIOR</i>		
CIS 120A	<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		BUS 260	3	
			<i>PRINCIPLES OF MARKETING</i>		
Choose One (1) Course From:		3-4	BUS 273A	3	
GEOG 104	<i>CULTURAL GEOGRAPHY</i>		<i>HUMAN RESOURCE MANAGEMENT</i>		
PHIL 205	<i>BUSINESS ETHICS</i>		RECOMMENDED ELECTIVES (Minimum 10-12 CR. HRS.)		
PSCI 111	<i>INTRO TO AMERICAN GOVERNMENT</i>		ACC 202	4	
PSCI 211	<i>COMPARATIVE GOVERNMENTS</i>		<i>PRINCIPLES OF ACCOUNTING II</i>		
PSYC 102	<i>APPLIED PSYCHOLOGY</i>		BUS 114	3	
PSYC 201	<i>GENERAL PSYCHOLOGY</i>		<i>PERSONAL FINANCE</i>		
BUSINESS CORE REQUIREMENTS		10 CR. HRS.	BUS 124	3	
ACC 201		4	<i>BUSINESS LAW II</i>		
<i>PRINCIPLES OF ACCOUNTING I</i>			BUS 131	1	
BUS 121		3	<i>INTRODUCTION TO ENTREPRENEURSHIP</i>		
<i>INTRODUCTION TO BUSINESS</i>			BUS 161A	3	
BUS 200		3	<i>EFFECTIVE SELLING</i>		
<i>INTERNATIONAL BUSINESS</i>			BUS 204	3	
			<i>eMARKETING</i>		
			BUS 220	3	
			<i>E-BUSINESS</i>		
			BUS 223	4	
			<i>STARTING YOUR BUSINESS PLAN</i>		
			BUS 240	3	
			<i>ENTREPRENEURSHIP CAPSTONE</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</i>		
			<i>SPC-STATISTICAL PROCESS CONTROL</i>		
				TOTAL 62	

Associate in Applied Science

Marketing

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

GENERAL EDUCATION REQUIREMENTS		18-20 CR. HRS.	CAREER PROGRAM REQUIREMENTS	25 CR. HRS.
ENG 101		3	BUS 123	3
<i>ENGLISH COMPOSITION</i>			<i>BUSINESS LAW I</i>	
BCOM 102		3	BUS 161A	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			<i>EFFECTIVE SELLING</i>	
BUS 127		3	BUS 162	3
<i>HUMAN RELATIONS</i>			<i>PRINCIPLES OF RETAILING</i>	
Choose One (1) Course From:		3-4	BUS 166	3
BUS 126	<i>BUSINESS MATH</i>		<i>QUALITY CUSTOMER SERVICE</i>	
MATH 109	<i>COLLEGE ALGEBRA WITH APPLICATIONS</i>		BUS 167	1
MATH 115A	<i>PROBABILITY AND STATISTICS</i>		<i>PROFESSIONALISM IN YOUR CAREER</i>	
Choose One (1) Course From:		3	BUS 204	3
CIS 110	<i>COMPUTER CONCEPTS</i>		<i>eMARKETING</i>	
CIS 120A	<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		BUS 260	3
			<i>PRINCIPLES OF MARKETING</i>	
Choose One (1) Course From:		3-4	BUS 263	3
GEOG 104	<i>CULTURAL GEOGRAPHY</i>		<i>ADVERTISING DYNAMICS</i>	
PHIL 205	<i>BUSINESS ETHICS</i>		Choose One (1) Course From:	3
PSCI 111	<i>INTRO TO AMERICAN GOVERNMENT</i>		BUS 122	<i>PRINCIPLES OF MANAGEMENT</i>
PSCI 211	<i>COMPARATIVE GOVERNMENTS</i>		BUS 125	<i>SUPERVISION</i>
PSYC 102	<i>APPLIED PSYCHOLOGY</i>			
PSYC 201	<i>GENERAL PSYCHOLOGY</i>			
			RECOMMENDED ELECTIVES	7-9 CR. HRS.
			ACC 202	4
			<i>PRINCIPLES OF ACCOUNTING II</i>	
BUSINESS CORE REQUIREMENTS	10 CR. HRS.		BUS 114	3
ACC 201		4	<i>PERSONAL FINANCE</i>	
<i>PRINCIPLES OF ACCOUNTING I</i>			BUS 124	3
BUS 121		3	<i>BUSINESS LAW II</i>	
<i>INTRODUCTION TO BUSINESS</i>			BUS 131	1
BUS 200		3	<i>INTRODUCTION TO ENTREPRENEURSHIP</i>	
<i>INTERNATIONAL BUSINESS</i>			BUS 220	3
			<i>E-BUSINESS</i>	
			BUS 222	3
			<i>FUNDAMENTALS OF ORGANIZATIONAL BEHAVIOR</i>	
			BUS 223	4
			<i>STARTING YOUR BUSINESS PLAN</i>	
			BUS 240	3
			<i>ENTREPRENEURSHIP CAPSTONE</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>	
			TOTAL	62

Associate in Applied Science

Digital Game Development (with Michigan Transfer Agreement)

Digital Game Development will prepare students for entry into the world of interactive media and game design. Core requirements will expose the student to real world development of game systems, effective teamwork in a multidisciplinary setting, understand the video game and interactive media industry as well as being able to map video game features to target market needs. Students transform their perspective from player to provider and acquire understanding of how development teams work in this fast paced and constantly changing industry. This degree prepares students for entry-level positions as game scripters, game programmers, assistant producers, game designers, Quality Assurance engineers, and level designers. Transfer-oriented students interested in working with computers should consult with a counselor.

GENERAL EDUCATION REQUIREMENTS

35-37 CR. HRS.

ENG 101	3
<i>ENGLISH COMPOSITION</i>	
ENG 102	3
<i>ENGLISH COMPOSITION</i>	
COM 201	3
<i>PUBLIC SPEAKING</i>	
ART 198	3
<i>ART HISTORY I</i>	
GEOG 105	3
<i>WORLD REGIONAL GEOGRAPHY</i>	
PSCI 202	3
<i>INTERNATIONAL RELATIONS</i>	
Choose One (1) Course From:	3-4
MATH 112 <i>TRIGONOMETRIC FUNCTIONS WITH COORDINATE GEOMETRY</i>	
MATH 115A <i>PROBABILITY AND STATISTICS</i>	
Choose One (1) Course From:	4-5
BIOL 103L&L <i>INTRODUCTORY BIOLOGY</i>	
BIOL 104L&L <i>INTRODUCTORY BIOLOGY II</i>	
CHEM 100LEC AND 100A <i>GENERAL AND INORGANIC CHEMISTRY</i>	
GEOG 101A <i>PHYSICAL GEOGRAPHY</i>	
GEOG 215 <i>INTRODUCTION TO WEATHER AND CLIMATE</i>	
GEOLOG 101A <i>INTRODUCTION TO PHYSICAL GEOLOGY</i>	
PHSC 101A <i>INTRODUCTORY PHYSICAL SCIENCE LECTURE AND LAB</i>	
PHYS 201CL&L <i>COLLEGE PHYSICS I LECTURE AND LAB</i>	
Choose One (1) Course From:	4
ANTH 105D <i>INTRODUCTION TO PHYSICAL ANTHROPOLOGY/ARCHAEOLOGY</i>	
ASTR 101 <i>GENERAL ASTRONOMY</i>	
ASTR 105A <i>COSMOLOGY</i>	
GEOL 102 <i>INTRODUCTION TO EARTH HISTORY</i>	

Choose One (1) Course From:	3
ENG 211 <i>WORLD MYTHOLOGY</i>	
ENG 218A <i>HORROR, FANTASY AND SCIENCE FICTION</i>	
Choose One (1) Course From:	3
PHIL 102 <i>PRINCIPLES OF LOGIC</i>	
PHIL 104 <i>SYMBOLIC LOGIC</i>	

CAREER PROGRAM REQUIREMENTS 24 CR. HRS.

BUS 108.....	3
<i>INTRODUCTION TO PROJECT MANAGEMENT</i>	
BUS 127.....	3
<i>HUMAN RELATIONS</i>	
CIS 120A.....	3
<i>INTRODUCTION TO COMPUTER INFORMATION SYSTEMS</i>	
CIS 124.....	3
<i>INTRODUCTION TO GAME DEVELOPMENT</i>	
CIS 185.....	3
<i>C PROGRAMMING</i>	
CIS 244.....	3
<i>GAME SCRIPTING</i>	
CIS 284.....	3
<i>INTERACTIVE MEDIA AND GAME DESIGN</i>	
GRD 120.....	3
<i>INTRODUCTION TO GRAPHIC DESIGN</i>	

ELECTIVES 1-3 CR. HRS.

TOTAL 62

PROGRAMS

Entrepreneurship Certificate

This certificate is designed for community members or students who have a specific idea for starting a business and want to follow one of two paths: 1) create a business plan while at the same time refine their business idea with the desire to start their business within the next five years, or, 2). Create/refine their business plan and start their business as soon as possible after completing the Certificate.

CERTIFICATE REQUIREMENTS	17 CR. HRS.
BUS 131	1
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>	
BUS 204	3
<i>eMARKETING</i>	
Choose One (1) Course From:	3
<i>BUS 161A EFFECTIVE SELLING</i>	
<i>BUS 220 E-BUSINESS</i>	
BUS 166	3
<i>QUALITY CUSTOMER SERVICE</i>	
BUS 223	4
<i>STARTING YOUR BUSINESS PLAN</i>	
BUS 240	3
<i>ENTREPRENEURSHIP CAPSTONE</i>	
TOTAL 17	

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>	
	TOTAL 12

PROGRAMS

Computer Networking Certificate

CERTIFICATE REQUIREMENTS	37 CR. HRS.
BUS 290CI.....	2
<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
CIS 109A.....	2
<i>COMP TIA A+ PART A</i>	
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
CIS 142	3
<i>WINDOWS CLIENT ADMINISTRATION</i>	
CIS 143A.....	3
<i>WINDOWS SERVER ADMIN I</i>	
CIS 183	3
<i>NETWORKING TECHNOLOGIES</i>	
CIS 185C.....	3
<i>PROGRAMMING</i>	
CIS 209A.....	3
<i>COMP TIA A+ PART B</i>	
CIS 243	3
<i>TELECOMMUNICATIONS</i>	
CIS 275	3
<i>LINUX OPERATING SYSTEM</i>	
CIS 280	3
<i>JAVA PROGRAMMING</i>	
CIS 283B.....	3
<i>WINDOWS SERVER ADMIN II</i>	
CIS 293A.....	3
<i>NETWORK SECURITY</i>	
TOTAL 37	

Computer Networking CISCO Certificate

The Computer Networking CISCO Certificate program is a gateway to entry-level networking jobs and IT careers. CISCO Certified Network Associate (CCNA) Routing and Switching curriculum builds the skills necessary to succeed in jobs related to networking computers and devices. This program will prepare students to sit for CompTIA Network+, CISCO Certified Entry Network Technician (CCENT), and CISCO CCNA. Computer networks are critical parts of almost every organization. Network and computer systems administrators are responsible for the day-to-day operation of these networks. Network and computer systems administrators work with the physical computer networks in a variety of organizations and therefore are employed in many industries. Network and Computer System administrators also find work as Network Administrators or Network Support Specialists. Other career information includes: Network Administrator (O*Net OnLine) (Bureau of Labor Statics), Network Support Specialist (O*Net OnLine) (Bureau of Labor Statistics). This program is not designed for students wishing to transfer to a four-year college for a bachelor's degree. Students planning to transfer should consult with an MCC counselor. Potential transfer schools include Ferris State University, Grand Valley State University, Western Michigan University.

CERTIFICATE REQUIREMENTS	27 CR. HRS.
CIS 109A.....	2
<i>COMP TIA A+ PART A</i>	
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
CIS 104A.....	4
<i>INTRODUCTION TO NETWORKS (CISCO 1)</i>	
CIS 105A.....	4
<i>SWITCHING, ROUTING & WIRELESS (CISCO 2)</i>	
CIS 183.....	3
<i>NETWORKING TECHNOLOGIES</i>	
CIS 202A.....	4
<i>IT SEC & AUTOMATION (CISCO 3)</i>	
CIS 204.....	4
<i>CCNA CYBERSECURITY (CISCO 4)</i>	
ANY CIS ELECTIVE.....	3

TOTAL 27

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.

PROGRAMS

GENERAL EDUCATION REQUIREMENTS	19-20 CR. HRS.	DEGREE REQUIREMENTS	31 CR. HRS.
ENG 101	3	BUS 290CI	2
<i>ENGLISH COMPOSITION</i>		<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
BCOM 102	3	CIS 109A	2
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>COMP TIA A+ PART A</i>	
CIS 120A	3	CIS 142	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>WINDOWS CLIENT ADMINISTRATION</i>	
PHIL 205	3	CIS 143A	3
<i>BUSINESS ETHICS</i>		<i>WINDOWS SERVER ADMIN I</i>	
Choose One (1) Course From:	3-4	CIS 183	3
<i>BUS 126 BUSINESS MATH</i>		<i>NETWORKING TECHNOLOGIES</i>	
<i>MATH 109 COLLEGE ALGEBRA WITH APPLICATIONS</i>		CIS 209A	3
<i>MATH 115A PROBABILITY AND STATISTICS</i>		<i>COMP TIA A+ PART B</i>	
<i>OR HIGHER LEVEL MATH COURSE</i>		CIS 243	3
Choose One (1) Course From:	3	<i>TELECOMMUNICATIONS</i>	
<i>BUS 127 HUMAN RELATIONS</i>		CIS 275	3
<i>COM 101 ORAL COMMUNICATIONS</i>		<i>LINUX OPERATING SYSTEM</i>	
Choose One (1) Course From:	1	CIS 283B	3
<i>HE 110 INDUSTRIAL SAFETY AND</i>		<i>WINDOW SERVER ADMIN II</i>	
<i>WORKPLACE TRAINING</i>		CIS 293A	3
<i>PEA/DNC ANY PHYSICAL EDUCATION</i>		<i>NETWORK SECURITY</i>	
<i>OR DANCE COURSE</i>		CIS 185:	3
		<i>C PROGRAMMING</i>	
ENTREPRENEUR CORE REQUIREMENTS	12 CR. HRS.		TOTAL 62
BUS 131	1		
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>			
BUS 167	1		
<i>PROFESSIONALISM</i>			
BUS 223	4		
<i>STARTING YOUR BUSINESS PLAN</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>BUS 204 eMARKETING</i>			

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 will prepare a student for multiple certifications including CompTIA A+, Network+ Security+, CISCO CCENT (Cisco Certified Entry Network Technician), CISCO CCNA (Cisco Certified Networking Associate) and MCP (Microsoft Certified Professional). This degree is not designed for students wishing to transfer to four-year institutions. Transfer-oriented students interested in working with computers should consult with a counselor.

GENERAL EDUCATION REQUIREMENTS		15-16 CR. HRS.	CAREER PROGRAM REQUIREMENTS	44 CR. HRS.
ENG 101	ENGLISH COMPOSITION	3	BUS 290CI2	2
BCOM 102	ADVANCED BUS AND TECH COMMUNICATIONS	3	COOPERATIVE INTERNSHIP PROGRAM	
CIS 120A	INTRO TO COMPUTER INFORMATION SYSTEMS	3	CIS 104A	4
Choose One (1) Course From:		3-4	INTRODUCTION TO NETWORKS (CISCO 1)	
BUS 126	BUSINESS MATH		CIS 105A	4
MATH 109	COLLEGE ALGEBRA WITH APPLICATIONS OR HIGHER LEVEL MATH COURSE		SWITCHING, ROUTING & WIRELESS (CISCO 2)	
Choose One (1) Course From:		3	CIS 109A	2
BUS 127	HUMAN RELATIONS		COMP TIA A+ PART A	
COM 101	ORAL COMMUNICATIONS		CIS 142	3
			WINDOWS CLIENT ADMINISTRATION	
			CIS 143A	3
			WINDOWS SERVER ADMIN I	
			CIS 183	3
			NETWORKING TECHNOLOGIES	
			CIS 185	3
			C PROGRAMMING	
BUSINESS CORE REQUIREMENTS		3 CR. HRS.	CIS 202A	4
Choose One (1) Course From:		3	IT SEC & AUTOMATION (CISCO 3)	
BUS 121	INTRODUCTION TO BUSINESS		CIS 204	4
BUS 122	PRINCIPLES OF MANAGEMENT		CCNA CYBERSECURITY (CISCO 4)	
			CIS 209A	3
			COMP TIA A+ PART B	
			CIS 275	3
			LINUX OPERATING SYSTEM	
			CIS 283B	3
			WINDOW SERVER ADMIN II	
			CIS 293A	3
			NETWORK SECURITY	
				TOTAL 62-63

Associate in Applied Science

Information Technology Support

Students receiving an AAS Degree in Information Technology Support are prepared to provide technical assistance to computer users concerning the use of computer hardware and software. 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.

PROGRAMS

GENERAL EDUCATION REQUIREMENTS	18-19 CR. HRS.	CAREER PROGRAM REQUIREMENTS	33 CR. HRS.
ENG 101	3	CIS 101EW	1
<i>ENGLISH COMPOSITION</i>		<i>INTRODUCTION TO ELECTRONIC SPREADSHEETS</i>	
BCOM 102	3	CIS 102EW	1
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>INTERMEDIATE ELECTRONIC SPREADSHEETS</i>	
CIS 120A	3	CIS 109A	2
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>COMP TIA A+ - PART A</i>	
BUS 127	3	CIS 115WW	1
<i>HUMAN RELATIONS</i>		<i>INTRODUCTION TO WORD PROCESSING</i>	
Choose One (1) Course From:	3-4	CIS 119PP	1
BUS 126 <i>BUSINESS MATH</i>		<i>INTRODUCTION TO PRESENTATION GRAPHICS</i>	
MATH 109 <i>COLLEGE ALGEBRA WITH APPLICATIONS</i>		CIS 131	1
MATH 115A <i>PROBABILITY AND STATISTICS</i>		<i>OPERATIONS & COMMANDS FOR MID-RANGE COMPUTERS</i>	
Choose One (1) Course From:	3	CIS 142	3
PHIL 202 <i>INTRODUCTION TO ETHICS</i>		<i>WINDOWS CLIENT ADMINISTRATION</i>	
PHIL 205 <i>BUSINESS ETHICS</i>		CIS 143A	3
BUSINESS CORE REQUIREMENTS	10 CR. HRS.	<i>WINDOWS SERVER ADMIN 1</i>	
BUS 121	3	CIS 153A	1
<i>INTRODUCTION TO BUSINESS</i>		<i>DATABASE MANAGEMENT-ACCESS</i>	
BUS 179	1	CIS 183	3
<i>KEYBOARDING</i>		<i>NETWORKING TECHNOLOGIES</i>	
BUS 167	1	CIS 199	1
<i>PROFESSIONALISM IN YOUR CAREER</i>		<i>INTERNET CONTENT MANAGEMENT SYSTEMS</i>	
BUS 220	3	CIS 201	3
<i>E-BUSINESS</i>		<i>HELP DESK USER SUPPORT</i>	
BUS 290C1	2	CIS 209A	3
<i>COOPERATIVE INTERNSHIP PROGRAM</i>		<i>COMP TIA A+ - PART B</i>	
		CIS 253A	3
		<i>DATABASE DESIGN AND IMPLEMENTATION</i>	
		CIS 257A	3
		<i>HTML FOR INTERNET WEB DESIGN</i>	
		GRD 110	3
		<i>PRINCIPLES OF DESIGN</i>	
		ELECTIVES	0-1 CR. HRS.
		ELECTIVES	0-1
			TOTAL 63

Associate in Applied Science

Software Development

Students receiving an AAS Degree in Software Development become familiar with several programming languages and develop procedural, object-oriented, and web applications. This degree prepares students for entry-level positions as programmers and developers. Transfer-oriented students interested in working with computers should consult with a counselor.

GENERAL EDUCATION REQUIREMENTS	18-19 CR. HRS.	CAREER PROGRAM REQUIREMENTS	37 CR. HRS.
ENG 101	3	CIS 121	1
<i>ENGLISH COMPOSITION</i>		<i>FILE DESIGN & UTILITIES FOR MIDRANGE COMPUTERS</i>	
BCOM 102	3	CIS 153A	1
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>DATABASE MANAGEMENT-ACCESS</i>	
CIS 120A	3	CIS 162	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>VISUAL C# PROGRAMMING</i>	
*Choose One (1) Course From:	3-4	CIS 170	3
<i>BUS 126 BUSINESS MATH</i>		<i>RPG PROGRAMMING</i>	
<i>MATH 100A INTERMEDIATE ALGEBRA</i>		CIS 185	3
<i>MATH 109 COLLEGE ALGEBRA WITH APPLICATIONS</i>		<i>C PROGRAMMING</i>	
<i>OR HIGHER LEVEL MATH COURSE</i>		CIS 199	1
Choose One (1) Course From:	3	<i>INTERNET CONTENT MANAGEMENT SYSTEMS</i>	
<i>PHIL 205 BUSINESS ETHICS</i>		CIS 228	3
<i>PHIL 202 INTRODUCTION TO ETHICS</i>		<i>JAVASCRIPT</i>	
Choose One (1) Course From:	3	CIS 250	3
<i>COM 101 ORAL COMMUNICATIONS</i>		<i>DEVELOPING INFORMATION SYSTEMS</i>	
<i>COM 201 PUBLIC SPEAKING</i>		CIS 253A	3
BUSINESS CORE REQUIREMENTS	7 CR. HRS.	<i>DATABASE DESIGN AND IMPLEMENTATION</i>	
BUS 121	3	CIS 257A	3
<i>INTRODUCTION TO BUSINESS</i>		<i>HTML FOR INTERNET WEB DESIGN</i>	
BUS 167	1	CIS 258	3
<i>PROFESSIONALISM IN YOUR CAREER</i>		<i>ADVANCED HTML WEB DEVELOPMENT</i>	
BUS 220	3	CIS 267PHP	3
<i>E-BUSINESS</i>		<i>SERVER-SIDE WEB PROGRAMMING</i>	
		CIS 270A	3
		<i>ADVANCED RPG PROGRAMMING</i>	
		CIS 280	3
		<i>JAVA PROGRAMMING</i>	
		ELECTIVE	1
		TOTAL	62

PROGRAMS

*Students should see a counselor regarding Math requirements

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 228	3
<i>JAVASCRIPT</i>	
CIS 250	3
<i>DEVELOPING INFORMATION SYSTEMS</i>	
CIS 253A.....	3
<i>DATABASE DESIGN AND IMPLEMENTATION</i>	
CIS 257A.....	3
<i>HTML FOR INTERNET WEB DESIGN</i>	
CIS 280	3
<i>JAVA PROGRAMMING</i>	
	TOTAL 22

Midrange Programming Certificate

CERTIFICATE REQUIREMENTS	24 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 153A.....	1
<i>DATABASE MANAGEMENT-ACCESS</i>	
CIS 170	3
<i>RPG PROGRAMMING</i>	
CIS 250	3
<i>DEVELOPING INFORMATION SYSTEMS</i>	
CIS 253A.....	3
<i>DATABASE DESIGN AND IMPLEMENTATION</i>	
CIS 257A.....	3
<i>HTML FOR INTERNET WEB DESIGN</i>	
CIS 267PHP	3
<i>SERVER-SIDE WEB PROGRAMMING USING PHP</i>	
CIS 270A.....	3
<i>ADVANCED RPG PROGRAMMING</i>	
TOTAL 24	

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

GENERAL EDUCATION REQUIREMENTS	22 CR. HRS.	DEGREE REQUIREMENTS	22 CR. HRS.
ENG 101	3	CIS 104A.....	4
<i>ENGLISH COMPOSITION</i>		<i>INTRODUCTION TO NETWORKS (CISCO 1)</i>	
BCOM 102.....	3	CIS 105A.....	4
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>SWITCHING, ROUTING & WIRELESS (CISCO 2)</i>	
BUS 126.....	3	CIS 109A.....	2
<i>BUSINESS MATH</i>		<i>COMP TIA A+ PART A</i>	
CIS 120A.....	3	CIS 142	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>WINDOWS CLIENT ADMINISTRATION</i>	
HE 110	1	CIS 143A.....	3
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		<i>WINDOWS SERVER ADMIN I</i>	
PHIL 205.....	3	CIS 183	3
<i>BUSINESS ETHICS</i>		<i>NETWORKING TECHNOLOGIES</i>	
BUS 127.....	3	CIS 209A.....	3
<i>HUMAN RELATIONS</i>		<i>COMP TIA A+ PART B</i>	
COM 101	3	RECOMMENDED ELECTIVES	6 CR. HRS.
<i>ORAL COMMUNICATIONS</i>		BUS 166.....	3
ENTREPRENEUR CORE REQUIREMENTS	12 CR. HRS.	<i>QUALITY CUSTOMER SERVICE</i>	
BUS 131.....	1	BUS 220.....	3
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>		<i>E-BUSINESS</i>	
BUS 167.....	1	BUS 263.....	3
<i>PROFESSIONALISM IN YOUR CAREER</i>		<i>ADVERTISING DYNAMICS</i>	
BUS 223.....	4	BUS 290CL.....	1-4
<i>STARTING YOUR BUSINESS PLAN</i>		<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
BUS 240.....	3		
<i>ENTREPRENEURSHIP CAPSTONE</i>		TOTAL 62	
Choose One (1) Course From:	3		
<i>BUS 161A EFFECTIVE SELLING</i>			
<i>BUS 204 eMARKETING</i>			

Associate in Applied Science

Web Design

The Web Design AAS Degree is designed for students interested in careers which require extensive knowledge of the internet including web designers, web developers, internet content creators, online marketers and producers. Students receiving an AAS Degree in Web Design can create web sites, set up operational e-commerce sites, make effective use of web servers and are knowledgeable about the protocols and associated technologies used to transfer data across the Internet. They learn to work within wide-area networks and develop new web sites using video and graphics manipulation technologies, content management systems, HTML, CSS, JavaScript and PHP coding.

GENERAL EDUCATION REQUIREMENTS

20-22 CR. HRS.

BCOM 102.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>	
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
ENG 101.....	3
<i>ENGLISH</i>	
Choose One (1) Course From:.....	3-4
BUS 126 <i>BUSINESS MATH</i>	
MATH 109 <i>COLLEGE ALGEBRA WITH APPLICATIONS</i> <i>OR HIGHER LEVEL MATH COURSE</i>	
Choose One (1) Course From:.....	3
BUS 127 <i>HUMAN RELATIONS</i>	
COM 101 <i>ORAL COMMUNICATIONS</i>	
Choose One (1) Course From:.....	3-4
GEOG 104 <i>CULTURAL GEOGRAPHY</i>	
PHIL 205 <i>BUSINESS ETHICS</i>	
PSCI 111 <i>INTRO TO AMERICAN GOVERNMENT</i>	
PSCI 211 <i>COMPARATIVE GOVERNMENTS</i>	
PSYC 102 <i>APPLIED PSYCHOLOGY</i>	
PSYC 201 <i>GENERAL PSYCHOLOGY</i>	
PEA/DNC.....	2
<i>ONE CREDIT HOUR FROM: PEA 101A, PEA 103,</i> <i>PEA 104A, PEA 118, OR PEA 201 AND</i> <i>ONE PEA/DNC CREDIT HOUR OF CHOICE</i>	

BUSINESS CORE REQUIREMENTS

12 CR. HRS.

BUS 121.....	3
<i>INTRODUCTION TO BUSINESS</i>	
BUS 204.....	3
<i>E-MARKETING</i>	
BUS 220.....	3
<i>E-BUSINESS</i>	
BUS 260.....	3
<i>PRINCIPLES OF MARKETING</i>	

CAREER PROGRAM REQUIREMENTS

30 CR. HRS.

BUS 167.....	1
<i>PROFESSIONALISM IN YOUR CAREER</i>	
CIS 153A.....	1
<i>DATABASE MANAGEMENT-ACCESS</i>	
CIS 199.....	1
<i>INTERNET CONTENT MANAGEMENT SYSTEMS-CMS</i>	
CIS 228.....	3
<i>JAVASCRIPT</i>	
CIS 257A.....	3
<i>HTML FOR INTERNET WEB PAGE DESIGN</i>	
CIS 258.....	3
<i>ADVANCED HTML WEB DEVELOPMENT</i>	
CIS 267PHP.....	3
<i>SERVER-SIDE WEB PROGRAMMING USING PHP</i>	
CIS 287A.....	3
<i>DIGITAL VIDEO EDITING</i>	
GRD 102.....	3
<i>INTRODUCTION TO ILLUSTRATOR</i>	
GRD 103.....	3
<i>INTRODUCTION TO PHOTOSHOP</i>	
GRD 110.....	3
<i>PRINCIPLES OF DESIGN</i>	
GRD 120.....	3
<i>INTRODUCTION TO GRAPHIC DESIGN</i>	

TOTAL 62

Web Design Certificate

CERTIFICATE REQUIREMENTS	30 CR. HRS.
BUS 220.....	3
<i>E-BUSINESS</i>	
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
CIS 153A.....	1
<i>DATABASE MANAGEMENT-ACCESS</i>	
CIS 199.....	1
<i>INTERNET CONTENT MANAGEMENT SYSTEMS-CMS</i>	
CIS 228.....	3
<i>JAVASCRIPT</i>	
CIS 257A.....	3
<i>HTML FOR INTERNET WEB PAGE DESIGN</i>	
CIS 258.....	3
<i>ADVANCED HTML</i>	
CIS 267PHP.....	3
<i>SERVER-SIDE WEB PROGRAMMING USING PHP</i>	
GRD 102.....	3
<i>INTRODUCTION TO ILLUSTRATOR</i>	
GRD 110.....	3
<i>PRINCIPLES OF DESIGN</i>	
GRD 120.....	3
<i>INTRODUCTION TO GRAPHIC DESIGN</i>	
ELECTIVE.....	1

TOTAL 30

Associate in Applied Science

Web Game Development Entrepreneur

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

GENERAL EDUCATION REQUIREMENTS		18 CR. HRS.	DEGREE REQUIREMENTS		32 CR. HRS.
BCOM 102.....		3	BUS 108.....		3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			<i>INTRODUCTION TO PROJECT MANAGEMENT</i>		
CIS 120A.....		3	CIS 124.....		3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>			<i>INTRODUCTION TO GAME DEVELOPMENT</i>		
ENG 101.....		3	CIS 153A.....		1
<i>ENGLISH COMPOSITION</i>			<i>DATABASE MANAGEMENT-ACCESS</i>		
PHIL 205.....		3	CIS 185.....		3
<i>BUSINESS ETHICS</i>			<i>C PROGRAMMING</i>		
Choose One (1) Course From:.....		3	CIS 244.....		3
MATH 115A	<i>PROBABILITY AND STATISTICS</i>		<i>GAME SCRIPTING</i>		
	<i>OR HIGHER LEVEL MATH COURSE</i>		CIS 253A.....		3
Choose One (1) Course From:.....		3	<i>DATABASE DESIGN AND IMPLEMENTATION</i>		
BUS 127	<i>HUMAN RELATIONS</i>		CIS 257A.....		3
COM 101	<i>ORAL COMMUNICATIONS</i>		<i>HTML FOR INTERNET WEB PAGE DESIGN</i>		
			CIS 267PHP.....		3
			<i>SERVER-SIDE WEB PROGRAMMING USING PHP</i>		
ENTREPRENEUR CORE REQUIREMENTS	12 CR. HRS.		CIS 284.....		3
BUS 131.....		1	<i>INTERACTIVE MEDIA AND GAME DESIGN</i>		
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>			GRD 120.....		3
BUS 167.....		1	<i>INTRODUCTION TO GRAPHIC DESIGN</i>		
<i>PROFESSIONALISM</i>			Choose One (1) Course From:.....		3
BUS 223.....		4	ART 198	<i>ART HISTORY I</i>	
<i>STARTING YOUR BUSINESS PLAN</i>			BUS 290CI	<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
BUS 240.....		3	TH 102	<i>INTRO TO ACTING I</i>	
<i>ENTREPRENEURSHIP CAPSTONE</i>			ELECTIVE.....		1
Choose One (1) Course From:.....		3			
BUS 161A	<i>EFFECTIVE SELLING</i>				
BUS 204	<i>E-MARKETING</i>				
BUS 220	<i>E-BUSINESS</i>				
					TOTAL 62

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

GENERAL EDUCATION REQUIREMENTS	20 CR. HRS.	DEGREE REQUIREMENTS	30 CR. HRS.
BCOM 102.....	3	CIS 153A.....	1
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>DATABASE MANAGEMENT-ACCESS</i>	
CIS 120A.....	3	CIS 185.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		<i>C PROGRAMMING</i>	
ENG 101.....	3	CIS 199.....	1
<i>ENGLISH COMPOSITION</i>		<i>INTERNET CONTENT MANAGEMENT SYSTEMS-CMS</i>	
PHIL 205.....	3	CIS 228.....	3
<i>BUSINESS ETHICS</i>		<i>JAVASCRIPT</i>	
Choose One (1) Course From:.....	3	CIS 253A.....	3
BUS 126 <i>BUSINESS MATH</i>		<i>DATABASE DESIGN AND IMPLEMENTATION</i>	
MATH 115A <i>PROBABILITY AND STATISTICS</i>		CIS 257A.....	3
Choose One (1) Course From:.....	3	<i>HTML FOR INTERNET WEB PAGE DESIGN</i>	
BUS 127 <i>HUMAN RELATIONS</i>		CIS 258.....	3
COM 101 <i>ORAL COMMUNICATIONS</i>		<i>ADVANCED HTML WEB DEVELOPMENT</i>	
Choose One (1) Course From:.....	1	CIS 280.....	3
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201		<i>JAVA PROGRAMMING</i>	
Choose One (1) Course From:.....	1	CIS 267PHP.....	3
HE 110 <i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		<i>SERVER-SIDE WEB PROGRAMMING USING PHP</i>	
PEA/DNC <i>ANY PHYSICAL EDUCATION OR DANCE COURSE</i>		GRD 120.....	3
		<i>INTRODUCTION TO GRAPHIC DESIGN</i>	
		BUS 204.....	3
		<i>eMARKETING</i>	
ENTREPRENEUR CORE REQUIREMENTS	12 CR. HRS.	ELECTIVE.....	1
BUS 131.....	1		
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>			
BUS 167.....	1		
<i>PROFESSIONALISM IN YOUR CAREER</i>			
BUS 220.....	3		
<i>E-BUSINESS</i>			
BUS 223.....	4		
<i>STARTING YOUR BUSINESS PLAN</i>			
BUS 240.....	3		
<i>ENTREPRENEURSHIP CAPSTONE</i>			
			TOTAL 62

Associate in Applied Science

Graphic Design

The graphic design curriculum is a career-focused program designed to help students combine creativity with technology to create effective and memorable visual messaging. Students develop skills in understanding the principles of graphic design, ideation, and mastery of production techniques through specific software classes for print and web. Students work independently and in groups formulating, executing, and presenting concepts in a variety of formats. This program is appropriate for students who wish to enhance their skills, or retrain for new or added job skills to enter the job market. The curriculum combines foundational concepts with hands-on projects, culminating in the assembly of a professional portfolio. Graduates may find work with design firms, advertising agencies, publishing and printing firms, media companies, or businesses with in-house design departments.

GENERAL EDUCATION REQUIREMENTS

	15 CR. HRS.
ENG 101	3
<i>ENGLISH COMPOSITION</i>	
BCOM 102	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>	
BUS 127	3
<i>HUMAN RELATIONS</i>	
SOC 101	3
<i>PRINCIPLES OF SOCIOLOGY</i>	
TMAT 101A	3
<i>TECHNICAL MATH I</i>	

GRAPHIC DESIGN REQUIREMENTS

	30 CR. HRS.
GRD 101	3
<i>INTRODUCTION TO INDESIGN</i>	
GRD 102	3
<i>INTRODUCTION TO ILLUSTRATOR</i>	
GRD 103	3
<i>INTRODUCTION TO PHOTOSHOP</i>	
GRD 110	3
<i>PRINCIPLES OF DESIGN</i>	
GRD 120	3
<i>INTRODUCTION TO 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 280	3
<i>PORTFOLIO PREPARATION</i>	
Choose One (1) Course From	3
<i>GRD 290C13 GRAPHIC DESIGN INTERNSHIP</i>	
<i>GRD 292 GRAPHIC DESIGN STUDIO M</i>	

RELATED REQUIREMENTS

	15 CR. HRS.
ART 104	3
<i>DRAWING I</i>	
ART 199	3
<i>ART HISTORY II</i>	
BUS 260	3
<i>PRINCIPLES OF MARKETING</i>	
CIS 120A	3
<i>INTRODUCTION TO COMPUTER INFO SYSTEMS</i>	
CIS 257A	3
<i>HTML FOR INTERNET WEB PAGE DESIGN</i>	

RECOMMENDED ELECTIVES

	2-3 CR. HRS.
(Take 2-3 credits of any of the following courses)	
ART 100A	3
<i>ART APPRECIATION</i>	
ART 105B	3
<i>TWO-DIMENSIONAL FORM AND SURFACE</i>	
BUS 131	1
<i>INTRO TO ENTREPRENEURSHIP</i>	
BUS 167	1
<i>PROFESSIONALISM IN YOUR CAREER</i>	
BUS 220	3
<i>E-BUSINESS</i>	
BUS 263	3
<i>ADVERTISING DYNAMICS</i>	
CIS 119PP	1
<i>INTRODUCTION TO PRESENTATION GRAPHICS</i>	
CIS 199	1
<i>INTERNET CONTENT MANAGEMENT SYSTEMS-CMS</i>	

TOTAL 62

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

Associate in Applied Science

Graphic Design Entrepreneur

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

GENERAL EDUCATION REQUIREMENTS	18 CR. HRS.	DEGREE REQUIREMENTS	32 CR. HRS.
ENG 101 <i>ENGLISH</i>	3	BUS 263	3
BCOM 102 <i>ADVANCED BUS AND TECH COMMUNICATIONS</i>	3	<i>ADVERTISING DYNAMICS</i>	
BUS 126 <i>BUSINESS MATH</i>	3	CIS 257A <i>HTML FOR INTERNET WEB PAGE DESIGN</i>	3
CIS 120A <i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	3	GRD 101 <i>INTRODUCTION TO INDESIGN</i>	3
PHIL 205 <i>BUSINESS ETHICS</i>	3	GRD 102 <i>INTRODUCTION TO ILLUSTRATOR</i>	3
Choose One (1) Course From:	3	GRD 103 <i>INTRODUCTION TO PHOTOSHOP</i>	3
BUS 127 <i>HUMAN RELATIONS</i>		GRD 110 <i>PRINCIPLES OF DESIGN</i>	3
COM 101 <i>ORAL COMMUNICATIONS</i>		GRD 120 <i>INTRODUCTION TO GRAPHIC DESIGN</i>	3
ENTREPRENEUR CORE REQUIREMENTS	12 CR. HRS.	GRD 140 <i>INTRODUCTION TO TYPOGRAPHY</i>	3
BUS 131 <i>INTRODUCTION TO ENTREPRENEURSHIP</i>	1	GRD 210 <i>GRAPHIC DESIGN II</i>	3
BUS 167 <i>PROFESSIONALISM</i>	1	GRD 280 <i>PORTFOLIO PREPARATION</i>	3
BUS 223 <i>STARTING YOUR BUSINESS PLAN</i>	4	Choose One (1) Course From	2-3
BUS 240 <i>ENTREPRENEURSHIP CAPSTONE</i>	3	GRD 290C12 <i>GRAPHIC DESIGN INTERNSHIP</i>	
Choose One (1) Course From:	3	GRD 292 <i>GRAPHIC DESIGN STUDIO M</i>	
BUS 161A <i>EFFECTIVE SELLING</i>			
BUS 220 <i>E-BUSINESS</i>			
BUS 204 <i>E-MARKETING</i>			
		TOTAL 62-63	

PROGRAMS

Graphic Design Video/Audio Certificate

The curriculum is designed to provide students with a broad multi-media skillset. Students will combine traditional graphic design and typography principles through application projects, with exposure to technical skills gained in computer, video, and audio development and production. This program provides students with pertinent knowledge to enter the communications field.

Transfer paths and requirements: This program is not designed for students wishing to transfer to a four-year college for a bachelor's degree. Students planning to transfer should consult with an MCC counselor. This is intended to go directly into the workforce.

CERTIFICATE REQUIREMENTS	26 CR. HRS.
BUS 123.....	3
<i>BUSINESS LAW</i>	
CIS 287A.....	3
<i>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 110	3
<i>PRINCIPLES OF DESIGN</i>	
GRD 120	3
<i>INTRODUCTION TO GRAPHIC DESIGN</i>	
GRD 140	3
<i>INTRODUCTION TO TYPOGRAPHY</i>	
Choose One (1) Course From:	3
CIS 110 <i>COMPUTER CONCEPTS</i>	
CIS 120A <i>INTRO TO COMPUTERS INFORMATION</i> <i>SYSTEMS</i>	

TOTAL 26

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

GENERAL EDUCATION REQUIREMENTS		20 CR. HRS.	DEGREE REQUIREMENTS	30 CR. HRS.
ENG 101		3	MU 101	3
<i>ENGLISH COMPOSITION</i>			<i>MUSIC THEORY</i>	
BCOM 102		3	MU 103A	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			<i>MUSIC APPRECIATION</i>	
CIS 120A		3	MU 194	1
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>			<i>SIGHT-READING AND EAR TRAINING</i>	
PHIL 205		3	MU 240	3
<i>BUSINESS ETHICS</i>			<i>PROFESSIONAL PRACTICES IN MUSIC</i>	
Choose One (1) Course From:		3	Performance/Ensemble	4
BUS 126 <i>BUSINESS MATH</i>			<i>ANY MU PERFORMANCE/ENSEMBLE COURSES</i>	
MATH 115A <i>PROBABILITY AND STATISTICS</i>			Choose One (1) Course From:	3
Choose One (1) Course From:		3	MU 100 <i>INTRODUCTION TO MUSIC THEORY</i>	
BUS 127 <i>HUMAN RELATIONS</i>			**MU 102 <i>MUSIC THEORY</i>	
COM 101 <i>ORAL COMMUNICATIONS</i>			Choose One (1) Course From:	3
Choose One (1) Course From:		1	MU 190A <i>CLASS PIANO FOR MUSIC MAJORS</i>	
HE 110 <i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>			MU 190B <i>CLASS PIANO (NON-MUSIC MAJORS)</i>	
PEA/DNC <i>ANY PHYSICAL EDUCATION OR DANCE COURSE</i>			APPLIED MUSIC OPTIONS	
Choose One (1) Course From:		1	Choose One (1) of the following options:	8
PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201			OPTION 1	
ENTREPRENEUR CORE REQUIREMENTS	12 CR. HRS.		<i>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</i>	
BUS 131		1	OPTION 2	
<i>INTRODUCTION TO ENTREPRENEURSHIP</i>			<i>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</i>	
BUS 167		1	OPTION 3	
<i>PROFESSIONALISM</i>			<i>ANY EIGHT COURSES WITH A SECONDARY INSTRUMENT FROM MU 127 TO MU 147</i>	
BUS 223		4	ELECTIVES	3 CR. HRS.
<i>STARTING YOUR BUSINESS PLAN</i>			<i>ANY MU COURSE NOT TAKEN ABOVE</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>				
BUS 204 <i>eMARKETING</i>				
				TOTAL 62

** If taking MU 102, choose MU 191A and MU 195 as MU electives.

Associate in Applied Science

Visual Art Entrepreneur

This degree program provides Visual Art students with the basic skills for a variety of entrepreneurial avenues such as self-employed artist, art promoter, gallery representative, or commercial art gallery owner/director. Along with acquiring practical business concepts, the student also develops basic hands-on skills through a variety of two and three-dimensional studio experiences traditionally associated with foundation-level undergraduate art degrees. Study in art from historical and contemporary viewpoints to help gain insights into the cultural significance of art and the interrelationship of art and society is also stressed. The student then concludes the degree with an overview of professional practices in art and further hands-on experience in gallery/museum operations. Students completing this program are made aware of many of the challenges they will face when starting and operating a business.

GENERAL EDUCATION REQUIREMENTS	20 CR. HRS.	DEGREE REQUIREMENTS	30 CR. HRS.
ENG 101 <i>ENGLISH COMPOSITION</i>	3	ART 104 <i>DRAWING I</i>	3
BCOM 102 <i>ADVANCED BUS AND TECH COMMUNICATIONS</i>	3	ART 105B <i>TWO-DIMENSIONAL FORM AND SURFACE</i>	3
BUS 126 <i>BUSINESS MATH</i>	3	ART 198 <i>ART HISTORY I</i>	3
CIS 120A <i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	3	ART 199 <i>ART HISTORY II</i>	3
HE 110 <i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>	1	ART 202 <i>CONTEMPORARY ART HISTORY</i>	3
PHIL 205 <i>BUSINESS ETHICS</i>	3	ART 204B <i>DRAWING II-TRANSFER PORTFOLIO PREPARATION</i>	3
Choose One (1) Course From: <i>BUS 127 HUMAN RELATIONS</i> <i>COM 101 ORAL COMMUNICATIONS</i>	3	ART 240 <i>PROFESSIONAL PRACTICES IN ART</i>	3
Choose One (1) Course From: <i>PEA 101A, PEA 103, PEA 104A, PEA 118, OR PEA 201</i>	1	ART 250 <i>GALLERY/COLLECTION PRACTICUM</i>	3
		ART 290CI <i>ART COOPERATIVE INTERNSHIP</i>	3
ENTREPRENEUR CORE REQUIREMENTS	12 CR. HRS.	Choose One (1) Course From: <i>ART 108 CERAMICS I</i> <i>ART 109 SCULPTURE I</i> <i>ART 117 THREE-DIMENSIONAL FORM AND SPACE</i>	3
BUS 131 <i>INTRODUCTION TO ENTREPRENEURSHIP</i>	1		
Choose One (1) Course From: <i>BUS 161A EFFECTIVE SELLING</i> <i>BUS 220 E-BUSINESS</i> <i>BUS 204 eMARKETING</i>	3		
BUS 167 <i>PROFESSIONALISM</i>	1		
BUS 223 <i>STARTING YOUR BUSINESS PLAN</i>	4		
BUS 240 <i>ENTREPRENEURSHIP CAPSTONE</i>	3		
		TOTAL 62	

Corrections Certificate

OPTION I

Corrections Certificate

The MCC Criminal Justice Corrections Certificate is designed to include the five classes that are required by the Michigan Correctional Training Council. The MI Correctional Training Council states that these classes must be taken in order to qualify for employment with the Michigan Department of Corrections. Each of these classes must be completed with a grade of “C” (2.0 GPA) in order to get the certificate and qualify for MDOC employment.

MCC CORRECTIONS PROGRAM	18 CR. HRS.
CJ 1013	
<i>INTRODUCTION TO LAW ENFORCEMENT</i>	
CJ 2503	
<i>INTRODUCTION TO CORRECTIONS</i>	
CJ 251A.....3	
<i>LEGAL ISSUES IN CORRECTIONS</i>	
CJ 252A.....3	
<i>CORRECTIONAL INSTITUTIONS/FACILITIES</i>	
CJ 2573	
<i>CLIENT RELATIONS IN CORRECTIONS</i>	
CJ 258A.....3	
<i>CLIENT GROWTH AND DEVELOPMENT</i>	
	TOTAL 18

OPTION II

Completion of 15 semester (23 term) college credits in one or a combination of the following: correctional administration, criminal justice, criminology, psychology, social work, sociology, counseling and guidance, educational psychology, family relations, pastoral counseling, or law enforcement. Students should check the Michigan Department of Corrections website for current and specific requirements.

OPTION III

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

Associate in Applied Science

Criminal Justice/Corrections

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

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

Associate in Applied Science

Criminal Justice/Law Enforcement

GENERAL EDUCATION REQUIREMENTS		20-22 CR. HRS.	LAW ENFORCEMENT REQUIREMENTS		15 CR. HRS.
ENG 101		3	CJ 202		3
<i>ENGLISH COMPOSITION</i>			<i>POLICE ADMINISTRATION II</i>		
BCOM 102		3	CJ 204		3
<i>ADVANCED BUS & TECH COMMUNICATIONS</i>			<i>CRIMINAL INVESTIGATIONS</i>		
Choose One (1) Course From:		3-4	CJ 205		3
BUS 126	<i>BUSINESS MATH</i>		<i>INTERROGATION AND CASE PREPARATION</i>		
MATH 109	<i>COLLEGE ALGEBRA WITH APPLICATIONS</i>		CJ 206		3
MATH 115A	<i>PROBABILITY AND STATISTICS</i>		<i>EVIDENCE AND CRIMINAL PROCEDURE</i>		
Choose One (1) Course From:		3	CJ 207		3
BUS 127	<i>HUMAN RELATIONS</i>		<i>POLICE AND COMMUNITY RELATIONS</i>		
COM 101	<i>ORAL COMMUNICATIONS</i>		RECOMMENDED ELECTIVES		
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>		
CRIMINAL JUSTICE REQUIREMENTS		15 CR. HRS.	CJ 193		1
CJ 101		3	<i>HAZ-MAT COMMUNICATIONS</i>		
<i>INTRO TO LAW ENFORCEMENT</i>			CJ 208		3
CJ 102		3	<i>POLICE SCIENCE LABORATORY I</i>		
<i>POLICE ADMINISTRATION I</i>			CJ 250		3
CJ 104		3	<i>INTRODUCTION TO CORRECTIONS</i>		
<i>CRIMINOLOGY</i>			CJ 251A		3
CJ 109		3	<i>LEGAL ISSUES IN CORRECTIONS</i>		
<i>CRIME PREVENTION AND JUVENILE DELINQUENCY</i>			CJ 252A		3
CJ 201		3	<i>CORRECTIONAL INSTITUTIONS/FACILITIES</i>		
<i>CRIMINAL LAW</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>		
			TOTAL 62		

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

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/Office Management
- ◆ Administrative/Office Management-Medical

Certificates

- ◆ Administrative Medical Assistant
- ◆ Office Assistant

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

AH 196

ELECTRONIC HEALTH RECORDS

BUS 179

KEYBOARDING

BUS 180D

WORD PROCESSING PART I

BUS 181C

OFFICE PROCEDURES I: DOCUMENT FORMATTING

BUS 182C

OFFICE PROCEDURES II: DOCUMENT PRODUCTION

BUS 195

MEDICAL RECORDS MANAGEMENT

BUS 280C

WORD PROCESSING PART II

CIS 101EW

INTRODUCTION TO ELECTRONIC SPREADSHEETS

CIS 102EW

INTERMEDIATE ELECTRONIC SPREADSHEETS

CIS 115WW

INTRODUCTION TO WORD PROCESSING

CIS 119PP

INTRODUCTION TO PRESENTATION GRAPHICS

Associate in Applied Science

Administrative/Office Management

This program is for the AAS degree student and 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 skills 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. This degree will also prepare the student to supervise and manage a small to mid-size office. 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; effectively supervise, organize, and lead employees in the office environment; and demonstrate critical thinking skills as they relate to the administrative/office manager.

PROGRAMS

GENERAL EDUCATION REQUIREMENTS

18 CR. HRS.

ENG 101	3
<i>ENGLISH COMPOSITION</i>	
BCOM 102.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>	
BUS 126.....	3
<i>BUSINESS MATH</i>	
Choose One (1) Course From:	3
BUS 127 <i>HUMAN RELATIONS</i>	
COM 101 <i>ORAL COMMUNICATIONS</i>	
CIS 120A.....	3
<i>INTRODUCTION TO COMPUTER INFORMATION SYSTEMS</i>	
PHIL 205.....	3
<i>BUSINESS ETHICS</i>	

TOTAL 18

BUSINESS/CSE CORE REQUIREMENTS

9 CR. HRS.

ACC 100	3
<i>FUNDAMENTALS IN ACCOUNTING</i>	
BUS 121.....	3
<i>INTRODUCTION TO BUSINESS</i>	
BUS 180D.....	3
<i>WORD PROCESSING PART I</i>	

TOTAL 9

ADMINISTRATIVE ASSISTANT/SPECIALIST

CORE REQUIREMENTS

29-30 CR. HRS.

ACC 206	3
<i>QUICKBOOKS COMPUTERIZED ACCOUNTING</i>	
BUS 123.....	3
<i>BUSINESS LAW</i>	
BUS 125.....	3
<i>SUPERVISION</i>	
BUS 167.....	1
<i>PROFESSIONALISM IN YOUR CAREER</i>	
BUS 179.....	1
<i>KEYBOARDING</i>	
BUS 181C.....	3
<i>OFFICE PROCEDURES I: DOCUMENT FORMATTING</i>	
BUS 182C.....	3
<i>OFFICE PROCEDURES I: DOCUMENT PRODUCTION</i>	
BUS 280C.....	3
<i>WORD PROCESSING II</i>	

BUS 290CI.....	2-3
<i>COOPERATIVE INTERNSHIP PROGRAM</i>	
CIS 101EW.....	1
<i>INTRODUCTION TO ELECTROIC SPREADSHEETS</i>	
CIS 102EW.....	1
<i>INTERMEDIATE ELECTROIC SPREADSHEETS</i>	
CIS 106.....	3
<i>GOOGLE APPS</i>	
CIS 119PP.....	1
<i>INTRODUCTION TO PRESENTATION GRAPHICS</i>	
CIS 153AW.....	1
<i>DATABASE MANAGEMENT - ACCESS</i>	

TOTAL 29-30

RECOMMENDED ELECTIVES (DEPENDENT ON INDIVIDUAL STUDENT TO MEET 62 CREDIT HOUR MINIMUM)

BUS 123.....	3
<i>BUSINESS LAW I</i>	
BUS 166.....	3
<i>QUALITY CUSTOMER SERVICE</i>	
BUS 200.....	3
<i>INTERNATIONAL BUSINESS</i>	
BUS 220.....	3
<i>E-BUSINESS</i>	
ECON 101A.....	4
<i>PRINCIPLES OF MACROECONOMICS</i>	

TOTAL 62

Associate in Applied Science

Administrative/Office Management Medical

This program is for the AAS degree student and 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 with specialized medical office skills. This includes the ability to manage administrative support staff of a small medical practice. 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 relates to the medical/legal, professional and bio-ethical standards and laws; define and use terms related to the administrative medical office; operate computer systems/software or other types of technology to accomplish office tasks; effectively supervise, organize, and lead employees in a medical office environment; and demonstrate problem solving skills as related to the management of employees.

GENERAL EDUCATION REQUIREMENTS

	18 CR. HRS.
ENG 101	3
<i>ENGLISH COMPOSITION</i>	
BCOM 102.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>	
BUS 126.....	3
<i>BUSINESS MATH</i>	
Choose One (1) Course From:	3
BUS 127 <i>HUMAN RELATIONS</i>	
COM 101 <i>ORAL COMMUNICATIONS</i>	
CIS 120A.....	3
<i>INTRODUCTION TO COMPUTER INFORMATION SYSTEMS</i>	
Choose One (1) Course From:	3
PHIL 204 <i>BIOMEDICAL ETHICS</i>	
PHIL 205 <i>BUSINESS ETHICS</i>	
PSYC 102 <i>APPLIED PSYCHOLOGY</i>	

TOTAL 18

BUSINESS/TECHNOLOGY CORE REQUIREMENTS

	9 CR. HRS.
ACC 100	3
<i>FUNDAMENTALS IN ACCOUNTING</i>	
BUS 121.....	3
<i>INTRODUCTION TO BUSINESS</i>	
BUS 180D.....	3
<i>WORD PROCESSING PART I</i>	

TOTAL 9

MEDICAL/ADMINISTRATIVE DEGREE CORE REQUIREMENTS

35 CR. HRS.

ACC 206	3
<i>QUICKBOOKS COMPUTERIZED ACCOUNTING</i>	
AH 101	3
<i>MEDICAL TERMINOLOGY</i>	
AH 104.....	2
<i>MEDICAL BILLING</i>	
AH 196.....	3
<i>ELECTRONIC HEALTH RECORDS</i>	
BIOL 115.....	4
<i>INTRODUCTION TO ANATOMY AND PHYSIOLOGY</i>	
BUS 125.....	3
<i>SUPERVISION</i>	
BUS 167.....	1
<i>PROFESSIONALISM IN YOUR CAREER</i>	
BUS 179.....	1
<i>KEYBOARDING</i>	
BUS 181C.....	3
<i>OFFICE PROCEDURES I: DOCUMENT FORMATTING</i>	
BUS 195.....	3
<i>MEDICAL RECORDS MANAGEMENT</i>	
Choose One (1) Course From:	3
BUS 280C <i>WORD PROCESSING PART II</i>	
CIS 106 <i>GOOGLE APPS</i>	
CIS 101EW	1
<i>INTRO TO ELECTRONIC SPREADSHEETS</i>	
MA 101	3
<i>MEDICAL ASSISTANT ADMINISTRATIVE I</i>	
MA 105.....	2
<i>MEDICAL ASSISTANT ADMINISTRATIVE II</i>	

TOTAL 35

RECOMMENDED ELECTIVES (IF BUS 179 KEYBOARDING IS WAIVED)

BUS 290CI.....	2
<i>COOPERATIVE INTERNSHIP PROGRAM</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>	

TOTAL 62

PROGRAMS

Administrative Medical Assistant Certificate

The following certificate is designed to provide training to meet entry level positions in a medical office administrative position. Job titles include medical receptionist, registration clerk, scheduling clerk, business office coordinator, and patient access representative. Upon completion of the program, the student will be able to successfully recognize the importance of safeguarding confidentiality as it relates to medical/legal, professional and bio-ethical standards and laws, define and use terms related to the administrative medical office; and operate basic computer systems/software.

Medical Administrative Assistants manage the front desk and office side of the medical practice. Job duties may include checking patients in and out at the front desk, answering the telephone, scheduling patients for appointments, compiling medical records and charts, using computer software, and maintaining supplies for the office.

This certificate 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 certificate flows directly into the Administrative/Office Management - Medical, AAS degree. Students are eligible to sit for the Certified Medical Administrative Assistant (CMAA) exam through the National Healthcareer Association upon completion of the program.

*Students wishing to continue on to receive a Medical Assistant Certificate, or switch to the Medical Assistant Certificate after taking MA101 and MA105, will have to retest their skills for those two courses and a fee will apply (testing must occur within two years of taking the course). **students taking BUS179 must achieve 35 wpm on a three-minute timing in order to achieve a certificate to enter the medical assistant program. For more information, consult with the MA Program Coordinator.

CERTIFICATE REQUIREMENTS 32-33 CR. HRS.

AH 101	3
<i>MEDICAL TERMINOLOGY</i>	
AH 104	2
<i>MEDICAL INSURANCE BILLING</i>	
AH 196	3
<i>ELECTRONIC HEALTH RECORD</i>	
BIOL 115	4
<i>INTRODUCTION TO ANATOMY & PHYSIOLOGY</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 195	3
<i>MEDICAL RECORDS MANAGEMENT</i>	
CIS 120A	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
ENG 101	3
<i>ENGLISH COMPOSITION</i>	
MA 101	3
<i>MEDICAL ASSISTANT ADMINSTRATIVE I</i>	
MA 105	2
<i>MEDICAL ASSISTANT ADMINSTRATIVE II</i>	

TOTAL 32-33

Office Assistant Certificate

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

CERTIFICATE REQUIREMENTS **30 CR. HRS.**

Fall (12 credits)

BUS 167.....	1
<i>PROFESSIONALISM IN YOUR CAREER</i>	
BUS 179.....	1
<i>KEYBOARDING</i>	
CIS 106.....	3
<i>GOOGLE APPS</i>	
CIS 119PP.....	1
<i>INTRODUCTION TO PRESENTATION GRAPHICS</i>	
CIS 120A.....	3
<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
ENG 101.....	3
<i>ENGLISH COMPOSITION</i>	

Winter (12 credits)

BCOM 102.....	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>	
BUS 180D.....	3
<i>WORD PROCESSING PART I</i>	
BUS 181C.....	3
<i>OFFICE PROCEDURES I: DOCUMENT FORMATTING</i>	
CIS 101EW.....	1
<i>INTRODUCTION TO ELECTRONIC SPREADSHEETS</i>	
CIS 102EW.....	1
<i>INTERMEDIATE ELECTRONIC SPREADSHEETS</i>	
CIS 153A.....	1
<i>DATABASE MANAGEMENT-ACCESS</i>	

Fall or Summer (6 credits)

BUS 182C.....	3
<i>OFFICE PROCEDURES II: DOCUMENT PRODUCTION</i>	
BUS 280C.....	3
<i>WORD PROCESSING PART II</i>	

TOTAL 30

Education Programs

(Degrees and Certificates)

Degree Programs

- ♦ Child Development Associate
- ♦ Instructional Assistant, Special Education
- ♦ Teacher Aide
- ♦ Early Childhood Education

Certificates

- ♦ Child Development Associate
- ♦ Infant-Toddler Development Associate

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

Students are focused on understanding the development of children from birth to eight years of age through hands-on practical fieldwork and classroom instruction. An emphasis will be placed on an anti-bias curriculum covering the physical, intellectual, emotional and social domains of development. Students will be prepared for the Child Development Associate (CDA) assessment process, as part of the national credential recognized by the Council for Early Childhood Professional Recognition. The degree prepares students to be preschool teachers, child care center directors, Head Start teachers, teacher aides and classroom assistants. This program is intended for direct employment into the field of early childhood education.

GENERAL EDUCATION REQUIREMENTS

	20-22 CR. HRS.
ENG 101	3
<i>ENGLISH COMPOSITION</i>	
BCOM 102	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>	
Choose One (1) Course From:	3-4
BUS 126 <i>BUSINESS MATH</i>	
MATH 105 <i>MATH FOR ELEMENTARY TEACHERS</i>	
Choose One (1) Course From:	3
BUS 127 <i>HUMAN RELATIONS</i>	
COM 101 <i>ORAL COMMUNICATIONS</i>	
Choose One (1) Course From:	3
CIS 110 <i>COMPUTER CONCEPTS</i>	
CIS 120A <i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
Choose One (1) Course From:	3-4
GEOG 104 <i>CULTURAL GEOGRAPHY</i>	
PHIL 205 <i>BUSINESS ETHICS</i>	
PSCI 111 <i>INTRO TO AMERICAN GOVERNMENT</i>	
PSCI 211 <i>COMPARATIVE GOVERNMENTS</i>	
PSYC 102 <i>APPLIED PSYCHOLOGY</i>	
PSYC 201 <i>GENERAL PSYCHOLOGY</i>	
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

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>	

RECOMMENDED ELECTIVES

11-13 CR. HRS.

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 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 234	3
<i>EDUCATION PSYCHOLOGY</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>	
SOC 101	3
<i>PRINCIPLES OF SOCIOLOGY</i>	
TH 108	3
<i>THEATER FOR CHILDREN</i>	

TOTAL 62

Total Fieldwork Hours: 480

Child Development Associate Certificate

(Center-Based Preschool)

CERTIFICATE REQUIREMENTS	20 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 220A.....	2
<i>EARLY CHILDHOOD ASSESSMENT</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 20	

*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

PROGRAMS

Infant-Toddler Development Associate Certificate

CERTIFICATE REQUIREMENTS	20 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 220A.....	2
<i>EARLY CHILDHOOD ASSESSMENT</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 20

*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

PROGRAMS

Associate in Applied Science

Instructional Assistant, Special Education

GENERAL EDUCATION REQUIREMENTS	20-22 CR. HRS.	RECOMMENDED ELECTIVES	10-12 CR. HRS.
ENG 101	3	CSS 100A	3
<i>ENGLISH COMPOSITION</i>		<i>COLLEGE SUCCESS SEMINAR</i>	
BCOM 102	3	ED 118	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>CREATIVE CURRICULUM FOR CHILDREN</i>	
Choose One (1) Course From:	3-4	ED 219	3
BUS 126 <i>BUSINESS MATH</i>		<i>SCIENCE IN THE ELEMENTARY CLASSROOM</i>	
MATH 105 <i>MATH FOR ELEMENTARY TEACHERS</i>		ED 220A	3
Choose One (1) Course From:	3	<i>EARLY CHILDHOOD ASSESSMENT</i>	
BUS 127 <i>HUMAN RELATIONS</i>		ED 251	3
COM 101 <i>ORAL COMMUNICATIONS</i>		<i>HEALTH NEEDS OF THE YOUNG CHILD</i>	
Choose One (1) Course From:	3	HE 100A	2
CIS 110 <i>COMPUTER CONCEPTS</i>		<i>COMMUNITY FIRST AID AND SAFETY</i>	
CIS 120A <i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		MATH 100A (Formerly MATH 050)	4
Choose One (1) Course From:	3-4	<i>INTERMEDIATE ALGEBRA</i>	
GEOG 104 <i>CULTURAL GEOGRAPHY</i>		MU 192	4
PHIL 205 <i>BUSINESS ETHICS</i>		<i>MUSIC FOR THE CLASSROOM TEACHER</i>	
PSCI 111 <i>INTRO TO AMERICAN GOVERNMENT</i>		SOC 101	3
PSCI 211 <i>COMPARATIVE GOVERNMENTS</i>		<i>PRINCIPLES OF SOCIOLOGY</i>	
PSYC 102 <i>APPLIED PSYCHOLOGY</i>		TH 108	3
PSYC 201 <i>GENERAL PSYCHOLOGY</i>		<i>THEATER FOR CHILDREN</i>	
PEA/DNC	2	TOTAL 62	
<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	30 CR. HRS.		
ED 101A	3		
<i>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 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 234	3		
<i>EDUCATIONAL PSYCHOLOGY</i>			
ED 272	3		
<i>EDUCATION PRACTICUM</i>			
Choose One (1) Course From:	3		
ED 225 <i>CHILD DEVELOPMENT</i>			
ED 250 <i>HUMAN GROWTH AND LEARNING</i>			

Total Fieldwork Hours: 480

PROGRAMS

Associate in Applied Science

Teacher Aide

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

GENERAL EDUCATION REQUIREMENTS	20-22 CR. HRS.	RECOMMENDED ELECTIVES	13-15 CR. HRS.
ENG 101	3	CSS 100A.....	3
<i>ENGLISH COMPOSITION</i>			
BCOM 102.....	3	ED 118	3
<i>ADVANCED BUS AND TECH COMMUNICATIONS</i>			
Choose One (1) Course From:	3-4	ED 216	3
BUS 126 <i>BUSINESS MATH</i>		<i>EDUCATING THE EXCEPTIONAL CHILD AND YOUNG ADULT</i>	
MATH 105 <i>MATH FOR ELEMENTARY TEACHERS</i>		ED 219	3
Choose One (1) Course From:	3	<i>SCIENCE IN THE ELEMENTARY CLASSROOM</i>	
BUS 127 <i>HUMAN RELATIONS</i>		ED 251	3
COM 101 <i>ORAL COMMUNICATIONS</i>		<i>HEALTH NEEDS OF THE YOUNG CHILD</i>	
Choose One (1) Course From:	3	MATH 100A (Formerly MATH 050).....	4
CIS 110 <i>COMPUTER CONCEPTS</i>		<i>INTERMEDIATE ALGEBRA</i>	
CIS 120A <i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>		MU 192	4
Choose One (1) Course From:	3-4	<i>MUSIC FOR THE CLASSROOM TEACHER</i>	
GEOG 104 <i>CULTURAL GEOGRAPHY</i>		SOC 101	3
PHIL 205 <i>BUSINESS ETHICS</i>		<i>PRINCIPLES OF SOCIOLOGY</i>	
PSCI 111 <i>INTRO TO AMERICAN GOVERNMENT</i>		TH 108	3
PSCI 211 <i>COMPARATIVE GOVERNMENTS</i>		<i>THEATER FOR CHILDREN</i>	
PSYC 102 <i>APPLIED PSYCHOLOGY</i>			
PSYC 201 <i>GENERAL PSYCHOLOGY</i>			
PEA/DNC	2		TOTAL 62
<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	27 CR. HRS.		
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 234	3		
<i>EDUCATIONAL PSYCHOLOGY</i>			
ED 272	3		
<i>EDUCATION PRACTICUM</i>			
Choose One (1) Course From:	3		
ED 225 <i>CHILD DEVELOPMENT</i>			
ED 250 <i>HUMAN GROWTH AND LEARNING</i>			

Total Fieldwork Hours: 480

PROGRAMS

Applied Technology Programs

(Degrees and Certificates)

STUDENTS MUST WEAR APPROVED SAFETY GLASSES WHERE HAZARDS EXIST.

AAS Degree Programs

- ♦ Agriculture
- ♦ Automotive Technology
- ♦ Biomedical Engineering Technology
- ♦ CAD/CNC
- ♦ Computer-Aided Drafting and Design
- ♦ Electronics Engineering Technology
- ♦ Engineering Technology
- ♦ Food Processing Technology
- ♦ Machining Technology
- ♦ Manufacturing Technology
- ♦ Welding Technology

Certificates

- ♦ Apprenticeship Certificate
- ♦ Automotive Technician Certificate
- ♦ CAD/CNC Certificate
- ♦ Computer-Aided Drafting and Design Certificate
- ♦ Electronics Technology Certificate
- ♦ Food Science Certificate
- ♦ Industrial Electricity Certificate
- ♦ Machining Technology Certificate
- ♦ Manufacturing Automation Certificate
- ♦ Manufacturing Machine Repair Certificate (Industrial Maintenance)
- ♦ Manufacturing Technology Certificate
- ♦ Mechatronics Certificate
- ♦ Patternmakers Certificate
- ♦ Quality Assurance Certificate
- ♦ Welding Technology Certificate

Alternative & Renewable Energy Certificates

- ♦ Wind & Solar Certificate

Agriculture AAS Degree

The MCC curriculum, paired with courses within a particular Michigan State University Certificate Program, prepares students for entry-level employment in agricultural operations. Students will earn an MSU certificate while also working towards an associate's degree. There are three available certificates from which to choose, listed following the MCC degree requirements. MSU Transfer Students: Students wishing to transfer to MSU as juniors must meet with the program coordinator during their first semester to alter general education courses to meet MSU requirements.

GENERAL EDUCATION REQUIREMENTS*	23-24 CR. HRS.	APPROVED ELECTIVES	5-9 MINIMUM CR. HRS.
Choose 2-Courses From:	6	<i>Electives must be chosen from the following list:</i>	
ENG 101 ENGLISH COMPOSITION		AMT 150	3
AND		PROCESS TROUBLESHOOTING & PROBLEM SOLVING	
BCOM 102 ADVANCED BUSINESS & TECHNICAL COMMUNICATIONS		BIOL 120L&L	1
OR		FLOWERING PLANTS OF SOUTHWEST MICHIGAN	
ENG 101 ENGLISH COMPOSITION		BIOL 120FL&L	1
AND		AUTUMN FLOWERING PLANTS OF SOUTHWEST MICHIGAN	
ENG 102 ENGLISH COMPOSITION		BIOL 207A	1
		MICROBIOLOGY LAB	
		BUS 122	3
		PRINCIPLES OF MANAGEMENT	
BIOL 121LEC	3	BUS 125	3
PLANT BIOLOGY LECTURE		SUPERVISION	
BIOL 121LAB	1	BUS 131	1
PLANT BIOLOGY LABORATORY		INTRO TO ENTREPRENEURSHIP	
BUS 127	3	ELTC 101AL&L	4
HUMAN RELATIONS		ELECTRICITY-BASIC	
HE 110	1	ELTC 103	3
INDUSTRIAL SAFETY AND WORKPLACE TRAINING		RESIDENTIAL WIRING	
CIS 120A	3	ELTC 150	3
INTRO TO COMPUTER INFORMATION SYSTEMS		INDUSTRIAL ELECTRICITY	
FS 101L&L	3	HP 101	3
INTRO TO FOOD SCIENCE AND PROCESS		HYDRAULICS/PNEUMATICS	
Choose One (1) Course From:	3-4	PHIL 207	3
MATH 100A INTERMEDIATE ALGEBRA		ENVIRONMENTAL ETHICS	
TMAT 101A TECHNICAL MATH I		QC 101	3
TMAT 102A TECHNICAL MATH II		BASIC QUALITY CONTROL	
TMAT 201 TECHNICAL MATH III		SPAN 101	4
MATH 111 ALGEBRA WITH COORDINATE GEOMETRY (RECOMMENDED FOR TRANSFER)		BASIC SPANISH	
		SPAN 102	4
		BASIC SPANISH	
		SPAN 150	4
		INTENSIVE BASIC SPANISH	
		SPAN 201	4
		INTERMEDIATE SPANISH	
		SPAN 202	4
		INTERMEDIATE SPANISH	
		W 101A	3
		BASIC WELDING	
		TOTAL CREDITS	62

*All General Education courses must be completed with a grade of "C" or better for transfer.

MSU Occupational Specialty Requirements Credits: 30-34

(Select from the following MSU areas of interest – Agriculture Operations, Fruit & Vegetable Crop Management, and Landscape Management)

AGRICULTURE OPERATIONS – 34 HOURS, 62 CREDIT HOUR DEGREE

ABM 130	Farm Management I	3
AE 131	Agricultural Water Resource Management	3
AE 143	Application of Precision Agriculture Technologies	3
AT 202	Agricultural Regulation Compliance and Safety	3
AT 293	Professional Internship in Agricultural Technology	3
CSS 101	Introduction to Crop Science	3
CSS 105	Agriculture Industries Seminar	1
CSS 126	Introduction to Weed Management	2
CSS 143	Introduction to Soil Science	2
ENT 110	Applied Entomology of Economic Plants	3
PLP 105	Fundamentals of Applied Plant Pathology	2

A minimum of 6 additional MSU Institute for Agricultural Technology approved College of Agriculture and Natural Resources credits must be completed with approval from the Program Coordinator. Must send Muskegon CC an original MSU transcript with certificate noted for transfer acceptance.

FRUIT & VEGETABLE CROP MANAGEMENT – 30 CREDITS, 62 CREDIT HOUR DEGREE

ABM 130	Farm Management I	3
AT 202	Agricultural Regulation Compliance and Safety	3
AT 293	Professional Internship in Agricultural Technology	3
CSS 126	Introduction to Weed Management	2
CSS 143	Introduction to Soil Science	2
ENT 110	Applied Entomology of Economic Plants	3
HRT 206	Training and Pruning Plants	1
HRT 207	Horticulture Career Development	1
HRT 218	Irrigation Systems for Horticulture	3
PLP 105	Fundamentals of Applied Plant Pathology	2

A minimum of 7 additional MSU Institute for Agricultural Technology approved College of Agriculture and Natural Resources credits, of which must contain at least one elective class in either Fruit Production, Vegetable Production, Organic Production or Greenhouse Management, must be completed with approval from the Program Coordinator. Must send Muskegon CC an original MSU transcript with certificate noted for transfer acceptance.

LANDSCAPE MANAGEMENT – 30 CREDITS, 62 CREDIT HOUR DEGREE

AT 202	Agricultural Regulation, Compliance and Safety	3
AT 293	Professional Internship in Agricultural Technology	3
CSS 126	Introduction to Weed Management	2
CSS 143	Introduction to Soil Science	2
ENT 110	Applied Entomology of Economic Plants	3
HRT 207	Horticulture Career Development	1
HRT 211	Landscape Plants I	3
HRT 212	Landscape Plants II	3
HRT 213	Landscape Maintenance	2
HRT 218	Irrigation Systems for Horticulture	3
PLP 105	Fundamentals of Applied Plant Pathology	2

A minimum of 3 additional MSU Institute for Agricultural Technology approved College of Agriculture and Natural Resources credits must be completed with approval from the Program Coordinator. Must send Muskegon CC an original MSU transcript with certificate noted for transfer acceptance.

(See next page)

MSU Electives:

AT 290	Unmanned Aircraft FAA
AT 291	General Ag Employee Mgmt
HRT 206	Training and Pruning Plants
HRT 221	Greenhouse Structures and Management
HRT 232	Principles and Practices of Grape Production
HRT 234	Current Issues in Viticulture and Enology
HRT 242	Passive Solar Greenhouses for Protected Cultivation
HRT 243	Organic Transplant Production
HRT 251	Organic Farming Principles and Practices
HRT 253	Compost Production and Use
HRT 231	Tree Fruit Production and Management
HRT 241	Vegetable Production and Management
ABM 130	Farm Management I
AE 131	Water Resources Management
AT 291	Application of Animal Agriculture
AT 291	Unmanned Aircraft FAA
AT 291	Michigan Pollination & Bee Keeping
AT 291	Agricultural Transportation

Apprenticeship Certificate

This certificate program provides students with the foundation skills necessary to complete the academic portion of their apprenticeship. Students will learn basic technical skills required to build, install, repair, and service industrial equipment. Students who are interested in enrolling in this program must be a registered apprentice.

CERTIFICATE REQUIREMENTS	24 CR. HRS.	
REQUIRED COURSES	3-4 CR. HRS.	
Choose One (1) Course From	3-4	ELTC 204 3
MATH 100A INTERMEDIATE ALGEBRA		ADVANCED INDUSTRIAL ROBOTS
TMAT 101A TECHNICAL MATH I		ELTC 210 3
TMAT 102A TECHNICAL MATH II		INDUSTRIAL COMMUNICATIONS
TMAT 201 TECHNICAL MATH III		ELTC 220 3
MATH 111 ALGEBRA WITH COORDINATE GEOMETRY (RECOMMENDED FOR TRANSFER)		ELECTRICAL TROUBLESHOOTING
		ELTR 101A 4
		ELECTRONICS-BASIC
		ELTR 102B 4
		ELECTRONICS I: ACTIVE DEVICES
ELECTIVES	20-21 CR. HRS.	ELTR 112A 4
<i>Electives must be chosen from the following list or have departmental approval.</i>		DIGITAL ELECTRONICS I
AMT 129 3		ELTR 202B 4
INTRODUCTION TO TECHNOLOGY		INDUSTRIAL ELECTRONIC SYSTEMS
ARE 115 3		ELTR 211AB 4
WIND TURBINE AND SOLAR ARRAY INSTALLATION		MICROCOMPUTER INTERFACING
CAD 110 3		ELTR 212A 4
INTRODUCTION TO COMPUTER-AIDED DRAFTING (2D)		BIOMED 2
CAD 135A 3		ELTR 214 3
ENGINEERING GRAPHICS		BIOMED 1
CAD 150 3		ENGR 105 4
BLUEPRINT READING		INTRODUCTION TO ENGINEERING
CAD 151 3		HP 101 3
GEOMETRIC DIMENSIONING & TOLERENCING		HYDRAULICS/PNEUMATICS
CAD 210 3		HP 201 4
PARAMETRIC DESIGN I-PART MODELING		ADVANCED HYDRAULICS
CAD 220A 4		MET 101 3
PARAMETRIC DESIGN II-ASSEMBLIES		INDUSTRIAL MATERIALS
CAD 230A 4		MET 102 3
TOOL DESIGN		BASIC CAST METALS
CAD 240A 4		MET 201 3
PRODUCT DESIGN		METALLURGY
CAD 250 3		MT 101B 4
INTRODUCTION TO SOLIDWORKS 3D		BASIC MACHINING
CAD 255 3		MT 102A 3
INTRODUCTION TO SIMENS NX		INTERMEDIATE MACHINING
ELTC 101AL&L 4		MT 103A 3
ELECTRICITY BASIC		ADVANCED MACHINING
ELTC 103 3		MT 150 3
RESIDENTIAL WIRING		MACHINERY HANDBOOK
ELTC 104 3		MT 205A 3
BASIC INDUSTRIAL ROBOTS		NC/CNC (COMPUTER NUMERICAL CONTROL)
ELTC 106 1		MT 206A 3
FIRE ALARM SYSTEMS		2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING
ELTC 150 3		MT 216 3
INDUSTRIAL ELECTRICITY		3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING
ELTC 152 3		MT 218 3
NATIONAL ELECTRIC CODE		5-AXIS CNC & CMM
ELTC 160L&L 3		MT 222 3
PROGRAMMABLE CONTROLLERS		MACHINING CAPSTONE
ELTC 203 3		MT 240 3
ADVANCED PROGRAMMABLE CONTROLLERS		BASIC MACHINE REPAIR

QC 101	3
<i>BASIC QUALITY CONTROL</i>	
QC 105	3
<i>QUALITY AND PRODUCTIVITY USING SPC-STATISTICAL PROCESS CONTROL</i>	
TECH 200	3
<i>APPLIED ALTERNATIVE AND RENEWABLE ENERGY</i>	
TECH 201	3
<i>INTRODUCTION TO MECHATRONICS</i>	
TECH 290CI	3
<i>COOPERATIVE INTERNSHIP</i>	
W 101A	3
<i>BASIC WELDING</i>	
W 102A	3
<i>GAS METAL ARC WELDING (MIG)</i>	
W 103A	3
<i>GAS TUNGSTEN ARC WELDING (TIG)</i>	
W 105	3
<i>SHIELDED METAL ARC WELDING (STICK)</i>	
W 201	3
<i>STRUCTURAL WELDING</i>	
W 202A	3
<i>PIPE WELDING</i>	
W 205	3
<i>WELDING AUTOMATION</i>	
W 206	3
<i>METAL FABRICATION</i>	

TOTAL 24

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. Upon completing the program students will be prepared to work as an Auto Mechanic, Automotive Service Technician, Automotive Technician, or Automotive Parts Specialist. Students who wish to complete a program in two years are advised to use a sequence of courses recommended by their counselor or by the instructor. If a student wishes to attend college on less than a full-time basis, the program may be extended beyond two years.

GENERAL EDUCATION REQUIREMENTS	15-18 CR. HRS.		
ENG 101	3	AT 211	3
ENGLISH COMPOSITION		AUTOMATIC TRANSMISSIONS	
Choose One (1) Course From:	3	AT 214	3
BCOM 102ADVANCED BUS AND TECH COMMUNICATIONS		SERVICE MANAGEMENT	
ENG 102.....ENGLISH COMPOSITION		AT 223.....	3
COM 201.....PUBLIC SPEAKING		ADVANCED ENGINE PERFORMANCE	
Choose One (1) Course From:	3-4	AT 230.....	2
BUS 127.....HUMAN RELATIONS		AUTOMOTIVE SERVICE	
ANTH 103.....CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY		OPTION 2: AUTOMOTIVE ENGINEERING TRACK	
ECON 101A.....PRINCIPLES OF MACROECONOMICS		ECON 101A.....	4
Choose Two (2) Courses From:	6-8	PRINCIPLES OF MACROECONOMICS	
TMAT 101A TECHNICAL MATH I		HIST 101A.....	3
TMAT 102A TECHNICAL MATH II		WESTERN CIVILIZATION TO 1500	
TMAT 201 TECHNICAL MATH III		MATH 161.....	4
MATH 100A INTERMEDIATE ALGEBRA		CALCULUS I	
MATH 111 ALGEBRA WITH COORDINATE GEOMETRY (RECOMMENDED FOR TRANSFER)		PHIL 202.....	3
MATH 112 TRIGONOMETRIC FUNCTIONS WITH COORDINATE GEOMETRY		INTRODUCTION TO ETHICS	
		PHYS 201CL&L.....	5
		COLLEGE PHYSICS I LECTURE AND LAB	
		PSYC 201.....	3
		GENERAL PSYCHOLOGY	

AUTOMOTIVE TECHNOLOGY REQUIREMENTS	18 CR. HRS.	REQUIRED ELECTIVES	MINIMUM 3-7 CR. HRS.
AT 114.....	3	<i>Electives must be chosen from the following list or have departmental approval.</i>	
AUTOMOTIVE POWER PLANTS (ENGINE REBUILDING)		COM 201.....	3
AT 120.....	3	PUBLIC SPEAKING	
INTRODUCTION TO ELECTRICAL SYSTEMS I		CSS 100A.....	3
AT 122.....	3	COLLEGE SUCCESS SEMINAR	
FUEL SYSTEMS AND EMISSION CONTROLS		ECON 101A.....	4
AT 150A.....	3	PRINCIPLES OF MACROECONOMICS	
AUTOMOTIVE BRAKES		HE 110.....	1
AT 210.....	3	INDUSTRIAL SAFETY AND WORKPLACE TRAINING	
POWERTRAINS (MANUAL DRIVETRAINS)		HP 101.....	3
AT 212.....	3	HYDRAULICS/PNEUMATICS	
ALIGNMENT AND SUSPENSION		MET 101.....	3
		INDUSTRIAL MATERIALS	
CHOOSE I OPTION 22-23 CR-HRS.		MET 201.....	3
OPTION 1: AUTOMOTIVE MANAGEMENT TRACK		METALLURGY	
AT 121.....	3	MT 101B.....	3
ELECTRICAL SYSTEMS II		BASIC MACHINING	
AT 123.....	3	PHYS 201 CL&L.....	5
ENGINE TUNE UP (DRIVABILITY)		COLLEGE PHYSICS I LECTURE AND LAB	
AT 140.....	3	W 101A.....	3
INTRO TO HYBRIDS AND ALTERNATIVE FUELS		BASIC WELDING	
AT 160A.....	3	TECH 290CI.....	3
AUTOMOTIVE AIR CONDITIONING		COOPERATIVE INTERNSHIP	

TOTAL 62

Automotive Technician Certificate

The curriculum is designed to educate and train personnel to fill the mechanical, technical, and supervisory position in the automotive industry. Upon completing the program students will be prepared to work as an Auto Mechanic, Automotive Service Technician, Automotive Technician, or Automotive Parts Specialist. Students planning to transfer should consult with an MCC counselor. This is intended to go directly into the workforce.

CERTIFICATE REQUIREMENTS	30-31 CR. HRS.
Choose One (1) Course From:	3-4
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	
<i>MATH 100A INTERMEDIATE ALGEBRA</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY</i> <i>(RECOMMENDED FOR TRANSFER)</i>	
AT 114.....	3
<i>AUTOMOTIVE POWER PLANTS</i> <i>(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</i>	
AT 150A.....	3
<i>AUTOMOTIVE BRAKES</i>	
AT 160A.....	3
<i>AUTOMOTIVE AIR CONDITIONING</i>	
AT 210.....	3
<i>POWERTRAINS (MANUAL DRIVETRAINS)</i>	
AT 212.....	3
<i>ALIGNMENT AND SUSPENSION</i>	
TOTAL 30-31	



Associate in Applied Science

Biomedical Engineering Technology

This curriculum is designed to prepare a student for employment as a Biomedical Technician. 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. Upon completing this program students will be prepared to work as a Biomedical Technician, Biomedical Electronics Technician or Electronics Technician. Students planning to transfer to a four-year college should consult with an MCC Counselor.

GENERAL EDUCATION REQUIREMENTS	21-23 CR. HRS.	TECHNICAL-RELATED REQUIREMENTS	41 CR. HRS.
ENG 101	3	CIS 120A	3
<i>ENGLISH COMPOSITION</i>			
Choose one (1) Course From	3	CIS 183	3
<i>BCOM 102 ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>INTRO TO COMPUTER INFORMATION SYSTEMS</i>	
<i>ENG 102 ENGLISH COMPOSITION</i>		<i>NETWORKING TECHNOLOGIES</i>	
<i>COM 201 PUBLIC SPEAKING</i>		ELTC 101AL&L	4
Choose one (1) Course From	3-4	<i>ELECTRICITY BASIC</i>	
<i>BUS 127 HUMAN RELATIONS</i>		ELTC 150	3
<i>ANTH 103 CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY</i>		<i>INDUSTRIAL ELECTRICITY</i>	
<i>ECON 101A PRINCIPLES OF MACROECONOMICS</i>		ELTC 220	3
HE 110	1	<i>ELECTRICAL TROUBLESHOOTING</i>	
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		ELTR 101A	4
Choose one (1) Course From	3-4	<i>ELECTRONICS-BASIC</i>	
<i>TMAT 102A TECHNICAL MATH II</i>		ELTR 102B	4
<i>TMAT 201 TECHNICAL MATH III</i>		<i>ELECTRONICS I: ACTIVE DEVICES</i>	
<i>MATH 100A INTERMEDIATE ALGEBRA</i>		ELTR 112A	4
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY (RECOMMENDED FOR TRANSFER)</i>		<i>DIGITAL ELECTRONICS I</i>	
BIOL 105L&L	4	ELTR 212A	4
<i>ANATOMY & PHYSIOLOGY I</i>		<i>BIOMEDICAL INSTRUMENTATION II</i>	
BIOL 106L&L	4	ELTR 214	3
<i>ANATOMY & PHYSIOLOGY II</i>		<i>BIOMEDICAL INSTRUMENTATION I</i>	
		TECH 290CI	6
		<i>COOPERATIVE INTERNSHIP</i>	
		TOTAL	62-64

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

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. Upon completing this program students will be prepared to work as a CNC Operator, CNC Machinist, CNC Programmer, CAD Operator, or CAD/CAM Operator. This program is offered for full-time and part-time, day or night, as well as Early College and Dual Enrollment students. Students planning to transfer to a four-year college should consult with an MCC Counselor.

PROGRAMS

GENERAL EDUCATION REQUIREMENTS	16-19 CR. HRS.	MACHINETECHNOLOGY REQUIREMENTS	19 CR. HRS.
ENG 101	3	MT 101B	4
<i>ENGLISH COMPOSITION</i>		<i>BASIC MACHINING</i>	
Choose one (1) Course From	3	MT 102A	3
<i>BCOM 102 ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>INTERMEDIATE MACHINING</i>	
<i>ENG 102 ENGLISH COMPOSITION</i>		MT 205A	3
<i>COM 201 PUBLIC SPEAKING</i>		<i>NC/CNC (COMPUTER NUMERICAL CONTROL)</i>	
Choose one (1) Course From	3-4	MT 206A	3
<i>BUS 127 HUMAN RELATIONS</i>		<i>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
<i>ANTH 103 CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY</i>		MT 216	3
<i>ECON 101A PRINCIPLES OF MACROECONOMICS</i>		<i>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
HE 110	1	MT 222	3
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>		<i>MACHINING CAPSTONE</i>	
Choose Two (2) Courses From	6-8		
<i>TMAT 102A TECHNICAL MATH II</i>			
<i>TMAT 201 TECHNICAL MATH III</i>			
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY (RECOMMENDED FOR TRANSFER)</i>			
<i>MATH 112 TRIGONOMETRIC FUNCTIONS WITH COORDINATE GEOMETRY</i>			
<i>(CONTINUED ON NEXT PAGE)</i>			
COMPUTER-AIDED DRAFTING & DESIGN REQUIREMENTS	13 CR. HRS.		
CAD 110	3		
<i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>			
CAD 210	3		
<i>PARAMETRIC DESIGN I-PART MODELING</i>			
CAD 220A	4		
<i>PARAMETRIC DESIGN II-ASSEMBLIES</i>			
CAD 250	3		
<i>INTRODUCTION TO SOLIDWORKS 3D</i>			

REQUIRED ELECTIVES**11-14 CR. HRS.***Electives must be chosen from the following list or have departmental approval.*

AMT 129	3
<i>INTRODUCTION TO TECHNOLOGY</i>	
CAD 135A	3
<i>ENGINEERING GRAPHICS</i>	
CAD 150	3
<i>BLUEPRINT READING</i>	
CAD 240A	4
<i>PRODUCT DESIGN</i>	
CAD 255	3
<i>INTRODUCTION TO SIEMENS NX</i>	
CSS 100A	3
<i>COLLEGE SUCCESS SEMINAR</i>	
COM 201	3
<i>PUBLIC SPEAKING</i>	
ELTC 101AL&L	4
<i>ELECTRICITY-BASIC</i>	
ELTC 104	3
<i>BASIC INDUSTRIAL ROBOTS</i>	
ELTC 150	3
<i>INDUSTRIAL ELECTRICITY</i>	
ELTR 101A	4
<i>ELECTRONICS-BASIC</i>	
ENGR 105	4
<i>INTRODUCTION TO ENGINEERING</i>	
HP 101	3
<i>HYDRAULICS/PNEUMATICS</i>	
HP 201	3
<i>ADVANCED HYDRAULICS</i>	
MATH 100A	4
<i>INTERMEDIATE ALGEBRA</i>	
MATH 161	4
<i>CALCULUS I</i>	
MATH 162A	4
<i>CALCULUS II</i>	
MET 101	3
<i>INDUSTRIAL MATERIALS</i>	
MET 102	3
<i>BASIC CAST METALS</i>	
MET 201	3
<i>METALLURGY</i>	
MT 103A	3
<i>ADVANCED MACHINING</i>	
MT 150	3
<i>MACHINERY HANDBOOK</i>	
MT 218	3
<i>5-AXIS, CNC & CMM</i>	
QC 101	3
<i>BASIC QUALITY CONTROL</i>	
TECH 290CI	3
<i>COOPERATIVE INTERNSHIP</i>	
TECH 201	3
<i>INTRODUCTION TO MECHATRONICS</i>	
TMAT 101A	3
<i>TECHNICAL MATH I</i>	
W 101A	3
<i>BASIC WELDING</i>	

TOTAL 62

CAD/CNC Certificate

This program is designed to provide Computer Aided Design skills (CAD) combined with the application of Computer Numerical Control (CNC) programming and machining skills. Upon completing this program students will be prepared to work as a CNC programmer, CNC operator, CNC draftsman, CAD designer, or CAD programmer. This program is not designed for students wishing to transfer to a four-year college for a bachelor's degree. Students planning to transfer should consult with an MCC counselor. This is intended to go directly into the workforce.

CERTIFICATE REQUIREMENTS 31-32 CR. HRS.

CAD 110	3
<i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>	
CAD 150	3
<i>BLUEPRINT READING</i>	
CAD 210	3
<i>PARAMETRIC DESIGN I-PART MODELING</i>	
CAD 250	3
<i>INTRODUCTION TO SOLIDWORKS 3D</i>	
MT 101B	4
<i>BASIC MACHINING</i>	
MT 150	3
<i>MACHINERY HANDBOOK</i>	
MT 205A	3
<i>NC/CNC (COMPUTER NUMERICAL CONTROL)</i>	
MT 206A	3
<i>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
MT 216	3
<i>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
Choose One (1) Courses From.....	3-4
<i>MATH 100A INTERMEDIATE ALGEBRA</i>	
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY</i>	
<i>(RECOMMENDED FOR TRANSFER)</i>	

TOTAL 31-32

PROGRAMS

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. Upon completing this program students will be prepared to work as a CAD Programmer, CAD Operator, CAD Designer, or CAD Detailer. Students planning to transfer to a four-year college should consult with an MCC Counselor.

GENERAL EDUCATION REQUIREMENTS	16-19 CR. HRS.	TECHNICAL-RELATED REQUIRED ELECTIVES	11-12 CR. HRS.
ENG 101 <i>ENGLISH COMPOSITION</i>	3	AMT 129 <i>INTRODUCTION TO TECHNOLOGY</i>	3
Choose one (1) Course From	3	MET 201 <i>METALLURGY</i>	3
<i>BCOM 102 ADVANCED BUS AND TECH COMMUNICATIONS</i>		MT 101B <i>BASIC MACHINING</i>	4
<i>COM 201 PUBLIC SPEAKING</i>		MT 205A <i>NC/CNC (COMPUTER NUMERICAL CONTROL)</i>	3
<i>ENG 102 ENGLISH COMPOSITION</i>		ENGR 105 <i>INTRODUCTION TO ENGINEERING</i>	4
Choose one (1) Course From	3-4	ELTC 101AL&L <i>ELECTRICITY-BASIC</i>	4
<i>BUS 127 HUMAN RELATIONS</i>		PHYS 201CL&L <i>COLLEGE PHYSICS 1 LECTURE AND LAB</i>	5
<i>ANTH 103 CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY</i>			
<i>ECON 101A PRINCIPLES OF MACROECONOMICS</i>			
HE 110 <i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>	1		
Choose Two (2) Courses From	6-8		
<i>TMAT 102A TECHNICAL MATH II</i>			
<i>TMAT 201 TECHNICAL MATH III</i>			
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY (RECOMMENDED FOR TRANSFER)</i>			
<i>MATH 112 TRIGONOMETRIC FUNCTIONS WITH COORDINATE GEOMETRY</i>			

(CONTINUED ON NEXT PAGE)

COMPUTER-AIDED DRAFTING & DESIGN REQUIREMENTS	24 CR. HRS.
CAD 110 <i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>	3
CAD 135A <i>ENGINEERING GRAPHICS</i>	3
CAD 210 <i>PARAMETRIC DESIGN I-PART MODELING</i>	3
CAD 220A <i>PARAMETRIC DESIGN II-ASSEMBLIES</i>	4
CAD 230A <i>TOOL DESIGN</i>	4
CAD 240A <i>PRODUCT DESIGN</i>	4
CAD 250 <i>INTRODUCTION TO SOLIDWORKS 3D</i>	3

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.

REQUIRED ELECTIVES

7-11 CR. HRS.

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

BUS 179.....	1
<i>KEYBOARDING</i>	
CAD 150.....	3
<i>BLUEPRINT READING</i>	
CAD 151.....	3
<i>GEOMETRIC DIMENSIONING & TOLERANCING</i>	
CAD 255.....	3
<i>INTRODUCTION TO SIEMENS NX</i>	
COM 101.....	3
<i>ORAL COMMUNICATIONS</i>	
COM 201.....	3
<i>PUBLIC SPEAKING</i>	
CSS 100A.....	3
<i>COLLEGE SUCCESS SEMINAR</i>	
HP 101.....	3
<i>HYDRAULICS/PNEUMATICS</i>	
MATH 100A.....	4
<i>INTERMEDIATE ALGEBRA</i>	
MATH 112.....	4
<i>TRIGONOMETRIC FUNCTIONS WITH COORDINATE GEOMETRY</i>	
MATH 161.....	4
<i>CALCULUS I</i>	
MATH 162A.....	4
<i>CALCULUS II</i>	
MET 101.....	3
<i>INDUSTRIAL MATERIALS</i>	
MET 102.....	3
<i>BASIC CAST METALS</i>	
MT 102A.....	3
<i>INTERMEDIATE MACHINING</i>	
MT 103A.....	3
<i>ADVANCED MACHINING</i>	
MT 150.....	3
<i>MACHINERY HANDBOOK</i>	
MT 206A.....	3
<i>2-D CAD/CAM COMPUTER AIDED DESIGN/MACHINING</i>	
MT 216.....	3
<i>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
PHYS 202CL&L.....	5
<i>COLLEGE PHYSICS II LECTURE AND LAB</i>	
QC 101.....	3
<i>BASIC QUALITY CONTROL</i>	
TECH 201.....	3
<i>INTRODUCTION TO MECHATRONICS</i>	
TECH 290CI.....	3
<i>COOPERATIVE INTERNSHIP</i>	
TMAT 101A.....	3
<i>TECHNICAL MATH I</i>	
W 101A.....	3
<i>BASIC WELDING</i>	

TOTAL 62

PROGRAMS



Computer-Aided Drafting and Design Certificate

Computer-Aided Design is a universal language used to communicate ideas of design and construction details through the use of lines, symbols and dimensions. Upon completing this program students will be prepared to work as a CAD Programmer, CAD Operator, CAD Designer, or CAD Detailer. Students planning to continue with an Associate's Degree should consult with an MCC Counselor.

CERTIFICATE REQUIREMENTS

21-23 CR. HRS.

CAD 110	3
<i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>	
CAD 135A	3
<i>ENGINEERING GRAPHICS</i>	
CAD 150	3
<i>BLUEPRINT READING</i>	
CAD 210	3
<i>PARAMETRIC DESIGN I-PART MODELING</i>	
CAD 250	3
<i>INTRODUCTION TO SOLIDWORKS 3D</i>	
Choose Two (2) Courses From	6-8
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY</i> <i>(RECOMMENDED FOR TRANSFER)</i>	
<i>MATH 112 TRIGONOMETRIC FUNCTIONS WITH</i> <i>COORDINATE GEOMETRY</i>	

TOTAL 21-23

Associate in Applied Science

Electronics Engineering Technology

This curriculum is designed to prepare a student for employment as an electrical and electronics technician in manufacturing, commercial repair, or service industries. Upon completing this program students will be prepared to work as an Electronics Technician, Automation Technician, or a Mechatronics Technician. Students planning to transfer to a four-year college should consult with an MCC counselor.

GENERAL EDUCATION REQUIREMENTS	15-17 CR. HRS.	REQUIRED ELECTIVES	16-18 CR. HRS.
ENG 101	3	<i>Electives must be chosen from the following list or have departmental approval.</i>	
<i>ENGLISH COMPOSITION</i>			
Choose two (2) Courses From	6	AMT 129	3
BCOM 102 <i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		<i>INTRODUCTION TO TECHNOLOGY</i>	
ENG 102 <i>ENGLISH COMPOSITION</i>		ARE 115	3
COM 201 <i>PUBLIC SPEAKING</i>		<i>WIND TURBINE AND SOLAR ARRAY INSTALLATION</i>	
Choose one (1) Course From	3-4	BUS 125	3
BUS 127 <i>HUMAN RELATIONS</i>		<i>SUPERVISION</i>	
ANTH 103 <i>CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY</i>		CAD 110	3
ECON 101A <i>PRINCIPLES OF MACROECONOMICS</i>		<i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>	
Choose One (1) Course From	3-4	CAD 135A	3
TMAT 101A <i>TECHNICAL MATH I</i>		<i>ENGINEERING GRAPHICS</i>	
TMAT 102A <i>TECHNICAL MATH II</i>		CAD 210	3
TMAT 201 <i>TECHNICAL MATH III</i>		<i>PARAMETRIC DESIGN I-PART MODELING</i>	
MATH 100A <i>INTERMEDIATE ALGEBRA</i>		CAD 250	3
MATH 111 <i>ALGEBRA WITH COORDINATE GEOMETRY (RECOMMENDED FOR TRANSFER)</i>		<i>INTRODUCTION TO SOLIDWORKS 3D</i>	
ELECTRONICS TECHNOLOGY REQUIREMENTS	29 CR. HRS.	COM 101	3
ELTC 101A&L	4	<i>ORAL COMMUNICATIONS</i>	
<i>ELECTRICITY-BASIC</i>			
ELTC 160L&L	3	COM 201	3
<i>PROGRAMMABLE CONTROLLERS</i>			
ELTC 210	3	<i>PUBLIC SPEAKING</i>	
<i>INDUSTRIAL COMMUNICATIONS</i>			
ELTC 220	3	CSS 100A	3
<i>ELECTRICAL TROUBLESHOOTING</i>			
ELTR 101A	4	<i>COLLEGE SUCCESS SEMINAR</i>	
<i>ELECTRONICS-BASIC</i>			
ELTR 102B	4	ELTC 103	3
<i>ELECTRONICS I: ACTIVE DEVICES</i>			
ELTR 112A	4	<i>RESIDENTIAL WIRING</i>	
<i>DIGITAL ELECTRONICS I</i>			
ELTR 202B	4	ELTC 104	3
<i>INDUSTRIAL ELECTRONIC SYSTEMS</i>			
		<i>BASIC INDUSTRIAL ROBOTS</i>	
		ELTC 106	1
		<i>FIRE ALARM SYSTEMS</i>	
		ELTC 150	3
		<i>INDUSTRIAL ELECTRICITY</i>	
		ELTC 152	3
		<i>NATIONAL ELECTRIC CODE</i>	
		ELTC 203	3
		<i>ADVANCED PROGRAMMABLE CONTROLLERS</i>	
		ELTC 204	3
		<i>ADVANCED INDUSTRIAL ROBOTS</i>	
		ELTR 211AB	4
		<i>MICROCOMPUTER INTERFACING</i>	
		ELTR 212A	4
		<i>BIOMEDICAL INSTRUMENTATION II</i>	
		ELTR 214	3
		<i>BIOMEDICAL INSTRUMENTATION I</i>	
		ENGR 105	4
		<i>INTRODUCTION TO ENGINEERING</i>	
		ENGR 202	3
		<i>STATICS</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.

(CONTINUED ON NEXT PAGE)

HE 110	1
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>	
HP 101	3
<i>HYDRAULICS/PNEUMATICS</i>	
HP 201	4
<i>ADVANCED HYDRAULICS</i>	
MATH 111	4
<i>ALGEBRA WITH COORDINATE GEOMETRY</i>	
MATH 112	4
<i>TRIGONOMETRIC FUNCTIONS WITH COORDINATE GEOMETRY</i>	
MATH 161	4
<i>CALCULUS I</i>	
MATH 162A	4
<i>CALCULUS II</i>	
MET 101	3
<i>INDUSTRIAL MATERIALS</i>	
MT 101B	4
<i>BASIC MACHINING</i>	
PHYS 201CL&L	5
<i>COLLEGE PHYSICS I LECTURE AND LAB</i>	
PHYS 202CL&L	5
<i>COLLEGE PHYSICS II LECTURE AND LAB</i>	
PHYS 203L&L	5
<i>ENGINEERING PHYSICS</i>	
PHYS 204L&L	5
<i>ENGINEERING PHYSICS</i>	
TECH 200	3
<i>APPLIED ALTERNATIVE AND RENEWABLE ENERGY</i>	
TECH 201	3
<i>INTRODUCTION TO MECHATRONICS</i>	
TECH 290CI	3
<i>COOPERATIVE INTERNSHIP</i>	
W101A	3
<i>BASIC WELDING</i>	

TOTAL 62

Electronics Technology Certificate

This curriculum is designed to prepare a student for employment as an electrical and electronics technician in manufacturing, commercial repair, or service industries. Upon completing this program students will be prepared to work as an Electronics Technician, Manufacturing Technician, Lab Technician, Electronic Assembler, or SMT Technician. Students planning to continue with an Associate's Degree should consult with an MCC counselor.

CERTIFICATE REQUIREMENTS	29-30 CR. HRS.
ELTC 101A&L.....	4
<i>ELECTRICITY-BASIC</i>	
ELTR 101A.....	4
<i>ELECTRONICS-BASIC</i>	
ELTR 102B.....	4
<i>ELECTRONICS 1: ACTIVE DEVICES AND CIRCUIT ANALYSIS</i>	
ELTR 112A.....	4
<i>DIGITAL ELECTRONICS I</i>	
ELTR 202B.....	4
<i>INDUSTRIAL ELECTRONICS SYSTEMS</i>	
ELTC 160L&L.....	3
<i>PROGRAMMABLE CONTROLLERS</i>	
ELTC 220.....	3
<i>ELECTRICAL TROUBLESHOOTING</i>	
Choose One (1) Course From.....	3-4
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	
<i>MATH 100A INTERMEDIATE ALGEBRA</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY</i> <i>(RECOMMENDED FOR TRANSFER)</i>	

TOTAL 29-30

Associate in Applied Science

Food Processing Technology

The food industry is the world's largest industry. This multi-billion dollar industry employs many thousands of food processing specialists and scientists. There are more positions available for food scientists than graduates to fill them. The MCC curriculum, paired with courses in the Michigan State University Food Processing Certificate Program, prepares students for mid-level and managerial employment in food processing operations. Students will earn an MSU certificate while also working towards an associate degree. MSU Transfer Students: Students wishing to transfer to MSU as juniors must meet with the program coordinator during their first semester to alter general education courses to meet MSU requirements.

GENERAL EDUCATION

REQUIREMENTS	26-27 CR. HRS.	REQUIRED ELECTIVES	1-2 CR. HRS.
Choose Two (2) Courses From	6	BUS 122	3
ENG 101 ENGLISH COMPOSITION		PRINCIPLES OF MANAGEMENT	
AND		BUS 125	3
BCOM 102 ADVANCED BUSINESS & TECHNICAL COMMUNICATIONS		SUPERVISION	
OR		BUS 131	1
ENG 101 ENGLISH COMPOSITION		INTRO TO ENTREPRENEURSHIP	
AND		ELTC 101AL&L	4
ENG 102 ENGLISH COMPOSITION		ELECTRICITY-BASIC	
BIOL 104L&L	4	ELTC 103	3
INTRODUCTORY BIOLOGY II		RESIDENTIAL WIRING	
OR		ELTC 150	3
BIOL 121 LEC	3	INDUSTRIAL ELECTRICITY	
PLANT BIOLOGY LECTURE		HP 101	3
AND		HYDRAULICS/PNEUMATICS	
BIOL 121 LAB	1	W 101A	3
PLANT BIOLOGY LABORATORY		BASIC WELDING	
BUS 127	3	QC 101	3
HUMAN RELATIONS		BASIC QUALITY CONTROL	
HE 110	1	BIOL 207A	1
INDUSTRIAL SAFETY AND WORKPLACE TRAINING		MICROBIOLOGY LAB	
CIS 120A	3	PHIL 207	3
INTRO TO COMPUTER INFORMATION SYSTEMS		ENVIRONMENTAL ETHICS	
FS 101L&L	3	SPAN 101	4
INTRO TO FOOD SCIENCE AND PROCESS		BASIC SPANISH	
AMT 150	3	SPAN 102	4
PROCESS TROUBLESHOOTING & PROBLEM SOLVING		BASIC SPANISH	
Choose One (1) Course From	3-4	SPAN 150	4
MATH 100A INTERMEDIATE ALGEBRA		INTENSIVE BASIC SPANISH	
TMAT 101A TECHNICAL MATH I		SPAN 201	4
TMAT 102A TECHNICAL MATH II		INTERMEDIATE SPANISH	
TMAT 201 TECHNICAL MATH III		SPAN 202	4
MATH 111 ALGEBRA WITH COORDINATE GEOMETRY		INTERMEDIATE SPANISH	
		BIOL 109 L&L	4
		FOOD TECHNOLOGY	

TOTAL 62

MSU Occupational Specialty Requirements Credits: 34**FOOD PROCESSING, TECHNOLOGY AND SAFETY – 34 CREDITS, 62 CREDIT HOUR DEGREE**

ABM 100	Decision Making in the Agri-Food Systems	3
AT 193	Agricultural Technology Clerkship	2
AT 293	Professional Internship	3
FSC 111	Foundational Concepts in Food Processing and Technology	3
FSC 112	Seminar in Food Processing, Technology and Safety	1
FSC 113	Basic Commodity Overview Food Processing and Technology	3
FSC 114	Food Processing and Technology Facilities Management	3
FSC 125	Food Processing and Technology Unit Operations	2
FSC 240	Applied Food Processing and Technology Microbiology	2
FSC 241	Safety Principles and Regulations in Food Process and Technology	3
FSC 242	Applied Food Processing and Technology Chemistry	2

Select two of the following four courses (4 credits)

FSC 230	Fruit and Vegetable Processing	2
FSC 231	Cereals Processing	2
FSC 232	Dairy Foods Processing	2
FSC 233	Muscle Foods Processing	2

Complete a minimum of 3 elective credits in the College of Agriculture and Natural Resources as approved by the program coordinator in the Institute of Agricultural Technology. Must send Muskegon CC an original MSU transcript with certificate noted for transfer acceptance.

MSU Electives:

AT 290	Unmanned Aircraft FAA
HRT 221	Greenhouse Structures and Management Grape Production
HRT 234	Current Issues in Viticulture and Enology Greenhouses for Protected Cultivation
HRT 243	Organic Transplant Production Principles and Practices
HRT 253	Compost Production and Use Management
HRT 2xx	Vegetable Production and Management
AE 131	Water Resources Management
AT 291	Application of Animal Agriculture
AT 291	Michigan Pollination & Bee Keeping
AT 291	General Ag Employee Management

Food Science Certificate

The Food Science Certificate will prepare students to work mid-level and managerial positions in a food processing operation.

CERTIFICATE REQUIREMENTS 27 or 28 CR. HRS.

ENG 101	3
<i>ENGLISH COMPOSITION</i>	
TMAT 101A.....	3
<i>TECHNICAL MATH I</i>	
TMAT 102A.....	3
<i>TECHNICAL MATH II</i>	
HP 101.....	3
<i>HYDRAULICS/PNEUMATICS</i>	
AMT 150.....	3
<i>PROCESS TROUBLESHOOTING AND PROBLEM SOLVING</i>	
FS 101 L&L.....	3
<i>INTRO TO FOOD SCIENCE AND PROCESS</i>	
TECH 290CI.....	3
<i>COOPERATIVE INTERNSHIP</i>	
OC 101.....	3
<i>BASIC QUALITY CONTROL</i>	

ELECTIVES 3 MINIMUM CR. HRS.

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

BIOL 104L&L.....	4
<i>INTRODUCTORY BIOLOGY II</i>	
BIOL 109L&L.....	4
<i>FOOD TECHNOLOGY</i>	
W 101A.....	3
<i>BASIC WELDING</i>	
ELTC 101AL&L.....	4
<i>ELECTRICITY - BASIC</i>	
ELTC 150.....	3
<i>INDUSTRIAL ELECTRICITY</i>	
BUS 122.....	3
<i>PRINCIPLES OF MANAGEMENT</i>	
BUS 125.....	3
<i>SUPERVISION</i>	
PHIL 207.....	3
<i>ENVIRONMENTAL ETHICS</i>	

TOTAL 27-28



Industrial Electricity Certificate

This curriculum is designed to prepare a student for employment as an industrial electrician or an industrial electrical worker. In order to become a licensed electrician students must complete an apprenticeship through an employer. Upon completing this program students will be prepared to work as an electrician, machine maintenance electrician, electrical control panel builder, or electrical machine builder. Students planning to continue with an associate's degree should consult with an MCC counselor.

CERTIFICATE REQUIREMENTS	28-29 CR. HRS.
ELTC 101A&L.....	4
<i>ELECTRICITY-BASIC</i>	
ELTC 103.....	3
<i>RESIDENTIAL WIRING</i>	
ELTC 104.....	3
<i>BASIC INDUSTRIAL ROBOTS</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 220.....	3
<i>ELECTRICAL TROUBLESHOOTING</i>	
HP 101.....	3
<i>HYDRAULICS/ PNEUMATICS</i>	
Choose One (1) Course From.....	3-4
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	
<i>MATH 100A INTERMEDIATE ALGEBRA</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY</i> <i>(RECOMMENDED FOR TRANSFER)</i>	

TOTAL 28-29

Manufacturing Technology Certificate

This curriculum is designed to educate and train personnel to fill supervisory and technical positions related in the manufacturing industry. Student will learn and apply manufacturing principles using industry leading technology. The program will emphasize process management, quality control, and skilled trades. Upon completing this program students will be prepared to work as a manufacturing technician, automation technician, production technician, or an advance manufacturing associate. Students planning to transfer should consult with an MCC counselor.

CERTIFICATE REQUIREMENTS	33-34 CR. HRS.
AMT 129.....	3
<i>INTRODUCTION TO TECHNOLOGY</i>	
CAD 150.....	3
<i>BLUEPRINT READING</i>	
HE 110.....	1
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>	
HP 101.....	3
<i>HYDRAULICS/PNEUMATICS</i>	
ELTC 101A&L.....	4
<i>ELECTRICITY-BASIC</i>	
MET 101.....	3
<i>INDUSTRIAL MATERIALS</i>	
MET 102.....	3
<i>BASIC CAST METALS</i>	
MT 101B.....	4
<i>BASIC MACHINING</i>	
QC 101.....	3
<i>BASIC QUALITY CONTROL</i>	
W 101A.....	3
<i>BASIC WELDING</i>	
Choose One (1) Course From.....	3-4
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	
<i>MATH 100A INTERMEDIATE ALGEBRA</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY</i> <i>(RECOMMENDED FOR TRANSFER)</i>	

TOTAL 33-34

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 Manufacturing Technology

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

GENERAL EDUCATION REQUIREMENTS

ENG 1013

ENGLISH COMPOSITION

Choose one (1) Course From3

BCOM 102 *ADVANCED BUS AND TECH COMMUNICATIONS*

ENG 102 *ENGLISH COMPOSITION*

COM 201 *PUBLIC SPEAKING*

Choose one (1) Course From3-4

BUS 127 *HUMAN RELATIONS*

ANTH 103 *CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY*

ECON 101A *PRINCIPLES OF MACROECONOMICS*

HE 1101

INDUSTRIAL SAFETY AND WORKPLACE TRAINING

Choose Two (2) Courses From6-8

TMAT 102A *TECHNICAL MATH II*

TMAT 201 *TECHNICAL MATH III*

MATH 111 *ALGEBRA WITH COORDINATE GEOMETRY (RECOMMENDED FOR TRANSFER)*

MATH 112 *TRIGONOMETRIC FUNCTIONS WITH COORDINATE GEOMETRY*

TECHNICAL-RELATED REQUIREMENTS 35 CR. HRS.

CAD 1103

INTRO TO COMPUTER-AIDED DRAFTING (2D)

Choose one (1) Course From3

CAD 250 *INTRODUCTION TO SOLIDWORKS 3D*

CAD 210 *PARAMETRIC DESIGN I-MODELING*

ELTC 101AL&L4

ELECTRICITY-BASIC

MET 1013

INDUSTRIAL MATERIALS

MET 1023

BASIC CAST METALS

MET 2013

METALLURGY

MT 101B4

BASIC MACHINING

MT 205A3

NC/CNC (NUMERICAL CONTROL/COMPUTER NUMERICAL)

QC 1013

BASIC QUALITY CONTROL

QC 1053

QUALITY AND PRODUCTIVITY USING SPC-STATISTICAL PROCESS CONTROL

W 101A3

BASIC WELDING

REQUIRED ELECTIVES

9-11 CR. HRS.

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

AMT 1293

INTRODUCTION TO TECHNOLOGY

BUS 1253

SUPERVISION

BUS 1663

QUALITY CUSTOMER SERVICE

CAD 135A3

ENGINEERING GRAPHICS

CAD 2103

PARAMETRIC DESIGN I-PART MODELING

PRODUCT DESIGN

CAD 2503

INTRODUCTION TO SOLIDWORKS 3D

CAD 2553

INTRODUCTION TO SIEMENS NX

CIS 101EW1

INTRODUCTION TO ELECTRONIC SPREADSHEETS

CIS 119PP1

INTRODUCTION TO PRESENTATION GRAPHICS

COM 1013

ORAL COMMUNICATIONS

COM 2013

PUBLIC SPEAKING

CSS 100A3

COLLEGE SUCCESS SEMINAR

ELTC 1043

BASIC INDUSTRIAL ROBOTICS

ELTC 1503

INDUSTRIAL ELECTRICITY

ELTC 160L&L3

PROGRAMMABLE CONTROLLERS

ENGR 1054

INTRODUCTION TO ENGINEERING

HP 1013

HYDRAULICS/PNEUMATICS

HP 2014

ADVANCED HYDRAULICS

MATH 100A4

INTERMEDIATE ALGEBRA

MATH 1614

CALCULUS I

MATH 162A4

CALCULUS II

MT 102A3

INTERMEDIATE MACHINING

(CONTINUED ON NEXT PAGE)

MT 103A.....	3
<i>ADVANCED MACHINING</i>	
MT 150.....	3
<i>MACHINERY HANDBOOK</i>	
MT 206A.....	3
<i>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
MT 216.....	3
<i>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
MT 218.....	3
<i>5-AXIS CNC & CMM</i>	
TECH 201	3
<i>INTRODUCTION TO MECHATRONICS</i>	
TECH 290CI.....	3
<i>COOPERATIVE INTERNSHIP</i>	
TMAT 101A.....	3
<i>TECHNICAL MATH</i>	
W 102A.....	3
<i>GAS METAL ARC WELDING (MIG)</i>	
W 103A.....	3
<i>GAS TUNGSTEN ARC WELDING (TIG)</i>	
W 105.....	3
<i>SHIELDED METAL ARC WELDING (STICK)</i>	

TOTAL 62

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. Upon completing this program students will be prepared to work as a machinist, machine operator, CNC Operator, and a setup machinist. Students planning to transfer to a four-year college should consult with an MCC counselor.

GENERAL EDUCATION REQUIREMENTS	16-19 CR. HRS.	REQUIRED ELECTIVES	18-21 CR. HRS.
ENG 101	3	<i>Electives must be chosen from the following list or have departmental approval.</i>	
<i>ENGLISH COMPOSITION</i>			
Choose one (1) Courses From	3	AMT 129	3
BCOM 102 <i>ADVANCED BUS AND TECH COMMUNICATIONS</i>		INTRODUCTION TO TECHNOLOGY	
ENG 102 <i>ENGLISH COMPOSITION</i>		BUS 125	3
COM 201 <i>PUBLIC SPEAKING</i>		SUPERVISION	
Choose one (1) Course From	3-4	CAD 110	3
BUS 127 <i>HUMAN RELATIONS</i>		INTRO TO COMPUTER-AIDED DRAFTING (2D)	
ANTH 103 <i>CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY</i>		CAD 135A	3
ECON 101A <i>PRINCIPLES OF MACROECONOMICS</i>		ENGINEERING GRAPHICS	
HE 110	1	CAD 150	3
INDUSTRIAL SAFETY AND WORKPLACE TRAINING		BLUEPRINT READING	
Choose Two(2) Courses From	6-8	CAD 210	3
TMAT 102A <i>TECHNICAL MATH II</i>		PARAMETRIC DESIGN I/PART MODELING	
TMAT 201 <i>TECHNICAL MATH III</i>		CAD 220A	4
MATH 111 <i>ALGEBRA WITH COORDINATE GEOMETRY (RECOMMENDED FOR TRANSFER)</i>		PARAMETRIC DESIGN II-ASSEMBLIES	
MATH 112 <i>TRIGONOMETRIC FUNCTIONS WITH COORDINATE GEOMETRY</i>		CAD 230A	4
		TOOL DESIGN	
		CAD 240A	4
		PRODUCT DESIGN	
		CAD 250	3
		INTRODUCTION TO SOLIDWORKS 3D	
		CAD 255	3
		INTRODUCTION TO SIEMENS NX	
		CSS 100A	3
		COLLEGE SUCCESS SEMINAR	
		ELTC 101AL&L	4
		ELECTRICITY-BASIC	
		ENGR 105	4
		INTRODUCTION TO ENGINEERING	
		HP 101	3
		HYDRAULICS/PNEUMATICS	
		MATH 100A	4
		INTERMEDIATE ALGEBRA	
		MATH 111	4
		ALGEBRA WITH COORDINATE GEOMETRY	
		MATH 112	4
		TRIGONOMETRIC FUNCTIONS WITH COORDINATE GEOMETRY	
		MATH 161	4
		CALCULUS I	
		MATH 162A	4
		CALCULUS II	
		MET 102	3
		BASIC CAST METALS	
		MET 201	3
		METALLURGY	
		MT 150	3
		MACHINERY HANDBOOK	
		MT 240	3
		BASIC MACHINE REPAIR	

(CONTINUED ON NEXT PAGE)

PHYS 201CL&L.....	5
<i>COLLEGE PHYSICS I LECTURE AND LAB</i>	
QC 101	3
<i>BASIC QUALITY CONTROL</i>	
TECH 201	3
<i>INTRODUCTION TO MECHATRONICS</i>	
TECH 290CI	3
<i>COOPERATIVE INTERNSHIP</i>	
TMAT 101A.....	4
<i>TECHNICAL MATH</i>	
W 101A	3
<i>BASIC WELDING</i>	
W 102A	3
<i>GAS METAL ARC WELDING (MIG)</i>	
W 103A	3
<i>GAS TUNGSTEN ARC WELDING (TIG)</i>	
W 105	3
<i>SHIELDED METAL ARC WELDING (STICK)</i>	

TOTAL 62

Machining Technology Certificate

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. Upon completing this program students will be prepared to work as a machinist, tool maker, die maker, lathe machinist, or CNC machinist. Students planning to continue with an associate's degree should consult with an MCC counselor.

CERTIFICATE REQUIREMENTS	28-29 CR. HRS.
CAD 150	3
<i>BLUEPRINT READING</i>	
MET 101	3
<i>INDUSTRIAL MATERIALS</i>	
MT 101B	4
<i>MACHINING-BASIC</i>	
MT 102A	3
<i>INTERMEDIATE MACHINING</i>	
MT 103A	3
<i>ADVANCED MACHINING</i>	
MT 150	3
<i>MACHINERY HANDBOOK</i>	
MT 205A	3
<i>NC/CNC (COMPUTER NUMERICAL CONTROL)</i>	
MT 206A	3
<i>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
Choose One (1) Course From	3-4
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	
<i>MATH 100A INTERMEDIATE ALGEBRA</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY</i> <i>(RECOMMENDED FOR TRANSFER)</i>	

TOTAL 28-29

Manufacturing Machine Repair Certificate (Industrial Maintenance)

This curriculum is designed to provide students the necessary skills to build, install, troubleshoot, repair, and maintain industrial equipment used in the manufacturing industry. Students will study a variety of topics including automation, electricity, robotics, pneumatics, hydraulics, welding, and machining. Upon completing this program students will be prepared to work as machine repair technician, industrial machine mechanic, millwright, mechanical journeyman, or machine maintenance technician. Students planning to continue with an associate's degree should consult with an MCC counselor.

CERTIFICATE REQUIREMENTS	28-29 CR. HRS.
CAD 150	3
<i>BLUEPRINT READING</i>	
ELTC 101AL&L	4
<i>ELECTRICITY-BASIC</i>	
HE 110	1
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>	
HP 101.....	3
<i>HYDRAULICS/PNEUMATICS</i>	
HP 201.....	4
<i>ADVANCED HYDRAULICS</i>	
MT 101B	4
<i>BASIC MACHINING</i>	
MT 240.....	3
<i>BASIC MACHINE REPAIR</i>	
W 101A.....	3
<i>BASIC WELDING</i>	
Choose One (1) Course From	3-4
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	
<i>MATH 100A INTERMEDIATE ALGEBRA</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY</i> <i>(RECOMMENDED FOR TRANSFER)</i>	

TOTAL 28-29



Mechatronics Certificate

This certificate program provides students with the foundation skills necessary to pursue a career in STEM. This program is designed to give students exposure to a variety of careers including: Mechanical Engineer, Electrical Engineer, Manufacturing Engineer, Electrician, Automation Technician, CAD/CNC, Electronics Technician, Machinist, Industrial Maintenance, and Materials Technology. Students will learn basic engineering skills required to apply mathematics to solve problems, as well as hands-on skills necessary to begin a career in skilled trades. Upon completing this program students will have the skills necessary to go to work as a technician, begin a career in skills trades as an apprentice, and/or continue their education toward an Associate's Degree or Bachelor's Degree. This program is offered for full-time and part-time, day or night, as well as early college and dual enrollment students.

CERTIFICATE REQUIREMENTS 23-26 CR. HRS.

REQUIRED COURSES 17-18 CR. HRS.

CAD 110	3
<i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>	
ELTC 101AL&L	4
<i>ELECTRICITY-BASIC</i>	
HE 110	1
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>	
TECH 201	3
<i>INTRODUCTION TO MECHATRONICS</i>	
Choose One (1) Course From:	3
<i>CAD 210 PARAMETRIC DESIGN I-PART MODELING</i>	
<i>CAD 250 INTRODUCTION TO SOLIDWORKS 3D</i>	
Choose One (1) Course From:	3-4
<i>MATH 100A INTERMEDIATE ALGEBRA</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY</i> <i>(RECOMMENDED FOR TRANSFER)</i>	
<i>MATH 112 TRIG FUNCTIONS WITH COORDINATE</i> <i>GEOMETRY</i>	
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	

REQUIRED ELECTIVES 6-8 CR. HRS

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

AMT129	3
<i>INTRODUCTION TO TECHNOLOGY</i>	
ENGR 105	4
<i>INTRODUCTION TO ENGINEERING</i>	
CSS 100A	3
<i>COLLEGE SUCCESS SEMINAR</i>	
HP 101	3
<i>HYDRAULICS/PNEUMATICS</i>	
MATH 111	4
<i>ALGEBRA WITH COORDINATE GEOMETRY</i>	
MATH 112	4
<i>TRIG FUNCTIONS WITH COORDINATE GEOMETRY</i>	
MATH 161	4
<i>CALCULUS I</i>	
MT 101B	4
<i>BASIC MACHINING</i>	
MT 205A	3
<i>NC/CNC (COMPUTER NUMERICAL CONTROL)</i>	
TMAT 101A	4
<i>TECHNICAL MATH</i>	
W101A	3
<i>BASIC WELDING</i>	

TOTAL 23-26

Patternmakers Certificate

This curriculum is designed to prepare the student for entry level work as a foundry patternmaker. Students will apply CAD, CNC, machining, and woodworking skills to create molds used in casting metal foundries. Upon completing this program students will be prepared to work as a foundry patternmaker, model maker, or foundry technician. Students planning to continue with an associate's degree should consult with an MCC counselor.

CERTIFICATE REQUIREMENTS	31-32 CR. HRS.
CAD 110.....	3
<i>INTRODUCTION TO DRAFTING</i>	
CAD 150.....	3
<i>BLUEPRINT READING</i>	
MT 101B.....	4
<i>BASIC MACHINING</i>	
MT 205A.....	3
<i>NC/CNC (NUMERICAL CONTROL/COMPUTER NUMERICAL CONTROL)</i>	
MT 206A.....	3
<i>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
MT 216.....	3
<i>3-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
MET 102.....	3
<i>BASIC CAST METALS</i>	
Choose One (1) Course From	3
<i>CAD 210 PARAMETRIC DESIGN I PART MODELING</i>	
<i>CAD 250 INTRODUCTION TO SOLIDWORKS 3D</i>	
Choose One (1) Course From	3
<i>MT 218 5-AXIS CNC & CMM</i>	
<i>MT 222 MACHINING CAPSTONE</i>	
Choose One (1) Course From	3-4
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	
<i>MATH 100A INTERMEDIATE ALGEBRA</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY</i>	
<i>(RECOMMENDED FOR TRANSFER)</i>	

TOTAL 31-32

Associate in Applied Science Engineering Technology

This curriculum is designed to prepare a student for entry-level engineering and technical positions related to industry and technology. This degree is designed to prepare graduates for entry-level work in the field of Engineering and/or to transfer to a four-year institution for continuing engineering study. Upon completing this program students will be prepared for a career path as Process Engineer, Quality Engineer, Systems Engineer, Plant Engineer, or Manufacturing Engineer. Students planning to transfer to a four-year college should consult with an MCC Counselor.

GENERAL EDUCATION REQUIREMENTS	16-22 CR. HRS.	ENGINEERING TECHNOLOGY REQUIRED ELECTIVES	6-10 CR. HRS.
Choose Two (2) Courses From:	6-8	<i>Electives must be chosen from the following list or have departmental approval.</i>	
AMT 129 INTRODUCTION TO TECHNOLOGY		ANTH 105D.....	4
ANTH 103 CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY		INTRODUCTION TO PHYSICAL ANTHROPOLOGY/ARCHAEOLOGY	
ART 198 ART HISTORY I		CAD 110	3
CIS 120A INTRO TO COMPUTER INFO SYSTEMS		INTRODUCTION TO COMPUTER AIDED DRAFTING (2D)	
CIS 185 C PROGRAMING		CAD 210	3
CS 100A COLLEGE SUCCESS SEMINAR		PARAMETRIC DESIGN I -PART MODELING	
ECON 101A PRINCIPLES OF MACROECONOMICS		CAD 250	3
ECON 102A PRINCIPLES OF MICROECONOMICS		INTRODUCTION TO SOLIDWORKS 3D	
HUM 195 INTRODUCTION TO HUMANITIES		CHEM 100LEC & CHEM 100A.....	5
HE 106 CONCEPTS OF HEALTH AND WELL-BEING		FUNDAMENTALS OF CHEMISTRY L&L	
PHIL 101 BASIC CONCEPTS OF PHILOSOPHY		CHEM 102LEC & CHEM 102A.....	5
PHIL 202 INTRODUCTION TO ETHICS		GENERAL AND INORGANIC CHEMISTRY L&L	
ENG 101	3	ECON 101A.....	4
ENGLISH COMPOSITION		PRINCIPLES OF MACROECONOMICS	
Choose One (1) Course From:	3	ENGR 105.....	4
BCOM 102 ADVANCED BUSINESS & TECH COM		INTRODUCTION TO ENGINEERING	
COM 201 PUBLIC SPEAKING		MT 101B	4
ENG 102 ENGLISH COMPOSITION		BASIC MACHINING	
PHIL 205 BUSINESS ETHICS			
SOC 101 PRINCIPLES OF SOCIOLOGY		CHOOSE ONE (1) OPTION	25-29 CR. HRS.
SOC 202A MODERN SOCIAL PROBLEMS		OPTION I: ENGINEERING TRACK	27-29 CR. HRS
MATH 112.....	4	CHEM 101LEC & CHEM 101A.....	5
TRIG FUNCTIONS WITH COORDINATE GEOMETRY		GENERAL AND INORGANIC CHEMISTRY L&L	
ELECTIVES.....	0-5	MATH 161	4
(AS NEEDED TO REACH 62 CREDITS)		CALCULUS I	
		MATH 162A.....	4
		CALCULUS II	
ENGINEERING TECHNOLOGY-RELATED REQUIREMENTS	10 CR. HRS.	MATH 283	4
Choose One (1) Course From:	5	CALCULUS III	
PHYS 201CL&L COLLEGE PHYSICS I LECTURE AND LAB		MATH 295	4
PHYS 203L&L ENGINEERING PHYSICS		DIFFERENTIAL EQUATIONS	
Choose One (1) Course From:	5	Choose Two (2) Courses From:	6-8
PHYS 202CL&L COLLEGE PHYSICS II LECTURE AND LAB		ANTH 103 CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY	
PHYS 204L&L ENGINEERING PHYSICS		ANTH 105D INTRODUCTION TO PHYSICAL ANTHROPOLOGY/ARCHAEOLOGY	
		ENGR 202 STATICS	
		ENGR 204 DYNAMICS	
		HIST 101 WESTERN CIVILIZATION TO 1500	
		HIST 102 WESTERN CIVILIZATION 1500 TO PRESENT	
		MATH 276 LINEAR ALGEBRA WITH APPLICATIONS	

*ENGINEERING TRACK IS RECOMMENDED FOR STUDENTS WISHING TO PURSUE A DEGREE IN ENGINEERING. STUDENTS PLANNING TO TRANSFER TO A FOUR-YEAR COLLEGE SHOULD CONSULT WITH AN MCC COUNSELOR.

OPTION 2: FERRIS STATE UNIVERSITY

ENGINEERING TECHNOLOGY TRACK 26 CR HRS, 26 CR. HRS.

CAD 250	3	CHEM 101LEC & CHEM 101A	5
<i>INTRODUCTION TO SOLIDWORKS</i>		<i>GENERAL AND INORGANIC CHEMISTRY L&L</i>	
ELTC 101AL&L	4	MET 101	3
<i>ELECTRICITY - BASIC</i>		<i>INDUSTRIAL MATERIALS</i>	
HP 101	3	MET 102	3
<i>HYDRAULICS/PNEUMATICS</i>		<i>BASIC CAST METALS</i>	
MATH 161	4	MET 201	3
<i>CALCULUS I</i>		<i>METALLURGY</i>	
MET 101	3	MT 205A	3
<i>INDUSTRIAL MATERIALS</i>		<i>NC/CNC (NUMERICAL CONTROL/COMPUTER NUMERICAL CONTROL)</i>	
MET 201	3	MT 206A	3
<i>METALLURGY</i>		<i>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>	
MT 205A	3	QC 101	3
<i>NC/CNC (NUMERICAL CONTROL/COMPUTER NUMERICAL CONTROL)</i>		<i>BASIC QUALITY CONTROL</i>	
MT 206A	3	QC 105	3
<i>2-D CAD/CAM COMPUTER-AIDED DESIGN/MACHINING</i>		<i>QUALITY AND PRODUCTIVITY USING SPC/STATISTICAL PROCESS CONTROL</i>	

*Ferris State University Engineering Technology Track allows students to transfer into the following programs at FSU:

- Industrial Technology and Management
- Manufacturing Engineering Technology
- Product Design Engineering Technology

TOTAL 62

OPTION 3: WESTERN MICHIGAN UNIVERSITY

ENGINEERING TECHNOLOGY TRACK 25 CR HRS,

CAD 210	3
<i>PARAMETRIC DESIGN I-PART MODELING</i>	
CHEM 101 LEC & CHEM 101A	5
<i>GENERAL & INORGANIC CHEMISTRY L&L</i>	
ELTC 101AL&L	4
<i>ELECTRICITY - BASIC</i>	
MATH 161	4
<i>CALCULUS I</i>	
MET 102	3
<i>BASIC CAST METALS</i>	
MET 201	3
<i>METALLURGY</i>	
MT 205A	3
<i>NC/CNC (NUMERICAL CONTROL/COMPUTER NUMERICAL CONTROL)</i>	

*Western Michigan University Engineering Technology Track allows students to transfer into the following programs at WMU:

- Engineering Design Technology
- Engineering Management Technology
- Manufacturing Engineering Technology

OPTION 4: MATERIALS TECHNOLOGY TRACK

Quality Assurance Certificate

This curriculum is designed to educate and train personnel to fill technician positions related to quality assurance in the manufacturing industry.

CERTIFICATE REQUIREMENTS	24-26 CR. HRS.
AMT 129.....	3
<i>INTRODUCTION TO TECHNOLOGY</i>	
ENG 101	3
<i>ENGLISH COMPOSITION</i>	
CAD 150	3
<i>BLUEPRINT READING</i>	
MET 101	3
<i>INDUSTRIAL MATERIALS</i>	
QC 101	3
<i>BASIC QUALITY CONTROL</i>	
QC 105	3
<i>QUALITY AND PRODUCTIVITY USING SPC-STATISTICAL PROCESS CONTROL</i>	
Choose Two (2) Courses From	6-8
<i>TMAT 101A TECHNICAL MATH I</i>	
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	
<i>MATH 100A INTERMEDIATE ALGEBRA</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY (RECOMMENDED FOR TRANSFER)</i>	
<i>MATH 115A PROBABILITY AND STATISTICS</i>	
<i>MATH 215 PROBABILITY AND STATISTICS FOR ENGINEERING</i>	

TOTAL 24-26

Associate in Applied Science Welding Technology

This program is designed to provide basic skills necessary to pursue a career in welding. Students will learn skills dealing with the fabrication of metal products from rolled, stamped, forged or cast shapes. Curriculum will also focus on the type of metal, position of weldments, and use of structural shapes in a manner similar to that used in industrial processing. Upon completing this program students will be prepared to work as a welding operator, welding technician, welding maintenance technician or welding automation technician. Students planning to transfer to a four-year college should consult with an MCC counselor.

GENERAL EDUCATION REQUIREMENTS	15-18 CR. HRS.	ELTC 101AL&L4 <i>ELECTRICITY-BASIC</i>
ENG 101	3	MET 2013 <i>METALLURGY</i>
<i>ENGLISH COMPOSITION</i>		MT 101B4 <i>BASIC MACHINING</i>
Choose one (1) Course From	3	ENGR 105.....4 <i>INTRODUCTION TO ENGINEERING</i>
<i>BCOM 102 ADVANCED BUS AND TECH COMMUNICATIONS</i>		PHYS 201CL&L.....5 <i>COLLEGE PHYSICS I LECTURE AND LAB</i>
<i>ENG 102 ENGLISH COMPOSITION</i>		
<i>COM 201 PUBLIC SPEAKING</i>		
Choose two (2) Courses From	6-8	REQUIRED ELECTIVES 8-12 CR. HRS.
<i>BUS 127 HUMAN RELATIONS</i>		<i>Electives must be chosen from the following list or have departmental approval.</i>
<i>ANTH 103 CULTURAL DIVERSITY IN CONTEMPORARY SOCIETY</i>		ACC 2014 <i>PRINCIPLES OF ACCOUNTING I</i>
<i>ECON 101A PRINCIPLES OF MACROECONOMICS</i>		AMT 129.....3 <i>INTRODUCTION TO TECHNOLOGY</i>
<i>HUM 195 INTRODUCTION TO HUMANITIES</i>		BUS 125.....3 <i>SUPERVISION</i>
<i>PHIL 202 INTRODUCTION TO ETHICS</i>		BUS 161A.....3 <i>EFFECTIVE SELLING</i>
<i>PSYC 201 GENERAL PSYCHOLOGY</i>		CAD 135A.....3 <i>ENGINEERING GRAPHICS</i>
Choose One (1) Course From	3-4	CAD 210.....3 <i>PARAMETRIC DESIGN I - PART MODELING</i>
<i>TMAT 102A TECHNICAL MATH II</i>		CAD 2503 <i>INTRODUCTION TO SOLIDWORKS 3D</i>
<i>TMAT 201 TECHNICAL MATH III</i>		CS 100A.....3 <i>COLLEGE SUCCESS SEMINAR</i>
<i>MATH 100A INTERMEDIATE ALGEBRA</i>		COM201.....3 <i>PUBLIC SPEAKING</i>
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY (RECOMMENDED FOR TRANSFER)</i>		ELTC 1043 <i>BASIC INDUSTRIAL ROBOTS</i>
WELDING TECHNOLOGY REQUIREMENTS	24 CR. HRS.	ELTC 150.....3 <i>INDUSTRIAL ELECTRICITY</i>
W 101A.....3		ELTC 204.....3 <i>ADVANCED INDUSTRIAL ROBOTS</i>
<i>BASIC WELDING</i>		ELTC 220.....3 <i>ELECTRICAL TROUBLESHOOTING</i>
W 102A.....3		HE 1101 <i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>
<i>GAS METAL ARC WELDING (MIG)</i>		HP 101.....3 <i>HYDRAULICS/PNEUMATICS</i>
W 103A.....3		HP 201.....4 <i>ADVANCED HYDRAULICS</i>
<i>GAS TUNGSTEN ARC WELDING (TIG)</i>		
W 105.....3		
<i>SHIELDED METAL ARC WELDING (STICK)</i>		
W 201.....3		
<i>STRUCTURAL WELDING</i>		
W 202A.....3		
<i>PIPE WELDING</i>		
W 205.....3		
<i>WELDING AUTOMATION</i>		
W 206.....3		
<i>METAL FABRICATION</i>		
TECHNICAL-RELATED REQUIRED ELECTIVES	11-12 CR. HRS.	
CAD 110.....3		
<i>INTRO TO COMPUTER-AIDED DRAFTING (2D)</i>		
CAD 150.....3		
<i>BLUEPRINT READING</i>		

(CONTINUED ON NEXT PAGE)

MATH 112	4
<i>TRIGONOMETRIC FUNCTIONS WITH COORDINATE GEOMETRY</i>	
MATH 161	4
<i>CALCULUS I</i>	
MATH 162A.....	4
<i>CALCULUS II</i>	
MET 101	3
<i>INDUSTRIAL MATERIALS</i>	
MET 102	3
<i>BASIC CAST METALS</i>	
TMAT 101A.....	4
<i>TECHNICAL MATH</i>	
TECH 201	3
<i>INTRODUCTION TO MECHATRONICS</i>	
TECH 290CI.....	3
<i>COOPERATIVE INTERNSHIP</i>	
QC 101	3
<i>BASIC QUALITY CONTROL</i>	
TOTAL 62	

Welding Technology Certificate

This program is designed to provide basic skills necessary to pursue a career in welding. Students will learn skills dealing with the fabrication of metal products from rolled, stamped, forged or cast shapes. Curriculum will also focus on the type of metal, position of weldments, and use of structural shapes in a manner similar to that used in industrial processing. Upon completing this program students will be prepared to work as a welding operator, welding technician, or welding maintenance technician. This program is offered for full-time and part-time, day or night, as well as early college and dual enrollment students. Students planning to continue with an associate's degree should consult with an MCC counselor.

CERTIFICATE REQUIREMENTS	25-26 CR. HRS.
CAD 150	3
<i>BLUEPRINT READING</i>	
ELTC 101AL&L	4
<i>ELECTRICITY-BASIC</i>	
MT 101B	3
<i>BASIC MACHINING</i>	
W 101A	3
<i>BASIC WELDING</i>	
W 102A	3
<i>GAS METAL ARC WELDING (MIG)</i>	
W 103A	3
<i>GAS TUNGSTEN ARC WELDING (TIG)</i>	
W 105	3
<i>SHIELDED METAL ARC WELDING (STICK)</i>	
Choose One (1) Course From	3-4
<i>TMAT 101A TECHNICAL MATH I</i>	
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	
<i>MATH 100A INTERMEDIATE ALGEBRA</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY</i> <i>(RECOMMENDED FOR TRANSFER)</i>	

TOTAL 25-26

PROGRAMS

Wind & Solar Certificate

The Wind and Solar Certificate focuses on the installation of wind and solar electric generation equipment designed for use in residential and light commercial environments. This segment of the industry has received statewide acceptance by local communities. As the technology advances payback periods are decreasing thus encouraging increased use of these alternative and renewable power generation technologies. Upon completing this program students will be prepared to work as a renewable energy technician, renewable energy installer, solar energy technician, or a wind technician. Students planning to continue with an associate's degree should consult with an MCC counselor.

CERTIFICATE REQUIREMENTS 29-30 CR. HRS.

ARE 115.....	3
<i>WIND TURBINE AND SOLAR ARRAY INSTALLATION</i>	
ELTC 101A L&L	4
<i>ELECTRICITY-BASIC</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>	
ELTC 220.....	3
<i>ELECTRICAL TROUBLESHOOTING</i>	
HE 110	1
<i>INDUSTRIAL SAFETY AND WORKPLACE TRAINING</i>	
TECH 200	3
<i>APPLIED ALTERNATIVE AND RENEWABLE ENERGY</i>	
Choose One (1) Course From	3-4
<i>TMAT 102A TECHNICAL MATH II</i>	
<i>TMAT 201 TECHNICAL MATH III</i>	
<i>MATH 100A INTERMEDIATE ALGEBRA</i>	
<i>MATH 111 ALGEBRA WITH COORDINATE GEOMETRY</i> <i>(RECOMMENDED FOR TRANSFER)</i>	

TOTAL 29-30

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.

Associate in General Studies Minimum – 62 credits	
Communication – 6 credits with grades of “C” or better	Personal, Social, and Cultural Awareness - 3 credits
Business and Technical Communication - 101	Anthropology - 103, 110
Communication - 101, 102, 107, 201	Art - 198, 199, 202, 213A
English – 101, 102, any 200-level English course except 234D	Business - 127
Problem Solving - 0-4 credits	Economics - any
Student may demonstrate competency by testing out of Math 100A or by completing one of the following courses:	English - 200A, 201A, 205, 206, 207, 210, 211, 213, 218A, 225, 226, 227, 228, 231
Business – 126	Foreign Language - any
Math – 100A or any higher level Math course	Geography - 104, 105
Technical Math – any	History - any
Science and Technology – 3 credits	Humanities - any
Anthropology – 105D	Musical - 103A
Astronomy – any	Philosophy - 203, 210
Biology – any	Political Science - any
Chemistry – any	Psychology - any
Computer Information Systems – any	Sociology - any
Geography – 101A, 215	Theater - 201
Geology – any	Women’s Studies - any
Introduction to Technology (AMT) 129	
Physical Science – any	
Physics - any	
Ethical Reasoning and Creativity-6 credits	Physical Education – 2 credits
Art – 100A, 104, 105B, 106B, 107, 108, 109, 117, 118, 204B, 205, 207, 208, 209, 214, 220, 240B	Option 1:
Communication – 203	One credit must be from the following:
Dance – any	Physical Education - 101A, 103, 104A, 118, 201
English – 216, 223	One credit must be from any other Physical Education or Dance course
Music – any	Option 2:
Philosophy – 101, 102, 104, 202, 204, 205, 207	May replace option 1 with PEA 121
Theater - any	
Electives - 38-42 credits of student’s choice	

PROGRAMS

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.

Ferris State University

(www.ferris.edu/muskegon)

Ferris State University partners with MCC to provide opportunities to complete a bachelor's degree locally and affordably. Some programs allow students to take up to 90 credits at MCC and 30 credits at Ferris to earn their bachelor's degree. These programs are available through a combination of community college courses and Ferris State University courses delivered in Grand Rapids and/or online coursework.

Business Administration

This program prepares students for the rapidly changing nature of the work environment in business, government, and other nonprofit organizations. The program is designed to equip graduates not only for entry-level positions, but also for advancement as well. Building upon a core of business courses, the program features a tight sequence of major courses; however, the program also provides the flexibility to specialize in an area of interest for the student.

Business Administration-Professional Track

The Business Administration-Professional Track provides a degree completion program in Business Administration for students who have prior coursework containing a professional or occupational emphasis (i.e. Accounting, Human Resources, Marketing, Cosmetology and many others).

Computer Information Systems

Computers and information systems are essential in many aspects of business, industry, and life. Individual business departments, corporations, or multi-national enterprises need professional, highly skilled computer systems problem-solvers to keep them operating at peak efficiency. The CIS curriculum provides a broad understanding of core business functions, competency in computer programming, knowledge of information

technology infrastructure, and a sound foundation in systems analysis and design.

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 a combination of Ferris courses in Grand Rapids and/or online.

Criminal Justice

This Generalist option prepares the student to seek federal, state and/or local Criminal Justice agency employment or admission to law school or graduate school, and it gives students an education with a broad focus in Criminal Justice. The program offers small class sizes, usually between 15 to 30 students, and our degreed faculty members have extensive Criminal Justice experience and utilize a pragmatic approach to prepare students for a career in Criminal Justice. The most common positions for graduates of this program are: police officer, corrections officer, community correction officer, probation officer, detective, federal agent, and investigator for a multitude of public and private agencies and/or corporations.

Early Childhood Education

In the Early Childhood Education program, students will study important topics such as early childhood development, nutrition, first aid, and children's literature. Students will also receive a broad educational background by completing general education courses in English, mathematics, humanities and sociology. This degree does not prepare students to become certified teachers; however, graduates of the Early Childhood Education major find positions in Head Start programs, Great Start Readiness Programs, day care center, or family day care homes, elementary schools, hospitals, recreation centers, or other child related businesses.

Industrial Technology and Management

If you have technical education, technical training, an apprenticeship or military training in your background and you're looking for a career move to production supervision, sales engineering, production planning, quality, engineering supervision, project management, continuous improvement, an administrative role or advanced technical position, this degree is for you.

Manufacturing Engineering Technology – Manufacturing or Quality Concentration

This curriculum offers instruction and practical experience in all facets of manufacturing engineering. Study through hands on applied coursework/projects in quality control,

manufacturing methods, industrial engineering, plant layout, automation, and uses of lean allows graduates to participate in the design of a total product manufacturing system. A quality concentration is also available for those seeking to become Quality Engineers.

Product Design Engineering Technology

Focusing on all facets of the design process, our Product Design Engineering Technology program will provide you with versatile design skills that apply to a wide range of industries. You will begin with conceptual drawing and move through the creation of complex layouts, prototypes and the integration of manufacturing principles into your design.

Grand Valley State University

(www.gvsu.edu/ce)

Transfer Connections provides services to students who transfer to Grand Valley State University from other colleges and universities with assistance including transfer advising and navigating the academic and cultural landscape of the university.

Services focus on supporting a successful transition, helping transfers build connections and community, and assisting students as they explore and pursue their academic and career goals.

For more information or to schedule an appointment go to Grand Valley State University, Transfer Connections (www.gvsu.edu/transferconnections) or call (231) 777-0505 or (616) 215-9067 or visit

our office on the MCC Campus Room 1309C, Stevenson Center for Higher Education.

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).

Michigan State University

(www.iat.msu.edu)

Michigan State University partners with MCC to provide opportunities to students interested in Agriculture programs. MCC offers two degrees, the AAS in Agriculture and the AAS in Food Processing Technology, which combine MCC courses with one of four certificates available from MSU: Agriculture Operations, Fruit and Vegetable Crop Management, Landscape Management, and Food Processing and Safety. For more information, call (231) 777-0576 to speak with the Muskegon Program Coordinator of the Institute of Agricultural Technology.

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 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 needed to receive a Commercial Driver's License.

- ♦ 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.
- ♦ Certificate after successfully completing the course.
- ♦ Basic (160 hrs), and Advanced (184 hrs) classes available
- ♦ CPR Training and Certificate
- ♦ Basic First Aid Training
- ♦ 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.

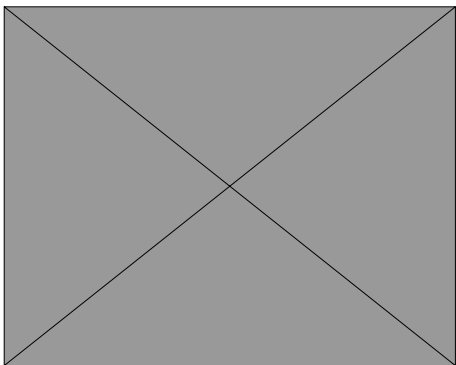
- Courses numbered from within the range 000 to 099 can generally be considered as pre-college level skills development or enhancement courses, designed to help prepare students for success in college level work. Students should check with an academic counselor, department chairperson, or program coordinator 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.

College Reading Proficiency (Reading Competency Only)	
Before enrolling in many courses, you must meet the College Reading Proficiency requirement in one of the following ways:	
ACCUPLACER CLASSIC/COMPASS	Reading score of 76 or higher
ACCUPLACER NEXTGEN	Reading score of 250 or higher
SAT	Reading score of 25 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 Course	Earning a "C" grade or better in Reading 040 or Reading 050 or Reading 130
High School GPA	3.0 or higher (from official school transcript from end of 11th or 12th grade, student must be within 3 years of graduation)
High School GPA +SAT/ACT student of 23-24 or	2.7-2.99 (from official school transcript from end of 11th or 12th grade, must be within 3 years of graduation) PLUS SAT Reading score of 17-18 ACT Reading score of 17-18

COURSE DESCRIPTIONS



Accounting

ACC 100

Fundamentals of Accounting

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

Prereq: None

This course is an introductory basic bookkeeping and accounting class that emphasizes the accounting cycle. Day-to-day accounting activities are covered, through the preparation of the financial statements and the process of closing the financial records. Upon successful completion of this class, the student will be well prepared to take ACC 201 Principles of Accounting I. (Students having difficulty with ACC 201 may transfer to this class through the end of the add/drop period with no loss of tuition.)

ACC 201

Principles of Accounting I

4 Cr. Hrs. – 4 Contact Hrs. **FWSO**

Prereq: College Reading Proficiency

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

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

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

3 Cr. Hrs. – 3 Contact Hrs. **WSO**

Prereq: ACC 100 or ACC 201 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.

ACC 220

Federal Taxation I

4 Cr. Hrs. – 4 Contact Hrs. **W**

Prereq: ACC 201 with a minimum grade of “C”

Catalog description: Federal Taxation I is designed to provide students with knowledge of the federal tax code as it relates to individual and business taxation. Students embark on a variety of learning opportunities including hands-on experience working with community organizations to provide tax services to Muskegon residents. The course prepares students for continuing education and career exploration as tax professionals in the private or public industries.

Allied Health

(see also Health Education)

Several Allied Health courses may be taken that do not require a commitment to a program or a special application. Students take these courses to increase their knowledge and skills in special areas or to prepare themselves to enter a health-related position.

AH 101

Medical Terminology

3 Cr. Hrs. – 3 Contact Hrs. **FWSO**

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 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 106

Fundamentals of Health Care Delivery

3 Cr. Hrs. – 3 Contact Hrs. **WO**

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**

Prereq: College Reading Proficiency, and possess a current CPR certification or be enrolled in HE 100A or other CPR course. The student must be free of communicable disease and demonstrate ability to meet the essential functions of the occupation, and have a clear criminal background check.

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 \$125.00 and is subject to change.

AH 111

Environmental Stressors and Nutrition

1 Cr. Hr. – 1 Contact Hr. **FSO**

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 196

Electronic Health Records

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

Prereq: None

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.

CHW 101

Community Health Worker

8 Cr. Hrs. – 8 Contact Hrs. **FWS**

Prereq: None

Community Health Workers (CHWs) are a vital part of health and human services delivery in Michigan and are trusted members of the community served. They contribute in many ways by functioning as a consistent source of contact between care providers and individuals, providing case management and care coordination. CHWs influence the health of the community by providing outreach, community education, informal counseling, social support, and advocacy. This course follows the Michigan Community Health Worker Alliance (MiCHWA) curriculum and includes 40 hours of internship.

American Sign Language

ASL 101

American Sign Language I

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

Prereq: None

Study the various aspects of American Sign Language including finger spelling, interpreting, sign vocabulary, facial expression, body movement, and grammatical structure. This course is designed for students who are considering pursuing certification in interpreting.

ASL 102

American Sign Language II

3 Cr. Hrs. – 3 Contact Hrs. **WS**

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

ANTH 103 Cultural Diversity in Contemporary Society

3 Cr. Hrs. – 3 Contact Hrs. **FWSO**

Prereq: College Reading Proficiency

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. **FWSO**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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

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: College Reading Proficiency

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: College Reading Proficiency

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 106B

Beginning Printmaking-Relief and Monotype

3 Cr. Hrs. – 6 Contact Hrs. **F**

Prereq: College Reading Proficiency

The study of a variety of relief and monotype printmaking techniques.

ART 107

Painting I

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

Prereq: College Reading Proficiency

The study of oils or acrylics through diverse subject matter.

ART 108

Ceramics I

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

Prereq: College Reading Proficiency

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: College Reading Proficiency

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: College Reading Proficiency

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 118

Beginning Printmaking Intaglio

3 Cr. Hrs. – 6 Contact Hrs. **W**

Prereq: College Reading Proficiency

The study of a variety of intaglio printmaking techniques..

ART 198**Art History I**3 Cr. Hrs. – 3 Contact Hrs. **F***Prereq: College Reading Proficiency*

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. **W***Prereq: College Reading Proficiency*

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: College Reading Proficiency*

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**College Reading Proficiency*

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. **F****W***Prereqs: ART 108 and**College Reading Proficiency*

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**College Reading Proficiency*

A continuation of ART 109, with concentration in materials of individual interest.

ART 213A**The Art of Gettysburg and the Civil War***(formerly ART 213)*3 Cr. Hr. – 3 Contact Hrs. **D**

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 214**Principles of 35 mm B&W Photography***(formerly GR 200L&L)*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.

ART 215

Intermediate Photography

(formerly GR 225)

3 Cr. Hrs. – 6 Contact Hrs. **S**

Prereq: ART 214

Intermediate Photography is a course in photography that builds on basic camera and black and white darkroom techniques introduced in Principles of Photography, 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.

ART 220

Figure Drawing

3 Cr. Hrs. – 6 Contact Hrs. **F**

Prereqs: College Reading Proficiency, 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 230

The Art and History of the Celts

1 Cr. Hr. – 2 Contact Hrs. **F**

Prereq: College Reading Proficiency

Note: This course is offered only in odd numbered years.

Where and when did Celtic art and culture originate? Even though the ancient Celts left no written record of their existence their art proves they were a dynamic and sophisticated society. They were distinct from their contemporaries the Greeks and Romans yet equal and even for a time, superior to their so-called “civilized” Mediterranean neighbors. When Christianity entered Celtic lands the ancient ways adapted to become one of the most popular and longest surviving art traditions in the world today.

This course will answer such questions as: Who are the Celts? What traits make their art significant? How has Celtic art and culture changed over time? How does their art reflect their unique spiritual beliefs and traditions? What vestiges of Celtic culture have survived to this day? What was Ireland’s unique role in preserving this heritage? The course will also examine how art and history is interpreted and presented through contemporary festivals, tourism, and popular culture.

ART 240

Professional Practices in Art

3 Cr. Hrs. – 3 Contact Hrs. **D**

Prereq: College Reading Proficiency

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: College Reading Proficiency 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.

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.

Astronomy

ASTR 101

General Astronomy

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

Prereq: College Reading Proficiency

This course is a broad, generally non-mathematical, survey of the science of astronomy. Topics include: historical astronomy, the mechanics and clockwork of the night sky, astronomical instruments, the solar system, stellar evolution, the Milky Way, galaxies and theories about the origin and evolution of the universe. There will be opportunities for observation of astronomical objects with observatory telescopes.

ASTR 105A

Cosmology

4 Cr. Hrs. – 4 Contact Hrs. **FW**

Prereq: MATH 100A

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 114

Automotive Power Plants (Engine Rebuilding)

3 Cr. Hrs. – 6 Contact Hrs. **F**

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**

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 (Drive-ability)

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. **W**

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 150A

Automotive Brakes

3 Cr. Hrs. – 4 Contact Hrs. **F**

Prereq: None

This course covers theory, repair, and adjustment of hydraulic and Anti lock 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 160A

Automotive Air Conditioning

3 Cr. Hrs. – 4 Contact Hrs. **S**

Prereq: None

This course covers theory, repair, and service of the automotive air conditioning system. Air conditioning for both R12 and R134A diagnosis testing and service is covered. Students have the opportunity to become certified via the State of Michigan test in the area of air conditioning.

AT 210

Powertrains (Manual Drive-trains)

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 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. **F**

Prereq: AT123

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.

AT 230

Automotive Service

2 Cr. Hrs. – 4 Contact Hrs. **FW**

Prereq: None

This course is designed to simulate an automotive repair facility. Student will engage in automotive repair projects scheduled to strengthen their knowledge and provide shop experience. Coursework may include visits to local repair facilities to complete the class hours.

Biology

BIOL 103L&L

Introductory Biology

4 Cr. Hrs. – 7 Contact Hrs. **FWS**

Prereq: College Reading Proficiency

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. **FWS**

Prereq: College Reading Proficiency

Note: BIOL 103L&L is **not** a prerequisite.

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: College Reading Proficiency

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. **FWS**

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: College Reading Proficiency

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. **FWS**

Prereq: College Reading Proficiency

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. **FWS**

Prereq: *College Reading Proficiency*

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.

BIOL 120L&L

Flowering Plants of Southwestern Michigan

1 Cr. Hr. – 1 Contact Hr. **S**

Prereq: *College Reading Proficiency*

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.

BIOL 120F L&L

Autumn Flowering Plants of Southwestern Michigan

1 Cr. Hr. – 1 Contact Hr. **F**

Prereq: *College Reading Proficiency*

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 121 LAB

Plant Biology Laboratory

1 Cr. Hr. – 3 Contact Hrs. **FWS**

Co-req: *BIOL 121LEC*

BIOL 121 Lab is a laboratory for the introductory plant biology course that will provide an overview of plants' morphology, physiology, development, and genetics. Also included in this course will be topics on the diversity, taxonomy, systematics, ecology, and evolution of plants.

BIOL 121 LEC

Plant Biology Lecture

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

Co-req: *BIOL 121LAB*

BIOL 121LEC is an introductory plant biology course that will provide an overview of plants' morphology, physiology, development, and genetics. Also included in this course will be topics on the diversity, taxonomy, systematics, ecology, and evolution of plants.

BIOL

200

Introductory Evolution

1 Cr. Hr. – 1 Contact Hr. **W**

Prereqs: *College Reading Proficiency 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 207A

Microbiology Laboratory

1 Cr. Hr. – 3 Contact Hrs. **FWS**

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

Coreq: *BIOL 207LEC*

A general microbiology lab course that includes techniques and experiments for the observation, testing, identification, and understanding of concepts related to microbes of human importance. Includes aspects of microbial culturing using various media, aseptic techniques, slide preparations and staining, techniques to evaluate microbial characteristics and identify microbes, and microbial control.

BIOL 207LEC

Microbiology Lecture

3 Cr. Hrs. – 3 Contact Hrs. **FWSO**

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

Coreq: BIOL 207A

A general microbiology lecture provides an overview of microbes of primarily human importance. Includes aspects of microbial structure and function, growth, energetics, genetics, human microbiota, infection and disease processes, human lines of defense against pathogens, antimicrobial control and resistance, and infectious diseases.

BIOL 250LAB

Coral Reef Ecology Lab

3 Cr. Hrs. – 3 Contact Hrs. **S**

Prereq: BIOL 250LEC, GEOL 250LEC, or Instructor Permission

This field study course will provide students a hands-on opportunity to study coral reef ecosystems in and around the Caribbean Island of Nevis. The biology, chemistry, geology, geography, and Caribbean history and culture will be studied in the classroom and in country. Through data collection and analysis, students will examine the effects of global climate change and ocean acidification on reef ecosystems. Individuals may participate through scuba, snorkel or on-board data collection and analysis. Ability to swim and SCUBA certification are a plus but not mandatory for participation. Travel will take place in the summer semester. Travel dates may vary year to year. Students must be 18 years of age prior to travel.

BIOL 250LEC

Coral Reef Ecology Lecture

2 Cr. Hrs. – 2 Contact Hrs. **W**

Prereq: Instructor Permission

Note: Students must be at least 18 years of age prior to the trip. Approximate cost for the course and dates for the trip can be viewed within Student Planning. Travel will take place in early June.

This field study course will provide students a hands-on opportunity to study coral reef ecosystems in and around the Caribbean Island of Nevis. The biology, chemistry, geology, geography, and Caribbean history and culture will be studied in the classroom and in country. Through data collection and analysis, students will examine the effects of global climate change and ocean acidification on reef ecosystems. Individuals may participate through scuba, snorkel or on-board data collection and analysis. Ability to swim and SCUBA certification are a plus but not mandatory for participation. Travel will take place in the summer semester and will require students to sign up for a 1-credit laboratory course.

BIOL 251

Advanced Coral Reef Ecology

1 Cr. Hrs. – 1 Contact Hrs. **W**

Prereq: BIOL 250LEC and BIOL 250LAB

Note: The two-week field experience will take place in early June. The approximate cost (\$3800) will be billed to your tuition as a course fee. The course fee covers airfare, food, lodging, ground transportation, guide fees, travel insurance, SCUBA diving/snorkeling, equipment rental, island tour, and rainforest and medicinal plant hike. Course fee is non-refundable after the drop deadline. Course fees may vary depending on airfare, dive fees, and food and lodging costs. These costs are approximate costs only. Actual costs will be listed on Web Advisor.

This study abroad course is a continuation of BIOL/GEOL 250Lec and BIOL/GEOL 250Lab for students wanting additional experience studying coral reef ecology. Students will learn the AGRRA (Atlantic and Gulf Rapid Reef Assessment) method for conducting scientific surveys of coral reef health and coral diversity. Classroom instruction to learn the methodology and coral identification procedures will take place

prior to the field experience. Students will spend 14 days on the island of Nevis (St. Kitts and Nevis, West Indies) during the summer semester where they will survey several coral reefs using the AGRRA method. In addition, students will also complete Reef Check surveys using the skills and techniques they learned in BIOL/GEOL 250. Trip dates will vary each year but will typically be in June. SCUBA certification is required for this course. Note: Students will receive a temporary grade of Incomplete at the conclusion of the winter semester. Following the travel portion of the course, a grade change form will be completed and an updated final grade will be submitted to the Registrar's office. Students are encouraged to speak with the Financial Aid office to determine how the incomplete will affect their Standard Academic Progress and Financial Aid eligibility.

BIOL 280

Applied Research in Biology I

3 Cr. Hr. – 5 Contact Hr. **F****W**

Prereq: Complete any college biology course with a grade of "C" or better, or obtain instructor permission.

This lecture/lab course will focus on preparing students to conduct group research projects in a biology-based laboratory setting. The lecture part of the course will provide students the opportunity to learn how to define a research question, formulate a relevant hypothesis, search the literature to gather information related to their research question and hypothesis, analyze scientific literature, prepare a research proposal, analyze and present data, and write a lab report. The research proposal will describe the background, methods, and predicted results of the research they will be conducting in the lab part of the course. The lab portion of the course will teach students biological laboratory skills and techniques that they will use when conducting their research project, including but not limited to genetic analysis techniques, microbiological techniques, preparation of solutions, pipetting, using instrumentation, and lab safety. A significant part of the lab experience will be focused on data collection related to student research projects. Research topics may vary each semester.

BIOL 281

Applied Research in Biology II

3 Cr. Hr. – 5 Contact Hr. **F****W**

Prereq: Complete BIOL 280 with a grade of "C" or better.

This lecture/lab course will focus on preparing students to conduct group research projects in a biology-based laboratory setting. The lecture part of the course will provide students the opportunity to learn how to define a research question, formulate a relevant hypothesis, search the literature to gather information related to their research question and hypothesis, analyze scientific literature, prepare a research proposal, analyze and present data, and write a lab report. The research proposal will describe the background, methods, and predicted results of the research they will be conducting in the lab part of the course. The lab portion of the course will teach students biological laboratory skills and techniques that they will use when conducting their research project, including but not limited to genetic analysis techniques, microbiological techniques, preparation of solutions, pipetting, using instrumentation, and lab safety. A significant part of the lab experience will be focused on data collection related to student research projects. Research topics may vary each semester. Students that have completed Biology 280 and would like another research experience will enroll in this course.

BIOL 290CI

Biology Internship

Contact Life Science chairperson **D**

BIOL 299

Independent Study

Variable Credit **D**

Prereq: College Reading Proficiency

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 108

Introduction to Project Management

3 Cr. Hrs. – 3 Contact Hrs. **F**

This Course provides a basic foundation of knowledge from which processes and procedures can be learned and developed for management of projects. It also describes Project Management tools that can be used to effectively create and manage various types of planning and scheduling activities that are required for completion of a project. Upon completion, students will be prepared to take the Project Management Professional (PMP) certification exam.

BUS 114

Personal Finance

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

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. **FWSO**

Prereq: College Reading Proficiency

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. **FWSO**

Prereq: College Reading Proficiency

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. **FWSO**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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. **FWS**

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. **FWSO**

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. **FWSO**

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****O**

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****W****S**

Prereqs: 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****O**

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. **F****W**

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: College Reading Proficiency**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 195**Medical Records Management**3 Cr. Hrs. – 3 Contact Hrs. **FWSO***Prereq: College Reading Proficiency*

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 200**International Business**3 Cr. Hrs. – 3 Contact Hrs. **FWSO***Prereq: College Reading Proficiency*

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 204**eMarketing**3 Cr. Hrs. – 3 Contact Hrs. **W***Prereqs: None*

The course provides students with a framework of knowledge required to design and implement an effective digital (electronic) marketing strategy either independent of or in conjunction with traditional marketing tools. Students will understand key marketing principles related to website creation, email, social media, video, domain selection, internationalization, online copy writing, analytics and other new media concepts. Students will combine these concepts with an evaluation of legal and ethical concerns about eMarketing to formulate and assess electronic marketing plans. The course will include the creation of a comprehensive, semester-long eMarketing portfolio as part of a project.

BUS 220**E-Business**3 Cr. Hrs. – 3 Contact Hrs. **F***Prereqs: Meet College Reading Proficiency*

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, ability 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.

BUS222

Fundamentals of Organizational Behavior

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

Prereq: College Reading Proficiency

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 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, copy writing and advertising decision-making.

BUS 266

Quality Customer Service II

3 Cr. Hrs. – 3 Contact Hrs. **W** **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 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 290CI

Cooperative Internship Program

1–4 Cr. Hrs. **FWSO**

Prereq: ENG 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.



Business and Technical Communications

BCOM 102

Advanced Business and Technical Communications

3 Cr. Hrs. – 4 Contact Hrs. **FWSO**

Prereq: ENG 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

(See Business)

Chemistry

Students who have not successfully completed Chemistry 100 must take a Chemistry Placement Test before enrolling in Chemistry 101. This test can be taken in the Testing Center. Test results will help place a student correctly into the MCC chemistry sequence.

CHEM 100LEC

Fundamentals of Chemistry

4 Cr. Hrs. – 4 Contact Hrs. **FWSO**

Prereq: MATH 100A with a minimum grade of “C”

Coreq: CHEM 100A

A course emphasizing fundamentals, symbols, formula, 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. **FWSO**

Prereq: MATH 100A

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. **FW**

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. **FWSO**

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. **WSO**

Prereqs: CHEM 101LEC and CHEM 101A

Coreq: CHEM 102A

Topics of the course are kinetics, chemical equilibrium, acid-base chemistry, nuclear chemistry, electro chemistry, 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. **WSO**

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. **FWSO**

Prereqs: MATH 040 and either MATH 041 or
MATH 100A 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. **FWSO**

Prereqs: MATH 040 and either MATH 041 or
MATH 100A

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. **FD** (Summer on
demand)

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. Stereo chemistry and IR, ultraviolet spectroscopy are also introduced.

CHEM 201F

Organic Chemistry Laboratory

1 Cr. Hr. – 4 Contact Hrs. **FD** (Summer on
demand)

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 micro-scale techniques are employed.

CHEM 202F

Organic Chemistry Lecture

4 Cr. Hrs. – 4 Contact Hrs. **W**

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. **W**

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

CHIN 101

Basic Chinese

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

Prereqs: College Reading Proficiency 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.

CHIN 102

Basic Chinese

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

Prereqs: CHIN 101 with a minimum C grade or Instructor Permission

CHIN 102 is the continuation of CHIN 101. Students will continue to develop their language skills of listening, speaking, reading and writing in Chinese. Upon completion of this course, students will have learned intermediate grammar, 395 Chinese characters, Including 11 topics: making requests, clothes and shopping, birthdays and celebrations, location and position, hobbies and sports, weather and seasons, travel and transportation, health and medicine, renting an apartment, and making plans.

College Success Center

(See English, Mathematics, and Reading)

College Success Seminar

CSS 100A

College Success Seminar

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

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 intra personal, 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. **FW**

Prereq: College Reading Proficiency

A consideration of the principles of public speaking with emphasis on the theories of argumentation and persuasion. Class performances required.

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 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 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. ①

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

CAD 110

Introduction to Computer-Aided Drafting (2D)

3 Cr. Hrs. – 6 Contact Hrs. ①②③④

Prereq: None

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 135A

Engineering Graphics

3 Cr. Hrs. – 6 Contact Hrs. ①②

Prereq: CAD 110 (Must pass CAD 110 with a C- or better grade)

The essentials of Engineering Graphics include working assembly drawings and the essentials of descriptive geometry. Included in this is the utilization of section and auxiliary views to create better illustrations of parts and assemblies. Emphasis will be on manufacturing processes for development of mechanical components including threads, gears and cams.

CAD 150

Blueprint Reading

3 Cr. Hrs. – 4 Contact Hrs. ①②③④

Prereq: None

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. ③④

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 210

Parametric Design I – Part Modeling

3 Cr. Hrs. – 6 Contact Hrs. ①②

Prereq: CAD 110 with a grade of C- or better or instructor permission

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 220A

Parametric Design II – Assemblies

4 Cr. Hrs. – 6 Contact Hrs. ①

Prereq: CAD 210

This course covers advanced part modeling concepts and multiple part assemblies. Rendering and animation fundamentals will be presented.

CAD 230A

Tool Design

4 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 240A

Product Design

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

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. **F** **W**

Prereq: CAD 110 with a grade of C- or better 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 255

Introduction to Siemens NX

3 Cr. Hrs. – 6 Contact Hrs. **W**

Prereq: CAD 110 with a grade of a C- or better or instructor permission

This course is designed for the student that has mastered two-dimensional CAD drawing. The student will be introduced to feature based 3D parametric solid modeling using the NX software. The course covers all major environments of NX with a thorough explanation of all tools, options, and their applications to create real-world products.

Computer Information Systems

CIS 100

Introduction to Personal Computers

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

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. **F**

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. FWSO**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 104A**Intro to Networks (CISCO 1) F***4 Cr. Hrs. – 4 Contact Hrs**Prereq. CIS 120A previously or concurrently*

This course introduces the architecture, structure, functions, components, and models of the Internet and other computer networks. The principles and structure of IP addressing and the fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build and test simple LANs, perform basic configurations for routers and switches, and implement IPv4 and IPv6 addressing schemes.

This is the first course in a series of four courses at MCC that prepares students for CISCO CCNA certification.

CIS 105A**Switching & Routing (CISCO 2) F***4 Cr. Hrs. – 4 Contact Hrs**Prereq. CIS 120A previously or concurrently CIS 104A (C-or higher required).*

Please note: Students will be allowed to register for both CIS 104A and CIS 105A at the same time, however if the student does not pass CIS 104A with at least a C-or higher they will not be allowed to continue on with CIS 105A.

This course describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students Learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with VLANs, inter-VLAN routing, STP and FHRP's. Students will also learn the basics of security in WLANs and network switches to configure devices using security best practices. This is the second course in a series of four courses at MCC that prepares students for CISCO CCNA certification.

CIS 106**Google Apps***3 Cr. Hr. – 3 Contact Hr. FW**Prereq: College Reading Proficiency*

Google Apps is an introduction to the many applications offered by Google. Students will be given real-world projects using these applications to increase their skills needed for productivity, collaboration, and communication. Activities focus both on individual applications and the integration of these applications. Google Apps include (but not limited to): Gmail, Google Calendar, Drive, Docs, Sheets, Forms, Slides, Hangouts, sites, Groups, and Maps.

CIS 109A**CompTIA A+ Part A***2 Cr. Hrs. – 3 Contact Hrs. F**Prereq: CIS 110 or CIS 120A*

Note: CIS 110 or CIS 120A may be taken concurrently with CIS 109A

This course provides students with the necessary skills to diagnose, update, and repair the physical components of a personal computing device. Students will become comfortable with the replacement of all internal components such as motherboards, processors, memory, and storage devices. Students will also work with I/O devices, the setting up and troubleshooting of small networks and be introduced to the setting up and working with mobile devices.

CIS 110

Computer Concepts

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

Prereqs: College Reading Proficiency

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. **FWSO**

*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. **FWSO**

*Prereqs: College Reading Proficiency 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. **FWSO**

Prereqs: College Reading Proficiency

*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. **FWSO**

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. **FWS**

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 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 142

Windows Client Administration

3 Cr. Hrs. – 3 Contact Hrs. F

Prereq: CIS 110 or CIS 120A

This course prepares students for Windows client administration on a network and supporting users in an enterprise environment. Students will prepare for a certification exam by studying three major topics areas. First, implement Windows to include preparing installation requirements, installing Windows, configuring devices and drivers, performing post-installation configuration, and implementing Windows in an enterprise environment. Second, configure and support core services to include configuring of networking, storage, data access and usage, remote management, along with implementing apps. Third, manage and maintain Windows to include configuring update, system and data recovery, authorization and authentication, advanced management tools as well as monitor windows.

CIS 143A

Windows Server Admin I

3 Cr. Hrs. – 3 Contact Hrs. F

Prereq: CIS 110 or CIS 120A

This course provides preparation for a Microsoft Windows Server certification exam towards MCSA (Microsoft Certified Solutions Associate). This course provides for the installation, practice, and working with the Microsoft Server operating

system. Students will study and prepare for certification topics such as: planning for server deployment, the ability to work with PowerShell commands, monitoring and maintaining servers, working with server roles, working with server storage and file systems, and server virtualization.

CIS 153A

Database Management - Access

1 Cr. Hr. – 1 Contact Hr. FW

Prereq or Coreq: 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.

CIS 162

Visual C# Programming

3 Cr. Hrs. – 3 Contact Hrs. F

Prereq: CIS 185 or instructor permission

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 170

RPG Programming

3 Cr. Hrs. - 3 Contact Hrs. FO

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 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 inter-networking.

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 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** **D**

Prereqs: 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 201

Help Desk User Support

3 Cr. Hrs. – 3 Contact Hrs. **W**

Prereq: CIS 120A or instructor permission

This course focuses on key information and skills for user support professionals, including troubleshooting and problem solving, successful communication with users, self-management skills, determining a client's specific needs, Help Desk processes, and training end users using both technical and non-technical skills.

CIS 202A

IT SEC & Automation (CISCO 3) **W**

4 Cr. Hrs. - 4 Contact Hrs.

Prereq: CIS 105A (with a passing grade of C- or higher).

This course continues to describes the architecture, components, security, and perations of routers and switches in larger and more complex networks including Wide Area Networks. Students will learn to configure single area OSPF, explain vulnerabilities, threats, and exploits and how that can be mitigated to enhance network security. Learn how to implement ACLs, NAT, IpSEC VPNs, QOS, learn how to monitor today's networks, learn troubleshooting techniques and skills, and learn how to network automation and virtualization are used in today's networks. This is the third course in a series of four courses at MCC that prepares students for CISCO CCNA certification.

CIS 204

CCNA Cybersecurity CISCO 4

4 Cr. Hrs. – 4 Contact Hrs. **W**

Prereq: CIS 202A (with a passing grade of C- or higher)

Note: Students will be allowed to register for both CIS 202A and CIS 204 at the same time, however, if the student does not pass CIS 202A with at least a C- or higher they will not be allowed to continue with CIS 204

Today's organizations are challenged with rapidly detecting cybersecurity breaches and effectively responding to security incidents. Teams of people in Security Operations Centers (SOCs) keep a vigilant eye on security systems, protecting their organizations by detecting and responding to cybersecurity threats. This course prepares students to begin a career working with associate-level cybersecurity analysts within both security operations centers, and as part of a network security team at an organization.

CIS 209A

CompTIA A+ Part B

3 Cr. Hrs. – 3 Contact Hrs. **W**

Prereq: CIS 109A

This course is designed to take the successful CIS109A student to the next, more in-depth level of personal computer maintenance and repair. Students will become comfortable with the installation (including virtualization), troubleshooting and maintenance of operating systems, peripheral devices, and system security strategies. It is recommended that students complete CIS143 prior to taking the CompTIA A+ exam.

CIS 228

JavaScript

3 Cr. Hrs. – 3 Contact Hrs. **F**

Prereq: CIS 257A

Students will learn how to program using JavaScript and implement scripts on web pages. In addition to JavaScript, students will develop utilizing HTML and CSS. Students will utilize JavaScript frameworks, integrate external API's as well as develop efficient user interfaces. Students will work with the Document Object Model (DOM) and will utilize JQuery, Ajax and JSON.

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

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. **W**

Prereq: CIS 162 or CIS 170 or CIS 185 or CIS 267PHP

Note: With instructor permission, any 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 153A and students are encouraged but not required to take some programming language before this class.

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** **O**

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, IDEs 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, there will be demonstrations of JavaScript, the DOM model and other Internet tools.

CIS 258

Advanced HTML Web Development

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

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 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.

CIS 270A

Advanced RPG Programming

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

Prereq: CIS 170

This course is a capstone course in midrange programming. Topics include interactive applications, file maintenance, procedures, sub-procedures, 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 110 or CIS 120A

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. This course

also serves as a pathway towards successful completion of the CompTIA Linux+/LPIC-1 certification exams.

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 283B

Windows Server Admin II

3 Cr. Hrs. – 3 Contact Hrs. W

Prereq: CIS 143A

This course provides preparation for Microsoft Server certification exams towards MCSA (Microsoft Certified Solutions Associate). This course provides for preparation and practice of certification exam topics such as: implementing, managing, and maintaining IP addressing, maintaining name resolution using the Domain Name System (DNS), installing and working with Dynamic Host Configuring Protocol (DHCP), implementing routing and remote access, installation and configuration of Active Director Domain Services (AD DS), working with Organization Units (OUs) and managing group policies.

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 287A

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 293A

Network Security

3 Cr. Hrs. – 3 Contact Hrs. W

Prereqs: CIS 183

This course is offered as a lecture/hands-on course relative to computer network security. The class will cover the core objectives of the Security + certification exam including: the knowledge and skills required to install and configure systems to secure applications, networks, and devices; perform threat analysis and respond with appropriate mitigation techniques, and participate in risk mitigation activities. Among the topics covered will be the core knowledge required to support the principles of confidentiality, integrity, and availability.

Criminal Justice

CJ 101

Introduction to Law Enforcement

3 Cr. Hrs. – 3 Contact Hrs. **FWSO**

Prereq: College Reading Proficiency

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. **W**

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. **FWSO**

Prereq: College Reading Proficiency

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. **FWO**

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. **D**

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. **D**

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. **D**

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. **D**

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. **D**

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. **D**

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. **D**

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

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** **W** **O**

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. **W** **S** **O**

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

Prereq: College Reading Proficiency

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****W****D**

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

Prereq: College Reading Proficiency

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. **FWS**

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

DNC 100

Modern Dance I

1 Cr. Hr. – 2 Contact Hrs. **W**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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: College Reading Proficiency

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: College Reading Proficiency

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

1 Cr. Hr. – 2 Contact Hrs. **W**

Prereq: College Reading Proficiency

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

ECON 101A

Principles of Macroeconomics

4 Cr. Hrs. – 4 Contact Hrs. **FWSO**

Prereqs: College Reading Proficiency 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. **FWSO**

Prereqs: College Reading Proficiency and MATH 040

A course in microeconomics, especially suited for social science, business and engineering majors. Various types of competition and how these affect decision making by the firm are discussed. Price and output determination by the firm are also examined. Other topics include the pricing of resources, the role of trade unions, international trade and finance, income distribution and poverty, and the basic characteristics of the economic systems of selected countries other than the United States.

Education

ED 101A

Introduction to Education

3 Cr. Hrs. – 3 Contact Hrs. **FWO**

Prereq: College Reading Proficiency

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 109

The Parent-Child Connection

3 Cr. Hrs. – 3 Contact Hrs. **FWO**

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** **O**

Prereq: None

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 120B

Early Childhood Education Curriculum

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

Prereq: College Reading Proficiency

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** **O**

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** **O**

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 210

Child Care and Guidance

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

Prereq: Departmental approval

Co-req: ED 252A

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****O**

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****O**

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****O**

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 220A

Early Childhood Assessment

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

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 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. **FWSO**

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 230

Children's Literature

3 Cr. Hrs. – 3 Contact Hrs. **FWO**

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 234

Educational Psychology

3 Cr. Hrs. – 3 Contact Hrs. **WO**

Prereq: College Reading Proficiency

This course is devoted to the connection between psychology and education by providing and overview of the applications in the field of psychology. Research data, learning theories cultural pluralism and special topics reflective of current educational changes is examined. 25 hours of fieldwork within a K-12 classroom environment will be required.

ED 250

Human Growth and Learning

3 Cr. Hrs. – 3 Contact Hrs. **FWO**

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** **O**

Coreq: ED 210

Note: Departmental approval

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

(These courses may be used for CDA renewal.)

MATH 105

Mathematics for Elementary Teachers

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

Prereq: MATH 100A 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: College Reading Proficiency

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.

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 101AL&L

Electricity-Basic

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

Prereq: None

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. **W**

Prereq: ELTC 101AL&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 104**Basic Industrial Robotics**3 Cr. Hrs. – 6 Contact Hrs. **WS**

Prereq: None

Introduction to industrial robotics programming, uses, maintenance and troubleshooting, and their integration into an automation environment. The students will learn about the mechanics of the robots, servo motor control, programming commands through the operator interface pendant, and safety aspects of the work-cells as well as electrical and mechanical systems. Programming tasks are the core focus of the class including basic motion commands, positional information and control, error conditions and recovery, special setup procedures, non-motion and advanced programming commands, testing and verification and back-up and recovery. The class is taught through hands-on projects and tasks to develop knowledge in material handling applications using full program definition and demonstration of their skills.

ELTC 106**Fire Alarms Systems**1 Cr. Hr. – 1 Contact Hr. **WO**

Prereq: ELTC 101AL&L

This course provides an overview of fire alarm systems. Topics include initiating devices, control panels, notification devices, monitoring and communications, general installation guidelines and codes and standards.

ELTC 150**Industrial Electricity**3 Cr. Hrs. – 4 Contact Hrs. **FW**

Prereq: ELTC 101AL&L

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, contractors, 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 101AL&L

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.

ELTC 204**Advanced Industrial Robotics**4 Cr. Hrs. – 6 Contact Hrs. **F**

Prereq: ELTC 104 with a minimum grade of “C,” must be taken “previous”

Advanced industrial robotics programming, work-cell design, maintenance and troubleshooting, and their integration into an automation environment. The students will learn about vision systems, lighting, communications with other robots, communications with PLCs. Vision and communication tasks are the core focus of the class including part recognition, part inspection, offsets, robot-to-robot integration, and robot-to-external controller integration. The class is taught through hands-on projects and tasks to develop knowledge in material handling applications using full program definition and demonstration of their skills.

ELTC 210

Industrial Communications

3 Cr. Hrs. – 4 Contact Hrs. **W**

Prereq: ELTC160 with a minimum grade of “C”, class must be taken “previous”

Industrial communications protocols, hardware requirements, and wiring will be explored and connected in lab. The students will learn about various communication choices between peripheral devices and hosts, automation devices, and supervisory systems. Communication concepts, standards, networks, and security are covered. The class is taught through hands-on projects and tasks to develop knowledge in communication applications between various industrial devices and demonstration of their skills.

ELTC 220

Electrical Troubleshooting

3 Cr. Hrs. – 4 Contact Hrs. **F**

Prereq: ELTC 150 or ELTC 160L&L with a minimum grade of “C”, class must be taken “previous”

Troubleshooting theory and process will be used to find, fix, and document a variety of electrical and system problems. The students will learn about test equipment, processes, and characteristics of various electronic and industrial devices. The students will troubleshoot using controlled and informed methodology. Documentation of finding, actions, and outcomes will be performed. The class is taught through hands-on projects and tasks to develop knowledge and skills.

Electronics

ELTR 101A

Electronics-Basic

4 Cr. Hrs. – 7 Contact Hrs. **W**

Prereq: ELTC 101A/L&L

Topics include: 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 102B

Electronics I: Active Devices

4 Cr. Hrs. – 6 Contact Hrs. **F**

Prereqs: ELTR 101A

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 112A

Digital Electronics I

4 Cr. Hrs. – 6 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 202B

Industrial Electronic Systems

4 Cr. Hrs. – 6 Contact Hrs. **W**

Prereq: ELTC 160L&L

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 211AB

Microcomputer Interfacing

4 Cr. Hrs. – 5 Contact Hrs. **F**

Prereqs: ELTR 112A

The principles and techniques of interfacing a microcontroller to peripheral hardware are examined. Topics include machine language, assembly language, subroutines, interrupts, and interfacing to real-world devices. 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 212A

Biomedical Instrumentation II

4 Cr. Hrs. – 6 Contact Hrs. **W**

Prereqs: ELTR 214

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.

ELTR 214

Biomedical Instrumentation I

3 Cr. Hrs. – 3 Contact Hrs. **F**

Prereqs: ELTC150

Students will acquire a knowledge of the language common to electronics and the medical profession based on spelling, pronunciation and definition of words and terms related to anatomy, medical equipment, electronic test equipment and safety. They will become acquainted with the fundamentals of medical equipment and testing concepts. Students will be introduced to the field of Biomedical Engineering Technology as a career.

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

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. **W**

Prereqs: PHYS 203L&L and MATH 162A with a minimum grade of “C” in each

NOTE: A graphing calculator is required; see 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. **SO**

Prereqs: ENGR 202

NOTE: A graphing calculator is required; see 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.

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 College Reading Proficiency requirement (*See next page*). Also, you must either submit ACT or SAT Reading and Writing scores, take the MCC 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 1032 to schedule an appointment if you do not meet the ACT, SAT 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:

- Schedule an appointment and meet with 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.

College Reading Proficiency (Reading Competency Only)	
Before enrolling in many courses, you must meet the College Reading Proficiency requirement in one of the following ways:	
ACCUPLACER CLASSIC/COMPASS	Reading score of 76 or higher
ACCUPLACER NEXTGEN	Reading score of 250 or higher
SAT	Reading score of 25 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 Course	Earning a "C" grade or better in Reading 040 or Reading 050 or Reading 130
High School GPA	3.0 or higher(from official school transcript from end of 11th or 12th grade, student must be within 3 years of graduation)
High School GPA +SAT/ACT	2.7-2.99 (from official school transcript from end of 11th or 12th grade student must be within 3 years of graduation) PLUS SAT Reading score of 23-24 or ACT Reading score of 17-18

To view current writing placement guidelines, go to <https://www.muskegoncc.edu/testing/mcc-placement-test/> and click on the Placement Guidelines link.

ENG 085

Essential Writing Skills

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

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

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

Prereq: Meet placement guidelines or complete 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 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. **F** **W** **S** **O**

Prereqs: College Reading Proficiency and placement guidelines OR complete ENG 091 with a minimum grade of “C,” prerequisite of ENG091 may be taken previously or concurrently with ENG 101

A course in which students will develop the abilities to read critically, to think logically, to discuss intelligently, and primarily to write effectively using exposition, argumentation, and research. A grade of “C” or better is required to enter into English 102.

ENG 102

English Composition

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

Prereq: ENG 101 with a minimum grade of “C”

A course in which the student will develop the ability to interpret and critique a variety of literary forms, especially fiction, drama and poetry. Students will discuss these works and write critical analyses.

ENG 114

Refresher English

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

Prereq: None

Note: Accuplacer Sentence Skills score 75-84 or Accuplacer Writing score 263-275

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

ENG 199A

Personalized Writing

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

Prereq: None

Personalized Writing is an individualized course to expand writing skills. Students pursue a self-paced study emphasizing specific skills needed at work, in school, or in everyday life. Course content depends on individual needs. Students meet once a week with an instructor for direction, instruction, and encouragement.

ENG 199B

Personalized Writing

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

Prereq: None

Similar to ENG 199A.

ENG 200A

Heroes of Early Western Literature

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 201A**Heroes of Later Western Literature**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 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 210**The Nature of Language**3 Cr. Hrs. – 3 Contact Hrs. **D**

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. **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 216**Introduction to Film**3 Cr. Hrs. – 3 Contact Hrs. **FWS**

Prereq: English 102 with a C or better; or concurrent with English 102 with Instructor Permission

An introduction to the art of the film as story telling/narrative; the course might include foreign and domestic films, documentary film, and a few (2-3) experimental and/or underground films. In addition to thematic study of films, the course explores the various elements of story-telling/narrative through movies: characterization, purposes of setting, theme, symbolism, music, lighting, etc.

ENG 218A**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. ①

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. ②

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. ③

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. ④⑤

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. ⑥⑦

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. ⑧

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. ⑨

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. ⑩

Prereq: ENG 102

This course examines women in contemporary American culture viewed from literary, historical, psychological, political, sociological and multicultural perspectives. The course explores the variety of writing styles women have used to think about issues such as the search for identity, power, societal roles, relationships and conflict, marriage, sexuality, treatment as the other, responses to patriarchy, achievement, and daily life. Students will be exposed to contemporary feminist criticism and encouraged to think critically about the impact of gender on literature, expression, and experience.

ENG 234D

Library Skills/Research Skills

1 Cr. Hr. – 1 Contact Hr. ①

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. ①

Prereq: None

Generally a summer offering with specialists in poetry. Workshop includes writing and criticism. May be elected for a maximum of six credits over a period of two summers - three credits per summer.

Foreign Languages

(See Chinese, French, German and Spanish)

French

FR 101

Basic French

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

Prereqs: College Reading Proficiency 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. **F****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

GEOG 101A

Physical Geography

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

Prereq: College Reading Proficiency

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**

Prereq: College Reading Proficiency

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. **W**

Prereq: College Reading Proficiency

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 214

Science of Climate Change

3 Cr. Hrs. – 3 Contact Hrs. **W****S****O**

Prereq: College Reading Proficiency

The science behind climate change and its potential impacts will be the focus of this course. A study of the major climate systems, their controls, distributions and significance will form the course foundation. Paleoclimatology, global gas distributions, and climate impact assessment will support analysis from an interdisciplinary approach to this science study. such as solar radiation,

GEOG 215

Introduction to Weather and Climate

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

Prereq: College Reading Proficiency

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.

Geology

GEOG 260

Geoscience Field Experience

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

Prereq: College Reading Proficiency

Geoscience is an all-encompassing course of study focused on the planet earth. The purpose of this course will be to provide students with integrated field experience in the Geosciences. A significant portion of the course work is completed in the field at a local or distant location depending upon the title and focus of the course for a given semester. Students will explore the physical and cultural geography of the focus area. Students will make field observations, create sketches, record data, and construct a field notebook detailing all aspects of their field experience. Participation is required in all field activities. The course will include pre-trip class sessions and post-trip class sessions. There will be off campus travel for this course. Approximate costs are dependent on the field location and duration of the fieldwork.

GEOG 100

Natural Disasters

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

Prereq: College Reading Proficiency

Natural disasters are major events on Earth that often have extreme consequences. This course is a survey of geoscience through an examination of natural hazards, including the causes and effects of earthquakes, volcanic eruptions, tsunamis, floods, climate change, and more. Case studies of natural disasters will be discussed, focusing on the geologic context of the hazard and its impact on society, individuals, and the environments. The course will examine how society minimizes

the risks associated with disasters and students will develop a foundation for critically evaluating future approaches to managing hazards. This course is designed for students without an extensive background in science or math and who do not plan to major in geology. Potential geology majors should take GEOL-101A.

GEOL 101A

Introduction to Physical Geology

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

Prereq: College Reading Proficiency

This integrated lecture and lab is a scientific study of the materials, structures and systems of the planet Earth. Students will investigate the processes affecting the interior and exterior of the Earth, and the rocks, minerals, and structures produced by these processes. The course may include a one-day weekend field trip, weather permitting.

GEOL 102

Introduction to Earth History

4 Credit Hrs. – 5 Contact Hrs. **W**

Prereq: College Reading Proficiency

This integrated lecture and lab is an introduction to the geologic history of the planet Earth and its life forms. Based on the unifying theories of plate tectonics and organic evolution, the course presents the evidence used by geologists to reconstruct Earth's ancient environments and organisms, and establishes connections between Earth's past and present environments. The course may include a one-day weekend field trip, weather permitting.

GEOL 201

Oceanography

4 Cr. Hrs. – 4 Contact Hrs. **F**

Prereq: College Reading Proficiency

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.

GEOL 250LAB

Coral Reef Ecology Lab

1 Cr. Hrs. – 1 Contact Hrs. **S**

Prereq: BIOL 250LEC, GEOL 250LEC, or Instructor Permission

This field study course will provide students a hands-on opportunity to study coral reef ecosystems in and around the Caribbean Island of Nevis. The biology, chemistry, geology, geography, and Caribbean history and culture will be studied in the classroom and in country. Through data collection and analysis, students will examine the effects of global climate change and ocean acidification on reef ecosystems. Individuals may participate through scuba, snorkel or on-board data collection and analysis. Ability to swim and SCUBA certification are a plus but not mandatory for participation. Travel will take place in the summer semester. Travel dates may vary year to year. Students must be 18 years of age prior to travel.

GEOL 250LEC

Coral Reef Ecology Lecture

2 Cr. Hrs. – 2 Contact Hrs. **W**

Prereq: Instructor Permission

Note: Students must be at least 18 years of age prior to the trip. Approximate cost for the course and dates for the trip can be viewed within Student Planning. Travel will take place in early June.

This field study course will provide students a hands-on opportunity to study coral reef ecosystems in and around the Caribbean Island of Nevis. The biology, chemistry, geology, geography, and Caribbean history and culture will be studied in the classroom and in country. Through data collection and analysis, students will examine the effects of global climate change and ocean acidification on reef ecosystems. Individuals may participate through scuba, snorkel or on-board data collection and analysis. Ability to swim and SCUBA certification are a plus but not mandatory for participation. Travel will take place in the summer semester and will require students to sign up for a 1-credit laboratory course.

German

GER 101

Basic German

4 Cr. Hrs. – 4 Contact Hrs. **FW**

Prereqs: College Reading Proficiency 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. **FW**

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 101

Introduction to InDesign

3 Cr. Hr. – 3 Contact Hrs. **F**

Prereq: None

This course explores the components, terminology, features, and uses of InDesign. Emphasis is given to creating professional-looking layouts utilizing InDesign as the layout vehicle. Through hands-on lectures, demonstrations, and projects, the student will learn the essential techniques and functions of the program while understanding some of the more complex issues of this software.

GRD 102

Introduction to Illustrator

3 Cr. Hr. – 3 Contact Hrs. **W**

Prereq: None

This course explores the components, terminology, features, and uses of Illustrator. Emphasis is given to creating professional-looking artwork and graphics utilizing Illustrator as the layout vehicle. Through hands-on lectures, demonstrations, and projects, the student will learn the essential techniques and functions of the program while understanding some of the more complex layout issues that designers face when using the software.

GRD 103

Introduction to Photoshop

3 Cr. Hr. – 3 Contact Hrs. **F****W**

Prereq: None

This course introduces the components, terminology, features, and uses of Photoshop. Emphasis is given to creating professional-looking artwork and graphics utilizing Photoshop as the layout vehicle. Through hands-on overviews, tutorials, and competencies, the student will learn advanced techniques of the program while understanding some of the more complex issues that designers face when using this software.

GRD 110

Principles of Design

3 Cr. Hr. – 6 Contact Hrs. **F****W**

Prereq: College Reading Proficiency

This course provides an introduction to the visual and verbal vocabularies, and the principles and elements of design as they relate to graphic design. The student will focus on making

connections between idea and visualization using type, imagery, and color to solve communication problems. The initial stages of the design process and various forms of conceptualizing will be emphasized throughout the course.

GRD 120

Introduction to Graphic Design

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

Prereq: GRD 110 recommended, and one of the following; GRD 101, GRD 102, or GRD 103 also recommended

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 140

Introduction to Typography

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

Prereq: GRD 110 recommended, and one of the following; GRD 101, GRD 102, or GRD 103 also recommended

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 160

History of Graphic Design

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

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 210

Graphic Design II

3 Cr. Hrs. – 6 Contact Hrs. **F**

Prereq: GRD 110, GRD 120, GRD 140, and two of the following: GRD 101, GRD 102, GRD 103

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 280

Portfolio Preparation

3 Cr. Hrs. – 6 Contact Hrs. **W**

Prereq: Capstone/Instructor approval -students should be at or near the final semester of the graphic design curriculum.

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 also create a personal brand, identity system, and design their own resume. Upon course completion, students will have a professional portfolio in both digital and printed formats. Although there are no prerequisites, students should be at or near the final semester of the graphic design curriculum.

GRD 290CI2

Graphic Design Internship

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

This is a 2 credit capstone class. The purpose of this class is to give the student 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.

GRD 290CI3

Graphic Design Internship

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

Prereq: Students should be at or near the final semester of the graphic design curriculum.

The Graphic Design Internship is a paid or non-paid fieldwork experience in the student's area of study, or area where they feel they would like further exposure that may not be available at the college. The course is offered on a pass/no pass basis.

GRD 292

Graphic Design Studio M

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

Prereq: Capstone course for students with minimum cumulative GPA - 3.0 and instructor permission.

This is a capstone course for advanced design students. The practicum course is designed to emulate a working design studio. The instructor acts as the Creative Director managing students on a variety of projects selected from local businesses and organizations. Projects will vary depending on client needs. Students gain valuable experience and understanding of the field in a studio environment by combining conceptual ideas and technical skills, within a team environment. Learning opportunities will also include field trips to professional design firms. Professionalism is stressed through regular presentations to clients. Upon completion of the course students are required to present their work to the MCC Graphic Design Advisory Committee in a formal portfolio review and exhibition format.

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.

GR220

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 240

Studio Lighting For Photography

3 Cr. Hrs. – 3 Contact Hrs. **D**

Prereq: ART 214

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. **F****W**

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

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

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

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.

History

HIST 101

Western Civilization - to 1500

4 Cr. Hrs. – 4 Contact Hrs. **FWSO**

Prereq: College Reading Proficiency

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. **FWSO**

Prereq: College Reading Proficiency

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. **FWSO**

Prereq: College Reading Proficiency

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. **FWSO**

Prereq: College Reading Proficiency

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. **FWSO**

Prereq: College Reading Proficiency

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 antebellum 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. **FWSO**

Prereq: College Reading Proficiency

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.

Subject to change

HIST 207**African American History***3 Cr. Hrs. – 3 Contact Hrs. ①**Prereq: College Reading Proficiency*

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. ②**Prereq: College Reading Proficiency*

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 212B**Gettysburg Battlefields***3 Cr. Hr. – 3 Contact Hrs. ①**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. ①**Prereq: College Reading Proficiency*

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. ②**Prereq: College Reading Proficiency*

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. ③**Prereq: College Reading Proficiency*

A survey course studying and critically analyzing the historical, political, and legal frameworks of the labor movement, major labor laws, causes and purposes of the labor movement, union structure and behavior, and labor-management approaches to solving employment disputes in the U.S. and internationally.

Humanities

HUM 195

Introduction to Humanities

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

Prereq: College Reading Proficiency

This course will provide the student with an awareness of the cultural strengths and weaknesses of our changing cybernetic society. The student will study how the performing and creative arts, philosophy, psychology, religion and applied technology impact the individual as well as society. In both an historical and individual context, the student will learn that the understanding of what it means to be human is an art which can help facilitate the development of one's full potential.

International Cultural Studies

ICS 101AGER

International Cultural Studies in Germany

(formerly ICS 101GER)

3 Cr. Hrs. – 3 Contact Hrs. **S**

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 College Reading Proficiency prerequisite, but does not fulfill the Foreign Language option under the International category of the ASA degree.*

Machining Technology

MT 101B

Basic Machining

4 Cr. Hrs. – 6 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 102A

Intermediate Machining

3 Cr. Hrs. – 5 Contact Hrs. **FW**

Prereq: MT 101B

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 103A

Advanced Machining

3 Cr. Hrs. – 5 Contact Hrs. **F**

Prereq: MT 102A

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. **FWSO**

Prereq: None

This course familiarizes the technical student with the Machinery Handbook and its uses in the solution of problems.

MT 205A

NC/CNC (Numerical Control/Computer Numerical Control)

3 Cr. Hrs. – 5 Contact Hrs. **FWS**

Prereq: None

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 206A

2-D CAD/CAM

Computer-Aided Design/Machining

3 Cr. Hrs. – 5 Contact Hrs. **FW**

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 geometry. Toolpaths for these parts will be created using the CAM system to create CNC programs for the mill, and lathe. This course is required for the Machining Technology programs.

MT 216

3-D CAD/CAM

Computer-Aided Design/Machining

3 Cr. Hrs. – 5 Contact Hrs. **F**

Prereq: MT 206A

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 218

5-Axis CNC & CMM

3 Cr. Hrs. – 5 Contact Hrs. 

Prereq: MT216 with a minimum grade of “C”, class must be taken “previous”

This course introduces 5 axis CNC machining. CAD/CAM software will be utilized to generate 3D models that will then be toolpathed and machined on a 5 axis Vertical Milling Machine. CM Ms will also be taught and utilized. This course is required for the Machining Technology AAS.

MT 222

Machining Capstone

3 Cr. Hrs. – 5 Contact Hrs. 

Prereq: MT216 with a minimum grade of “C”, class must be taken “previous”

This capstone course comprises of a multifaceted assignment that serves as a culminating academic experience in the CAD/CNC and Machining programs. Students will engage in machining activities encompassing advanced areas of CNC and CAM. Course focus will include areas such as: 4th and 5th axis machining, live tooling, drawing solid models using CAD/CAM systems and product development utilizing 3D scanning and 3-D printer technology. Projects selected by the students must be proposed and then approved by the instructor for appropriate rigor and content.

MT 240

Basic Machine Repair

3 Cr. Hrs. – 6 Contact Hrs. 

Prereq: MT 101B

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.

Management

(See Business)

Marketing

(See Business)

Materials Technology

MET 101

Industrial Materials

3 Cr. Hrs. – 4 Contact Hrs. **FW**

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. **FW**

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. **FW**

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.

Mathematics

(Includes College Success Center courses)

Before enrolling in any math courses, you must be placed. Placement is done by your ACT, SAT or your MCC Placement score. If you have ACT or SAT scores, they should be officially submitted to MCC's Testing Center. If testing is needed you must make an appointment to take the MCC Placement 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 or higher, you must meet the College Reading Proficiency requirement

ACT and SAT Math scores will not be accepted if taken over 3 years ago and students should take the ACCUPLACER 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:

- Schedule an appointment and meet with 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.

College Reading Proficiency (Reading Competency Only)	
Before enrolling in many courses, you must meet the College Reading Proficiency requirement in one of the following ways:	
ACCUPLACER CLASSIC/COMPASS	Reading score of 76 or higher
ACCUPLACER NEXTGEN	Reading score of 250 or higher
SAT	Reading score of 25 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 Course	Earning a "C" grade or better in Reading 040 or Reading 050 or Reading 130
High School GPA	3.0 or higher(from official school transcript from end of 11th or 12th grade, student must be within 3 years of graduation)
High School GPA +SAT/ACT student of 23-24 or	2.7-2.99 (from official school transcript from end of 11th or 12th grade must be within 3 years of graduation) PLUS SAT Reading score of 23-24 or ACT Reading score of 17-18

To view current math placement guidelines, go to <https://www.muskegoncc.edu/testing/mcc-placement-test/> and click on the Placement Guidelines link.

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. **FW**

Prereq: *College Reading Proficiency*

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. **FW**

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. **FW**

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

4 Cr. Hrs. – 4 Contact Hrs. **FWSO**

Prereq: College Reading Proficiency and MATH 040 with a minimum grade of “C,”
recommended Math 040 with a minimum grade of B.

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. **FW**

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: 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) 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. **FWSO**

Prereq: MATH 100A with a minimum grade of “C”

NOTE: A graphing calculator is required; see 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 with a minimum grade of “C”

NOTE: A graphing calculator is required; see 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 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 115A**Probability and Statistics**4 Cr. Hrs. – 4 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 for details.

Probability and statistics for business, social science, biological science, and other majors. Topics include: descriptive statistics including displays of data, probability, probability distributions including the binomial, normal, and Poisson distributions, confidence intervals/or proportions, means, and standard deviations, hypothesis testing/or one and two samples, contingency tables and the chi-square test, analysis of variance, linear regression, and non-parametric statistics (optional.) Methods of instruction include case studies, simulations, and the use of technology.

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 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, 162A, 283 and 295.

MATH 161**Calculus I**4 Cr. Hrs. – 4 Contact Hrs. **FWSO**

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

NOTE: A graphing calculator is required; see 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 162A**Calculus II**4 Cr. Hrs. – 4 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 for details.

A continuation of the calculus of functions of one variable. Topics include: methods of integration such as substitution, integration by parts, trigonometric substitution, partial fractions, using tables and technology; improper integrals; applications of integrals to area, volume, arc length, surface area, average value, center of mass, work, probability, economics; parametric and polar functions and enclosed areas and arc lengths of their graphs; infinite sequences, series, convergence and divergence tests; power series for common transcendental functions and their use in evaluation, differentiation, and integration. Time permitting, a brief introduction to differential equation may be provided.

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 162A

Note: A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.

This is a calculus-based statistics course. However, no previous statistics experience is required. Topics include: descriptive statistics, probability, discrete and continuous probability distributions, joint probability distributions, confidence intervals, hypothesis testing, analysis of variance, correlation and linear regression, non-parametric techniques, and quality control methods.

MATH 276

Linear Algebra with Applications

3 Cr. Hrs. – 3 Contact Hrs. **W**

Prereq: MATH 161

Recommended Coreq: MATH 162A

Note: A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.

A study of matrices, matrix operations, systems of linear equations, determinants, vectors, real and complex vector operations, vector spaces, eigenvalues, linear transformations, linear programming, and numerical methods. Applications used in science, engineering, business, computer science, and higher mathematics are integrated.

MATH 283

Calculus III

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

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

Note: A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.

The calculus of functions of more than one variable. Topics include: vectors, vector functions, surfaces, the Dot Product, the Cross Product, limits and continuity in 3 dimensions, partial derivatives, chain rule for partial derivatives, gradients, multiple integrals, and vector calculus.

MATH 295

Differential Equations with Linear Algebra

4 Cr. Hrs. – 4 Contact Hrs. **W**

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

Note: A graphing calculator is required; see www.muskegoncc.edu/calculatorhelp for details.

An introduction to the theory and solution of ordinary differential equations with techniques involving slope fields, separation of variables, homogeneous functions, exact equations, linear equations of order one, integrating factors, Bernoulli’s equation, coefficients linear in two variables, Wronskian, differential operators, Method of Undetermined Coefficients, reduction of order, variation of parameters, power series, Euler equation, the Laplace transform, linear systems, higher order linear equations, matrix algebra, eigenvalues, eigenvectors, determinants, and modeling applications in physical, biological, and social sciences. Computer software will be used to explore some of these topics.

Medical Assistant

MA 101

Medical Assistant Administrative I

3 Cr. Hr. – 3 Contact Hrs **FWS**

Prereq: Admission to the Medical Assistant Certificate Program and permission of the Medical Assistant Program Director.

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. Students wishing to transfer to the Medical Assistant Certificate Program after taking MA 101 will have to retest their skills for those two courses and a fee will apply (testing must occur within two years of taking the course).

MA 102A L&L

Medical Assistant Clinical I

5 Cr. Hr. – 7 Contact Hrs **FW**

Prereq: Admission to the Medical Assistant Certificate Program and permission of the Medical Assistant Program Director

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 **FWS**

Prereq: MA 101 Medical Assistant Administrative I with a grade of a C+ or better

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. Students wishing to transfer to the Medical Assistant Certificate Program after taking MA 105 will have to retest their skills for those two courses and a fee will apply (testing must occur within two years of taking the course).

MA 106A L&L

Medical Assistant Clinical II

6 Cr. Hr. – 8 Contact Hrs **FW**

Prereq: MA 101, MA 102A L&L with a grade of a C+ or better.

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/Practicum

4 Cr. Hr. – 4 Contact Hrs **S**

Prereq: The student must be admitted to the Medical Assistant Program, be in good standing, and have instructor permission. In addition, the student must meet all program requirements including all health, essential functions, immunization, CPR, and background requirements.

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, cognitive skills, and psychomotor and affective competencies during the assigned 160-hour unpaid, supervised practicum placement consistent with the standards of practice for the Medical Assistant.

MA 110A

Medical Assistant Practicum 1

1 Cr. Hr. – 1 Contact Hrs **FWS**

Prereq: To enroll in MA 110A Medical Assistant Practicum 1, the student must be admitted to the Medical Assistant Program, be in good standing and have practicum coordinator permission.

In addition, the student must meet all program requirements including all health, essential functions, immunizations, CPR, and background requirements.

MA 110A Medical Assistant Practicum 1 prepares the student for the current work environment as a medical assistant and gives the student the opportunity to use effective communication, ethical behaviors, cognitive skills, and psychomotor, and affective competencies during the assigned unpaid, supervised practicum placement consistent with the standards of practice for the Medical Assistant. This is the first of a three-part practicum experience.

MA 110B

Medical Assistant Practicum 2

1 Cr. Hr. – 1 Contact Hrs **FWS**

Prereq: To enroll in MA 110B Medical Assistant Practicum 2, the student must be admitted to the Medical Assistant Program, be in good standing and have practicum coordinator permission. In addition, the student must meet all program requirements including all health, essential functions, immunizations, CPR, and background requirements.

Medical Assistant Practicum 2 prepares the student for the current work environment as a medical assistant and gives the student the opportunity to use effective communication, ethical behaviors, cognitive skills, and psychomotor and affective competencies during the assigned unpaid, supervised practicum placement consistent with the standards of practice for the Medical Assistant. This is the second of a three-part practicum experience.

MA 110C

Medical Assistant Seminar/Practicum 3

2 Cr. Hr. – 2 Contact Hrs **FWS**

Prereq: To enroll in MA 110C Medical Assistant Practicum 3, the student must be admitted to the Medical Assistant Program, be in good standing and have practicum coordinator permission. In addition, the student must meet all program requirements including all health, essential functions, immunizations, CPR, and background requirements.

Medical Assistant Seminar/Practicum 3 prepares the student for the current work environment as a medical assistant and gives the student the opportunity to use effective communication, ethical behaviors, cognitive skills, and psychomotor and affective competencies during the assigned unpaid, supervised practicum placement consistent with the standards of practice for the Medical Assistant. This is part 3 of a 3 part practicum. The total practicum hours must be a 160 hour minimum with this course consisting of a minimum of 120 hour practicum.

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 070PVT, 071PVT
BASSOON

MU 052PVT, 053PVT
PIANO

MU 072PVT, 073PVT
SAXOPHONE

MU 054PVT, 055PVT
CORNET (TRUMPET)

MU 074PVT, 075PVT
PERCUSSION

MU 056PVT, 057PVT
CLARINET

MU 076PVT, 077PVT
GUITAR

MU 058PVT, 059PVT
TROMBONE

MU 078PVT, 079PVT
ORGAN

MU 060PVT, 061PVT
BARITONE (EUPHONIUM)

MU 080PVT, 081PVT
HARP

MU 062PVT, 063PVT
TUBA

MU 082PVT, 083PVT
VIOLIN

MU 064PVT, 065PVT
FRENCH HORN

MU 084PVT, 085PVT
VIOLA

MU 066PVT, 067PVT
FLUTE

MU 086PVT, 087PVT
CELLO

MU 068PVT, 069PVT
OBOE (ENGLISH HORN)

MU 088PVT, 089PVT
DOUBLE BASS

MU 100

Introduction to Music Theory

3 Cr. Hrs. – 3 Contact Hrs. **FWS**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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 103A

Music Appreciation

(formerly MU103)

3 Cr. Hrs. – 3 Contact Hrs. **FWO**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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: College Reading Proficiency

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: College Reading Proficiency

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: College Reading Proficiency

An extension of MU 108CB.

MU 110 A, B, C, D, E, F

Jayhawk Sound

1 Cr. Hr. – 2 Contact Hrs. **F**

This ensemble performs a wide variety of popular music and musical cheers at MCC sports events and plays a vital role in supporting the athletes and athletic teams at MCC. In addition to the weekly rehearsals the ensemble performs at MCC sports events both on-off campus.

MU 111 A, B, C, D, E, F

Wind Ensemble

1 Cr. Hr. – 2 Contact Hrs. **F**

An advanced-level wind ensemble performing traditional to contemporary wind-band literature. The ensemble focuses on the rehearsal and performance of the repertoire. In addition to the

biweekly rehearsals the ensemble performs two to four times per semester both on-off campus.

MU 117 A, B, C, D, E, F

Jazz Ensemble

1 Cr. Hr. – 2 Contact Hrs. **F**

Ensemble dedicated to increasing the knowledge of jazz literature and improving skills in improvisation and ensemble playing through the preparation and performance of traditional and contemporary big-band jazz repertoire. In addition to the biweekly rehearsals the ensemble performs two to four times per semester both on-off campus.

MU 118HON

Honors Orchestra

(formerly MU 118YSO)

1 Cr. Hr. – 2 Contact Hrs. **F****W**

Prereq: College Reading Proficiency

Students who play in the Honor's Orchestra 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
BARITONE (EUPHONIUM)

MU 134-A, B, C, D
TUBA

MU 135-A, B, C, D
FRENCH HORN

MU 136-A, B, C, D
FLUTE

MU 137-A, B, C, D
OBOE (ENGLISH HORN)

MU 138-A, B, C, D
BASSOON
(CONTRA-BASSOON)

MU 139-A, B, C, D
SAXOPHONE

MU 140-A, B, C, D
PERCUSSION

MU 141-A, B, C, D
GUITAR

MU 142-A, B, C, D
ORGAN

MU 143-A, B, C, D
HARP

MU 144-A, B, C, D
VIOLIN

MU 145-A, B, C, D
VIOLA

MU 146-A, B, C, D
CELLO

MU 147-A, B, C, D
DOUBLE BASS

MU 148PVT to 189PVT

Applied Music: Primary Instrument

2 Cr. Hrs. -Variable Contact Hrs. **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. **FW**

Prereq: College Reading Proficiency

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. **FW**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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. **FW**

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. **FW**

Prereq: MU 190B

A continuation of MU 190B.

MU 192

Music for the Classroom Teacher

4 Cr. Hrs. – 4 Contact Hrs. **W**

Prereq: College Reading Proficiency

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 193A

Hip-Hop, Rock, and All the Worlds Music

3 Cr. Hrs. – 3 Contact Hrs. **F**

World Music is an introduction to the music of selected world cultures, including South and Central America, Africa, India, China, and North America. Every class will require some listening and reading/research on the part of the student. As an introductory class, no prior technical experience with music is required. Students will also write a performance-analysis of a musical event (approved by the instructor) outside of class.

MU 194

Sight-Reading and Ear Training

1 Cr. Hr. – 2 Contact Hrs. **W**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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. **FW**

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: College Reading Proficiency

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. **FSO**

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. **FWO**

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

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. **FWSSO**

Prereq: College Reading Proficiency

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

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. **FWSS**

Prereq: College Reading Proficiency

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: College Reading Proficiency

This is an introductory course in Symbolic Logic, or the art of formal reasoning. It should be of special value to anyone with an interest in mathematics, computer programming, the sciences, or philosophy. Students will learn how to work with various classical and modern formal languages such as syllogistic logic, propositional logic, modal logic, and quantificational logic, and develop the ability to think in any discipline with greater clarity, precision, and understanding. No philosophy prerequisites are needed for this course, and in particular, it is not necessary to have taken PHIL I 02 Principles of Logic before enrolling in PHIL 104.

PHIL 202

Introduction to Ethics

3 Cr. Hrs. – 3 Contact Hrs. **F**

Prereq: College Reading Proficiency

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: College Reading Proficiency

This course is an introduction to philosophical thinking by way of the philosophy of religion. It deals with metaphysical, epistemological and ethical issues raised by different religious practices, experiences, and beliefs, and should be of interest to believers and nonbelievers alike. Students both with and without previous academic philosophical experience are all welcome to enroll.

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. **FWS**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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: College Reading Proficiency

In this course students will learn to understand and critically evaluate the beliefs and practices of the world's major religious traditions and will study the ways in which they impact societies and individuals. Traditions such as Confucianism, Daoism, Hinduism, Buddhism, Judaism, Christianity, Islam, and Humanism, among others, may be covered.

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 a General ASA degree must take PEA 121 **OR** 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: College Reading Proficiency

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: College Reading Proficiency

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: College Reading Proficiency

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: College Reading Proficiency

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. **FW**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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. **FS**

Prereq: College Reading Proficiency

Fundamental skills, techniques and rules of archery are practiced and studied, shooting 10-160 yards.

PEA 108

Bowling

1 Cr. Hr. – 2 Contact Hrs. **FWSS**

Prereq: College Reading Proficiency

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. **FW**

Prereqs: College Reading Proficiency 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 114

Golf I

1 Cr. Hr. – 2 Contact Hrs. **FS**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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. **FS**

Prereq: College Reading Proficiency

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 121

Human Movement Science

3 Cr. Hrs. – 3 Contact Hrs. **FWSS**

Prereq: None

This course will explore the past, present, and future of human movement science highlighting professional preparation and opportunities. Physical fitness and health behaviors will be introduced, as well as an opportunity to develop a personal fitness program to begin building a healthy lifestyle.

PEA 122

Fitness and Wellness

1 Cr. Hrs. – 2 Contact Hrs. **FWSS**

Prereq: None

A study of the body functions as they relate to exercise and postural alignment. Students will understand and experience factors important to the physical, psychological, and social well-being of the individual. Students will be undergoing physical fitness testing and participating in individual exercise programs. Students will also complete written assignments online.

PEA 137

Beginning Scuba

1 Cr. Hr. – 2 Contact Hrs. **FS**

Prereqs: College Reading Proficiency, and must be at least 12 years old by the start of the course, able to swim, and be reasonably comfortable in the water.

The Open Water Diver course is a diver's entry-level certification. It is designed to help prepare divers to: Independently plan and conduct no-stop (no-decompression) dives, with a qualified buddy or buddies, to depths of 20 m/65 feet (12 m/40 feet for divers 12 years old), in conditions similar to those in which the divers were trained or have gained prior experience; make guided dives, under direct Instructor, Assistant Instructor or Dive master supervision, to depths of 30 m/100 feet (12 m/40 feet for divers 12; 20 m/65 feet for divers ages 13 to 15). A lab fee of \$125

will cover the rental of tanks, regulator, BCD and environmental protection for length of course.

PEA 139A

Basic Canoeing/Kayaking

1 Cr. Hr. – 2 Contact Hrs. **F S**

Prereq: College Reading Proficiency

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 154A

Volleyball I

1 Cr. Hr. – 2 Contact Hrs. **F**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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: College Reading Proficiency

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 164

Zumba Movement for Fitness

1 Cr. Hr. – 2 Contact Hrs. **F W**

Prereq: None

Zumba is Spanish and means “to move fast and have fun”. It is a sizzling fusion of traditional Cumbia, salsa, samba and meringue paired with pulsating Latin rhythms mixed with international dance steps. Sizzling music really makes this class.

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 O**

Prereq: College Reading Proficiency

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 214A

Golf II

1 Cr. Hr. – 2 Contact Hrs. **F S**

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 255

Basketball II

1 Cr. Hr. – 2 Contact Hrs. **F W**

Prereq: None

This course is designed for those students who wish to gain additional knowledge and skill which could be of value to those who wish to play, teach, officiate or coach the game of basketball.

Physical Education - Professional

PEP 100

Foundations of Physical Education

2 Cr. Hrs. – 2 Contact Hrs. **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 203

Fundamentals of Coaching

3 Cr. Hrs. – 3 Contact Hrs. **FWSO**

Prereq: None

This course is designed for both experienced and novice coaches interested in understanding and/or improving their professional coaching skills. Topics to be covered include: philosophy, growth and development, sports safety training, psychology, litigation/liability and sports management. American Red Cross Sports Safety Training, which includes adult CPR, certification is awarded upon successful completion (80% or better).

Physical Science

PHSC 101A

Introductory Physical Science

Lecture and Lab

4 Cr. Hrs. – 6 Contact Hrs. **FWS**

Prereqs: College Reading Proficiency and MATH 040

This is a course for non-science majors offering students a broad exposure to the physical sciences. The approach to this course is conceptual and contemporary, and includes topics from various physical sciences. Students will use both empirical and theoretical evidence to gain an understanding of the fundamental laws that govern the universe.

Physics

PHYS 201CL&L

College Physics I Lecture and Lab

(formerly PHYS 201)

5 Cr. Hrs. – 7 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 202CL&L

College Physics II Lecture and Lab

(formerly PHYS 202)

5 Cr. Hrs. – 7 Contact Hrs. **W**

Prereq: PHYS 201CL&L

An integrated lecture and lab continuation of PHYS 201 which considers the physical aspects of phenomenon classified as magnetism, electricity, light, and nuclear physics. This course is especially suitable for pre-professional students such as pre-med, pre-law, pre-dental, and life science and liberal arts majors.

PHYS 203L&L

Engineering Physics

5 Cr. Hrs. – 7 Contact Hrs. **F**

Prereq: MATH 161

Recommended Coreq: MATH 162A

NOTE: A graphing calculator is required; see 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 162A and PHYS 203L&L

NOTE: A graphing calculator is required; see 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.

Political Science

PSCI 111

Introduction to American Government

4 Cr. Hrs. – 4 Contact Hrs. **FWSO**

Prereq: College Reading Proficiency

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 202

International Relations

3 Cr. Hrs. – 3 Contact Hrs. **F**

Prereq: College Reading Proficiency

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 205

Contemporary Political Issues in United States Government

3 Cr. Hrs. – 3 Contact Hrs. **FWO**

Prereq: College Reading Proficiency

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. **D**

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. **D**

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. **W**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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.

Psychology

PSYC 102

Applied Psychology

3 Cr. Hrs. – 3 Contact Hrs. **FWSO**

Prereq: College Reading Proficiency

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. This course is designed for those in Certificate Programs and those seeking personal enrichment. This course is not intended as a transfer course, though it may be accepted at some transfer schools for elective psychology credit. For those who wish to earn a Bachelor's Degree, PSYC 201, General Psychology is the recommended transfer course.

PSYC 201

General Psychology

4 Cr. Hrs. – 4 Contact Hrs. **FWSO**

Prereq: College Reading Proficiency

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 203

Abnormal Psychology

4 Cr. Hrs. —4 Contact Hrs. **FWO**

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. **FW**

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 209

Psychological Disorders of Childhood

3 Cr. Hrs. - 3 Contact Hrs. **WO**

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. **FWO**

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.

Reading

DEVELOPMENTAL COURSES

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

- Schedule an appointment and meet with 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.

College Reading Proficiency (Reading Competency Only)	
Before enrolling in many courses, you must meet the College Reading Proficiency requirement in one of the following ways:	
ACCUPLACER CLASSIC/COMPASS	Reading score of 76 or higher
ACCUPLACER NEXTGEN	Reading score of 250 or higher
SAT	Reading score of 25 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 Course	Earning a "C" grade or better in Reading 040 or Reading 050 or Reading 130
High School GPA	3.0 or higher (from official school transcript from end of 11th or 12th grade, student must be within 3 years of graduation)
High School GPA +SAT/ACT student of 23-24 or	2.7-2.99 (from official school transcript from end of 11th or 12th grade, must be within 3 years of graduation) PLUS SAT Reading score of 23-24 or ACT Reading score of 17-18

To view current reading placement guidelines, go to <https://www.muskegoncc.edu/testing/mcc-placement-test/> and click on the Placement Guidelines link.

RDG 040

Essential Reading Skills

3 Cr. Hrs. – 3 Contact Hrs. **F**

Prereq: None

This course is for students who have not yet fulfilled MCC's College Reading Proficiency requirement. Topics covered include prefixes, suffixes, vocabulary, reading for the main idea, and identifying supporting details. Additional lab time and/or small group meetings may be required. Completing this course with a grade of C or better fulfills MCC's College Reading Proficiency Requirement.

RDG 050

Essential Reading Skills

1 Cr. Hr. – 1 Contact Hr. **FWS**

Prereq: None

Note: See placement guidelines chart.

This course is designed for students who have not yet fulfilled MCC's College Reading Proficiency requirement. 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: College Reading Proficiency

Fulfillment of College Reading Proficiency is required for this course. Course work focuses on vocabulary and comprehension strategy development. Additional lab time and/or small group meetings may be required.

RDG 140

Advanced Reading Skills II

1 Cr. Hr. – 1 Contact Hr. **D**

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.

Recreation

REC 111

Introduction to Recreation and Leisure

3 Cr. Hrs. – 3 Contact Hrs. **F S O**

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 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 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?

Respiratory Therapy

RT 101

Respiratory Therapy Physics

1 Cr. Hr. – 1 Contact Hr. Ⓖ

Prereq: None

This course introduces the student to the basic concepts of classical physics used in respiratory care.

RT 102

Basic Patient Care Skills

3 Cr. Hrs. – 4 Contact Hrs. Ⓖ

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.

RT 110L&L

Equipment and Procedures I

3 Cr. Hrs. – 5 Contact Hrs. Ⓜ

Prereqs: RT 101 and RT 102

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 111B

Introduction to Respiratory Therapy

2 Cr. Hrs. – 2 Contact Hrs. Ⓜ

Prereqs: RT 101 and RT 102

Coreq: RT 110L&L

This course is designed to give an introduction to the field of Respiratory Therapy and to basic medical sciences. Topics included are: the gas laws, physical states and structure of matter, role of energy in chemical and biological systems, acid-base physiology and processes of body metabolism.

RT 120L&L

Equipment and Procedures II

3 Cr. Hrs. – 5 Contact Hrs. Ⓜ

Prereqs: RT 110L&L and RT 111LEC

Coreqs: RT 121 and RT 122

This course is designed to familiarize the student with proper techniques and equipment used for the delivery of aerosol/humidity therapy, incentive spirometry, intermittent positive pressure breathing (IPPB) and chest physical therapy.

RT 121

Pharmacology

2 Cr. Hrs. – 2 Contact Hrs. Ⓜ

Prereqs: RT 110L&L and RT 111LEC

Coreqs: RT 120L&L and RT 122

This course introduces the student to the general principles of pharmacology and gives an in-depth study of cardiopulmonary drugs.

RT 122

Clinical I

2 Cr. Hrs. – 4 Contact Hrs. Ⓜ

Prereqs: RT 110L&L and RT 111LEC

Coreqs: RT 121 and RT 120L&L

This course is designed to introduce the student to patient care. The student will be assigned such responsibilities as general rounds. In addition, students will observe certain respiratory care procedures being performed.

RT 130L&L

Equipment and Procedures III

3 Cr. Hrs. – 5 Contact Hrs. Ⓢ

Prereqs: RT 120L&L, RT 121, and RT 122

Coreqs: RT 131, RT 132, and RT 134

This course is designed to present procedural tasks including: intubation, airway care and management, pulmonary function testing and arterial blood gas sampling.

RT 131

Physiology

3 Cr. Hrs. – 3 Contact Hrs. Ⓢ

Prereqs: RT 120L&L, RT 121, and RT 122

Coreqs: RT 130L&L, RT 132, and RT 134

This course is designed to give the student an in-depth study of cardiopulmonary physiology.

RT 132

Clinical II

3 Cr. Hrs. – 8 Contact Hrs. **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****O**

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.

Sociology

SOC 101

Principles of Sociology

3 Cr. Hrs. – 3 Contact Hrs. **FWSO**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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. **WO**

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: College Reading Proficiency

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.

Spanish

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 College Reading Proficiency prerequisite.

SPAN 101

Basic Spanish

4 Cr. Hrs. – 4 Contact Hrs. **FWS**

Prereqs: College Reading Proficiency 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 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. **FWS**

Prereq: SPAN 102 or SPAN 150; with a minimum grade of “C,” or successful completion of three recent years of high school Spanish and instructor permission

This course reviews and reinforces the material learned in the first two semesters, examines more tenses and other aspects of grammar, and provides practice in expanding capabilities in reading, writing, speaking and understanding Spanish. There is no laboratory requirement, but the student is required to spend five sessions with a native speaker, when available, for group conversation practice. There will be occasional sessions on cultural matters.

SPAN 202

Intermediate Spanish

4 Cr. Hrs. – 4 Contact Hrs. **F****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.

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.

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

Prereq: MATH 036A with a minimum grade of "C"

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

Prereq: TMAT 101A with a minimum grade of "C"

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. **F****W**

Prereq: TMAT 102A with a minimum grade of "C"

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****O**

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.

AMT 150

Process Troubleshooting and Problem Solving

3 Cr. Hr. – 4 Contact Hr. **W**

Prereqs: None

This course teaches students how to develop the ability to recognize and solve process problems through practical, hands-on problem-solving to be used with automated processes. Practical safety and first aid will be covered as well.

ARE 115

Wind Turbine and Solar Array Installation

3 Cr. Hrs. - 4 Contact Hrs. **F**

Prereqs: ELTC 101AL&L

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.

FS 101L&L

Introduction to Food Science and Process

3 Cr. Hr. – 4 Contact Hr. **F****W**

Prereqs: none

The Intro to Food Science and Processing course is an introductory course that teaches the terminology and concepts necessary to communicate in the Food Manufacturing Industry. The course introduces the basic

chemistry of food, testing of food and soil, the types of microbiological organisms present, and food preservation. Calculations for product formulation from lab scale to batch processes will be performed. Also included are topics and case studies in packaging, contamination, food biotechnology, and careers in the agricultural industry. A lab component is included whereby the concepts in the course are demonstrated and critical thinking skills will have to be applied in order to solve problems. Experiments will include fermentation, analytical testing of food and soil, production of biodiesel, canning, and use of analytical tools for measurement. The Produce Safety Alliance Grower Certification that meets the Food Safety Modernization Act (FSMA) Produce Safety Rule is included.

HP 101

Hydraulics/Pneumatics

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

Prereq: None

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.

HP 201

Advanced Hydraulics

4 Cr. Hrs. – 6 Contact Hrs. **W**

Prereq: HP101 with a minimum grade of “C”, class must be taken “previous”

An overview of industrial fluid power technology with emphasis on advanced concepts. Practical hands-on exercises are provided using hydraulic 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** **O**

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** **O**

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. **W**

Prereq: None

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 201

Intro to Mechatronics

3 Cr. Hrs. – 6 Contact Hrs. **W**

Prereq: ELTC 101A L&L

This course is designed as the capstone course for the Mechatronics Certificate. Students will apply engineering skills to design, build, and troubleshoot electro-mechanical systems. Course work will emphasize hands-on skills through project based learning approaches. Students will design mechanical assemblies using CAD software, fabricate their designs using 3-D printers, machining and wood working equipment, as well as integrate controls systems and programming micro-controllers.

TECH 290CI

Cooperative Internship

Variable 1-4 Cr. Hrs. **D**

Prereq: None

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

TH 101

Theater Appreciation

3 Cr. Hrs. – 3 Contact Hrs. **FWSO**

Prereq: College Reading Proficiency

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: College Reading Proficiency

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: College Reading Proficiency

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 121

Introduction to Technical Theater

3 Cr. Hrs. – 3 Contact Hrs. **F**

Prereq: College Reading Proficiency

This course presents an overview of the elements, processes, and traditions of theatrical design. The students will be introduced to the use of computer aided design and other tools in the design process used in most theaters today. The students will become familiar with tools used in the design process, begin developing their own personal design aesthetic, and develop an understanding of the evolution of the theatre design.

TH 122

Theater Set & Lighting Design

3 Cr. Hrs. – 3 Contact Hrs. **W**

Prereq: College Reading Proficiency

In this course students will learn color theory, set and lighting design principles, and script analysis. Additionally they will learn basic computer aided design skills to be able to create scenic and lighting designs for theatrical productions.

TH 141

Applied Theater - Acting

1 Cr. Hr. – Variable Contact Hrs. **FWD**

Prereq: College Reading Proficiency 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: College Reading Proficiency 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: College Reading Proficiency 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. F W D**Prereq: College Reading Proficiency 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. F W D**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. F W D**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: College Reading Proficiency*

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: College Reading Proficiency*

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: College Reading Proficiency*

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: College Reading Proficiency*

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 204**Improvisation for Actors***3 Cr. Hrs. – 3 Contact Hrs. W**Prereq: College Reading Proficiency*

This course uses the art of improvisation as a tool for enhancing creativity, responsiveness, and immediacy for the actor; offering a way to explore the student's innate ability to be playful and creative. This class studies the fundamentals of improvisation, focusing on exercises and games that build confidence and improve listening, intuitive, and collaborative skills. In this course the student learns the basic rules, games, and forms of improvisation and their relation to scripted and non-scripted rehearsal and performance work.

TH 212

Summer Theater Workshop

3 Cr. Hrs. – Variable Contact Hrs. ①

Prereq: College Reading Proficiency

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: College Reading Proficiency

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: College Reading Proficiency

An experiential course giving credit for creative involvement in the planning, rehearsal, and performance of a play.

Welding Technology

W 101A

Basic Welding

3 Cr. Hrs. – 5 Contact Hrs. **FWS**

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 (OAW), Oxyacetylene Cutting (OAC), Plasma Arc Cutting (PAC), heating and bending with the torch, 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 102A

Gas Metal Arc Welding (GMAW)

3 Cr. Hrs. – 6 Contact Hrs. **FW**

Prereq: *W101A with a minimum grade of “C,” class must be taken “previous” or “concurrent”*

The GMAW (MIG) course is an in-depth study of the common methods of welding used in industry. Extensive technique practice for skill mastery on carbon steel and aluminum will be covered. Flux Cored Arc Welding (FCAW) and Metal Cored electrodes will also be covered. Students will be expected to pass the written knowledge assessments from the American Welding Society (AWS) SENSE Level 1 program as well as perform the skill practices.

W 103A

Gas Tungsten Arc Welding (TIG)

3 Cr. Hrs. – 6 Contact Hrs. **FW**

Prereq: *W 101*

The GTAW (TIG) course is an in-depth study of the common methods of welding used in industry. Extensive practice on metals including: mild steel, stainless steel, and aluminum in all welding positions will be covered. Students will be expected to pass the written knowledge assessments from the American Welding Society (AWS) SENSE Level 1 program as well as perform the skill practices.

W 105

Shielded Metal Arc Welding (STICK)

3 Cr. Hrs. – 6 Contact Hrs. **FW**

Prereq: *W 101*

The SMAW (Stick) course is an in-depth study of the welding process theory, skills and techniques that are common to the welding industry. Extensive technique practice for skill in all positions on both fillet and groove welding joints on carbon steel will be covered. Performance based testing for welder qualification for students in the welding major will be required. Students will also be expected to pass the written knowledge assessments from the American Welding Society (AWS) SENSE Level 1 program.

W 201

Structural Welding

3 Cr. Hrs. – 6 Contact Hrs. **F**

Prereq: *W 105*

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 202A

Pipe Welding

3 Cr. Hrs. – 6 Contact Hrs. **W**

Prereq: W 201

This course is designed for the advanced welders who want to improve their pipe welding skills or are preparing for pipe welding certification to the AWS D1.1 welding code standard. Lab projects for this course are designed to align with relevant sections of AWS SENSE Levels I. 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) and Gas Tungsten Arc Welding (GTAW). Destructive and visual testing will be part of the coursework.

W 205

Welding Automation

3 Cr. Hrs. – 6 Contact Hrs. **F**

Prereq: W 102A

The welding automation course will cover common robotic uses in manufacturing. A review of the common procedures and basic welding that includes joint design and filler materials. The student will perform set-up and operation of the basic automatic welding system with an emphasis on the effects or welding parameters and weld outcomes.

W 206

Metal Fabrication

3 Cr. Hrs. – 6 Contact Hrs. **F**

Prereq: W 102A, W 103A, W 105

This course deals with the theory, skills and application of metal fabrication principles. Students will apply their welding skills to build a capstone project. Students will be required to select and design an approved project. Building a bill of materials, ordering the materials, assembly, following tolerances, layout, fit-up and heat distortion control will all be factors in this course. Use of the various fabrication equipment in the welding lab. The capstone project will be approved on the basis of need and application. *Examples to include a community project or repair project.

Women's Gender Studies

WGS 101

Introduction to Women's and Gender Studies

3 Cr. Hrs. – 3 Contact Hrs. **FW**

Prereqs: College Reading Proficiency

WGS students study women's diverse experiences, perspectives and contributions as well as gender identity and gender representation as central categories of analysis. Interdisciplinary in range of course content, WGS 101 examines cultural beliefs and stereotyped images of women and gender, and covers the following: gender-role socialization, sexuality, the history of the women's liberation movements, different perspectives in feminism, and representations of women and their efforts to define new identities through work, creative activity, education and feminism. Through films, readings, and focused studies of the consequences of gender experience in life and learning. WGS 101 explores research about gender in personal development and relationships, race/ethnicity, class, and sexuality. Course goals: raise awareness, make connections, read write and think critically, and apply course knowledge and issues to personal experiences.

WGS 201

LGBTQ Studies

3 Cr. Hrs. – 3 Contact Hrs. **F**

Prereqs: College Reading Proficiency An inquiry into a wide range of issues related to the lesbian, gay, bisexual, trans-gender, and queer community. The course will include an overview of the history, politics, literature, and morality of sexual orientation and gender identity and of the LGBTQ civil rights movement and important members of the LGBTQ community. Gender identity will be explored from several viewpoints and sub-cultural perspectives as will cultural and media expressions and reactions. Finally, intersectionalities with race, social class, gender, and sex will be critically examined.





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, 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 meet all of 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. Please note, developmental credits can not be used toward graduation.

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.

Program Evaluation (Degree Audit)

My Progress is a tool in Student Planning that shows the requirements for students' academic program as outlined in the catalog for the year they were admitted and their progress toward completing those requirements. The audit shows both the courses transferred in from other institutions and courses completed at Muskegon Community College. It includes their grades and GPA.

Under My Progress in Student Planning, students may select "view a new program" to compare their academic record/progress to any program they might indicate, without changing their academic program. This can be a very helpful tool for students considering a change of program, but does not know how their record might apply to the requirements of the new program.

Students are encouraged to review My Progress in Student Planning by logging into MyMCC. My Progress is the primary tool used during counseling/advising and in preparing for graduation.

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 online in Student Planning. You must have completed at least 47 credit hours if you are applying for an associates degree. 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 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 Office of the Registrar 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. Multiple diplomas or certificates will be awarded when appropriate.

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 under your Planning & Registration, Student Planning & Registration, click on the Academics tab, and then choose Grades.

Quantitative Grade Values

A.....	4.0	B-.....	2.7	D+.....	1.3
A-.....	3.7	C+.....	2.3	D.....	1.0
B+.....	3.3	C.....	2.0	D-.....	0.7
B.....	3.0	C-.....	1.7	E.....	0.0

Non-quantitative Grades (*not computed*)

P.....	Pass
NP.....	No Pass
W.....	Withdrawal
WI.....	Withdrawal—Illness
WM.....	Withdrawal—Military Activated
CS.....	Community Service
AU.....	Audit
I.....	Incomplete

Pass/No Pass - These grades are not optional but a standard grading system for particular courses.

“Incomplete” Policy - When you are unable to complete all of the required work for a course because of illness or other unpredictable circumstances, you may request an Incomplete (I) grade. When requested by the student, the instructor’s judgment will determine whether the incomplete grade will be assigned. If the instructor does not deem the circumstances to be appropriate for an Incomplete (I), you may elect to withdraw from the course according to the withdrawal policy.

Although shorter time periods may be assigned on a case-by-case basis, “I” grades must be completed within one year of the official occurrence of the grade.

Once you complete the necessary requirements for the class, a Change of Grade Form must be submitted for you by the instructor to receive a grade greater than an “E.” Any “I” (incomplete) grades that are not changed within one year of the official occurrence of the grade will default to an “E.”

Grade Point Average (GPA) - Each letter grade has a point value as indicated above. The number of grade points earned for each course is found by multiplying the credit value of the course by the point value of the final grade. For example, a student with a final grade of “B” in Political Science (PSCI) 111 would earn 12 grade points, since a “B” has a point value of 3, and Political Science 111 is a 4-credit course.

The semester grade point average is calculated by adding the total points for all courses and dividing by the total number of credit hours taken during the semester.

Example:

Course	Credits	Grade	Grade Points
ENG 101	3	A	12
PSCI 111	4	C	8
PHSC 101A	4	B	12
ART 198	3	D	3
TOTAL	14		35

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

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 Probation

Academic Probation:

Students are placed on Academic Probation when they have completed at least 12 credit hours at MCC and have failed to meet the minimum cumulative grade point average (G.P.A.) of 2.0. Students will be notified of probation status by email. An academic probation hold will be placed on their record which will prevent them from registering for future courses or dropping current courses. **To have the hold lifted, students are required to meet with a Counselor to discuss how to improve the G.P.A. by using College resources.**

Academic Dismissal:

Students placed on academic probation for two consecutive semesters **MAY** be dismissed from MCC for one semester. Any student who is dismissed from MCC may appeal to the Petitions Committee for reinstatement.

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 and the summer session is 12 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, SAT or MME scores.
 - Have completed all course prerequisites
 - Completed new student orientation (if required)
- A. Testing.** Before registering for classes, you must take placement tests which will help you choose the right courses. Transfer students may be exempt from testing based on courses transferred. Please consult a counselor for more information.”
- 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, 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. You may register at your assigned time or after, but not before.

Online Registration

To register for classes online:

- ◆ Go to the MCC Homepage at www.muskegoncc.edu
- ◆ Click on MyMCC
- ◆ Login using your MCC username and password
- ◆ Click on WebAdvisor for Students
- ◆ Choose Planning & Registration
- ◆ Follow the instructions on “How to Register using Student Planning”
- ◆ Please note, when registering online through Student Planning remember that a course in **yellow means planned** and a course in **green means registered**.

In-Person Registration and open web registration is available after priority registration ends. Please refer to 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 Student Planning in the MyMCC for class information.

Dropping Courses

(Other than complete withdrawal from the College)

The preferred method of dropping courses is through Student Planning in the MyMCC. You may also drop courses by submitting an Add/Drop form in-person, to the Student Welcome Center prior to the withdraw 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 Student Planning in MyMCC or by submitting an 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** up to 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.

Prerequisites & Co-Requisites

Prerequisites and co-requisites are listed in course descriptions and are subject to change with each new catalog. It is the student’s responsibility to meet the prerequisites and / or co-requisites in effect for the term in which a course is taken, regardless of the catalog under which the student entered or will graduate. Students may be stopped from enrolling or may be dropped if prerequisites or co-requisites are not met.

Prerequisite: A prerequisite is a requirement that must be successfully completed before a student may enroll in a course. Prerequisites are based on the essential skills or competencies to be successful in the next level course.

Co-requisite: A co-requisite is a course that is either recommended or required to be taken in combination with another course.

Wait Lists

Once a course has reached the maximum enrollment, students are given the option to be placed on a wait list. This option must be chosen at the time of registration. The wait listed course cannot conflict with other courses in the student’s registration schedule and cannot be placed on multiple sections of the same course. Being on a wait list does not mean the student is registered in the course. Once space becomes available in a class, wait listed students will be offered a position in the class based on the student’s position on the wait list.

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:

1. 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.
2. 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 1048J. 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.**
3. Students who register for a credit class cannot change to audit status.
4. 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. **Please also note that audit credit cannot be used to complete a degree or transferred to another institution.**

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

Withdrawal from College

Withdrawal from college is defined as the student's formal withdrawal from all courses currently in progress.

Military Withdrawal

Any currently enrolled student who is called for military duty shall be dropped from all uncompleted courses with a grade of "WM" - Withdrawal Military and will be granted a refund of all tuition and fees paid upon receipt of a copy of military orders, completed Tuition Refund Appeal to the Student Welcome Center and deliberations of the Petitions Committee.

Illness Withdrawal

The Petitions Committee may allow a "WI" if a qualified professional (doctor, psychologist, etc.) provides written evidence of physical or mental illness. The initiative for such action rests with you, the student, and should be initiated in the semester in which it occurs, except under extenuating circumstances. All Withdrawal Illness requests must be received no later than one semester 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 listed 100% refund period using The MyMCC 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 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.

Tuition, Fees and Payment

Costs to attend MCC include registration fees, tuition, special class fees, and books/supplies. Please refer to MyMCC 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.....	\$1053.00
Technology Fee.....	\$225.00
Infrastructure Fee.....	\$135.00
Registration Fee.....	\$35.00
Lab/Course Fee (if applicable).....	n/a
Total Payment Due.....	\$1,448.00

Technology Fee: \$25.00 per contact hour

Infrastructure Fee: \$15.00 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 MyMCC 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 MyMCC.

Payment Plan

To help meet your educational expenses, Muskegon Community College has partnered with Nelnet Business Solutions (NBS) to provide MCC students with payment plan options to pay for tuition. Students who choose to use a payment plan may select installment plans that are spread over several months, depending on the length of the semester. Payments may be made from checking or savings accounts or by Visa, MasterCard, American Express, or Discover credit cards. In addition to the variety of choices available, students also have the convenience of paying online as soon as they are registered. The payment is automatically deducted on the 5th or the 20th of each month (depending upon the semester) Please note: Check, Debit, and ATM Cards may be returned unpaid due to daily limits restrictions imposed by your bank.

The only cost to budget monthly payments through a payment plan is a \$25 per semester non-refundable enrollment fee and a 2.75% non-refundable service fee if you choose to make your payments by credit/debit card. If you select the ACH option to have your payments come from a checking or savings account, there is no service fee, only the \$25 enrollment fee. If you wish to pay in full with E-Check instead of paying by credit card, there is only a \$2 fee.

If your payment is not successful, it will be reattempted within 15 days of the first attempt. Any time a payment is returned, you will receive notification from NBS on how the returned payment will be handled. Your payment plan agreement will be processed until the balance owed is paid in full.

For each returned payment, NBS assesses a \$30 Returned Payment Fee. NBS Returned Payment Fees are automatically deducted from the account you have provided. If your NBS Returned Payment Fee is returned, it will be reattempted. NBS Returned Payment Fees are payable to NBS.

NBS Enrollment Fees and Returned Payment Fees are subject to change in future academic years or semesters, unless otherwise agreed by NBS and Muskegon Community College. Interest earned on all custodial funds held by NBS is payable to NBS.

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 Fall Semester 2019:

Contact Hours	In District	Out-of-District	Out-of-State	Technology Fee	Infrastructure Fee
0.5	\$58.50	\$109.00	\$153.00	\$12.50	\$7.50
1.0	\$117.00	\$218.00	\$306.00	\$25.00	\$15.00
2.0	\$234.00	\$436.00	\$612.00	\$50.00	\$30.00
3.0	\$351.00	\$654.00	\$918.00	\$75.00	\$45.00
4.0	\$468.00	\$872.00	\$1,224.00	\$100.00	\$60.00
5.0	\$585.00	\$1,090.00	\$1,530.00	\$125.00	\$75.00
6.0	\$702.00	\$1,308.00	\$1,836.00	\$150.00	\$90.00
7.0	\$819.00	\$1,526.00	\$2,142.00	\$175.00	\$105.00
8.0	\$936.00	\$1,744.00	\$2,448.00	\$200.00	\$120.00
9.0	\$1,053.00	\$1,962.00	\$2,754.00	\$225.00	\$135.00
10.0	\$1,170.00	\$2,180.00	\$3,060.00	\$250.00	\$150.00
11.0	\$1,287.00	\$2,398.00	\$3,366.00	\$275.00	\$165.00
12.0	\$1,404.00	\$2,616.00	\$3,672.00	\$300.00	\$180.00
13.0	\$1,521.00	\$2,834.00	\$3,978.00	\$325.00	\$195.00
14.0	\$1,638.00	\$3,052.00	\$4,284.00	\$350.00	\$210.00
15.0	\$1,755.00	\$3,270.00	\$4,590.00	\$375.00	\$225.00
16.0	\$1,872.00	\$3,488.00	\$4,896.00	\$400.00	\$240.00
17.0	\$2,106.00	\$3,706.00	\$5,202.00	\$425.00	\$255.00
18.0	\$2,106.00	\$3,924.00	\$5,508.00	\$450.00	\$270.00
19.0	\$2,223.00	\$4,142.00	\$5,814.00	\$475.00	\$285.00
20.0	\$2,340.00	\$4,360.00	\$6,120.00	\$500.00	\$300.00

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" no later than 10 business days after the award date (typically Census date) or loan disbursement. For more information on the "My MCC OneCard" visit www.mymcconecard.com.

Schedule of Refund Days

Fall and Winter Semesters:

Class Length (in weeks)	Number of Business Days to Drop a Class for Tuition Refund
15 Weeks	10 days from the start date of the Semester
13-14 Weeks	7 days from the start date of the class
11-12 Weeks	6 days from the start date of the class
9-10 Weeks	5 days from the start date of the class
7-8 Weeks	4 days from the start date of the class
5-6 Weeks	3 days from the start date of the class
3-4 Weeks	2 days from the start date of the class
1-2 Weeks	1st day of the class

Summer Semester:

Class Length (in weeks)	Number of Business Days to Drop a Class for Tuition Refund
12 Weeks	10 days from the start date of the Semester
11 Weeks	6 days from the start date of the class
9-10 Weeks	5 days from the start date of the class
7-8 Weeks	4 days from the start date of the class
5-6 Weeks	3 days from the start date of the class
3-4 Weeks	2 days from the start date of the class
1-2 Weeks	1st day of the class

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 child care, 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. Federal and state financial aid is based on credit hours, not on contact hours. Your actual award will be determined no earlier than 1) at the semester census date (end of the refund period*) for classes that have started or 2) at the start date of any late start class or 3) at the time of awarding if it is past the semester census date. In addition, classes added after the census date may not be considered for supplementary aid. Finally, if I never attend, cease to attend, drop, withdrawal or receive all "E's", my financial aid may be reduced or cancelled, and that I may be liable to repay any amount of assistance already received.
 - C. If I register for classes in any academic semester, 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 degree program, as set forth in the "Satisfactory Progress 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 understand that if I do not graduate from one program before changing to another program, I may no longer be eligible for a subsidized loan and I may lose the subsidy on Direct Subsidized Loans I have already received.
 - H. 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.
 - I. 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).
 - J. I understand that I am not eligible for financial aid if I am still in high school. This includes if you are enrolled as a dual enrolled or early college student.
 - K. I am not eligible for financial aid if I indicated "guest" student status on my admissions application at MCC.
 - L. I understand that if I fail to meet any or all of the above conditions, my financial aid may be cancelled 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.fsa.help.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

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.
3. **Suspension Status:** The student has failed to meet one or more conditions of the SAP policy standards after two consecutive semesters. A student placed on suspension is not eligible for additional aid until they 1) raise the cumulative GPA up to the minimum required, and/or 2) earn enough credits to meet the minimum cumulative completion rate required. The student would be responsible to pay for any additional classes needed to bring them back into good standing.
4. **Financial Aid Probation Status:** A student placed on probation has successfully appealed their suspension status by demonstrating that they have the ability to earn a cumulative 2.00 GPA and 67% completion rate by the end of their next semester. If after one semester on probation the student is not back to satisfactory status, they would not be eligible for future aid unless they were successfully following a Financial Aid Academic Plan.
5. **Financial Aid Academic Plan:** A student on suspension that cannot return to a satisfactory status within one additional semester must meet with an MCC counselor and develop a Financial Aid Academic Plan. The Plan must be strictly followed and the conditions set forth must be met. The student will remain on the Plan until returning to a satisfactory status. If the conditions are not met, all future aid will be canceled. The student would be responsible to pay for any additional classes needed to bring them back into good standing.

Loss of Eligibility, Appeal, and Reinstatement

If you are denied aid under this Policy, you have the right to appeal. If you feel there are mitigating

circumstances in your case, you must complete the “Appeal Form for Satisfactory Academic Progress (SAP) and Loan Denial”. The appeal form must be submitted to the Student Welcome Center before the beginning of the semester you wish to attend. You must address the problem(s) of why you have been unsuccessful in the past and what has changed that will allow you to be successful in the future. The Committee will normally consider such things as illness, a change in job schedule, or other extenuating circumstances (which were beyond your reasonable control) as grounds for a successful appeal. Be sure to include documentation (for example, a doctor’s statement) and a Financial Aid Academic Plan, if appropriate. To complete a Financial Aid Academic Plan, contact the Counseling and Advising Center at (231)777-0362.

Students that successfully appeal are placed on either Financial Aid Probation OR placed on a Financial Aid Academic Plan that ensures they will meet SAP standards by a specific point in time.

If you want federal aid to earn a second degree, you must appeal in writing, stating your academic goal, and provide a Financial Aid Academic Plan including documentation (such as a “graduation audit”) of the classes needed to accomplish your goal.

This policy states the minimum required for most financial aid programs. However, some scholarship and loan programs require a higher standard (usually a higher GPA). Therefore, you may qualify for most aid programs by meeting the above conditions, but be denied a specific scholarship or loan unless you raise your GPA or pass additional credit hours.

Financial Aid Refunds

Financial Aid recipients who withdraw from classes will have their tuition accounts adjusted according to the College’s regular tuition refund policy (see “Refund Policy”). If you find it necessary to withdraw during a semester, you should notify the Student Welcome Center in person as soon as you can.

Federal aid recipients who withdraw from ALL classes before they complete 60% of the semester may have to repay a prorated portion of the federal aid they received.

Transferring Credit to MCC

Transferring Guidelines

Muskegon Community College welcomes transfer students. We may award transfer credit for coursework from accredited institutions of higher education and the United States Military Service. Transfer credits may also be awarded for some Advanced Placement (AP), College Level Examination Program (CLEP) examinations and Life Experiential Learning (LEAP).

Muskegon Community College will award equivalent course credit when applicable, and when direct equivalencies are not available, elective credit in appropriate academic subjects may be awarded.

Transfer credit to MCC is determined on an individual basis using these guidelines:

- ♦ Apply Online for Admission to Muskegon Community College.
- ♦ Official Transcripts and Official Score Reports must be sent directly from each college or national testing service to:

Transfer Evaluation, Room 1048-J
Muskegon Community College
221 S. Quarterline Rd
Muskegon, MI 49442

- ♦ **International**-credits must be evaluated through wes.org or ece.org to be accepted for evaluation.
- ♦ **Regionally-accredited College or University** - Transfer credit must be from a regionally-accredited college or university sent directly from the College/University or Testing Service.

- ♦ **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.
 - 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.
- ♦ **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.
- ♦ **Evaluation Time** - Transcripts will be evaluated within approximately three to five 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 needed 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.
- ♦ 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.
- ♦ Medical Assistant – All non-medical assistant courses required for the medical assistant degree, must be taken within eight years prior to the time of the evaluation. If testing/coursework is over eight years old, competency must be validated on established examinations or by repeating the course. As noted on the admission checklist, Computer Science courses must have been taken within the five years prior to the time of evaluation. Medical Assistant (MA) courses cannot be transferred to MCC from another institution.

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.

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.

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 Experience

Muskegon Community College (MCC) will evaluate your military credits for possible award of transfer credits after your official military transcript has been received and you have been admitted to the College.

Joint Services Transcript (JST)

JST is the Joint Services Transcript that has replaced the Coast Guard Institute Transcript, the Army/American Council on Education Registry Transcript (AARTS) and the Sailor/Marine American Council on Education Registry Transcript (SMART). JST is an academically accepted document approved by the American Council on Education (ACE) to validate a service member's military occupation experience and training along with the corresponding ACE college credit recommendation. For additional information on Military Transcript Evaluation visit ACE | Military Programs and check out Joint Service Transcript (JST) Video.

Army

Email your inquires to:
usarmy.knox.hrc.mbx.tagd-jst@mail.mil
or Call Toll Free: 1.888.276.9472
Login at [HTTP://JST.DODED.MIL](http://JST.DODED.MIL) to order transcript

Veterans now have access to electronically submit their official JST to Muskegon Community College after they register for an account on the JST website (<https://jst.doded.mil>). The steps for submitting an official transcript via the JST website are listed below:

Step 1: Register for an account with JST, if you have not done so already via <https://jst.doded.mil>.

Step 2: Log into the JST system via <https://jst.doded.mil>

Step 3: Click on the ‘Transcripts’ tab at the top of the page, and then select the ‘Official Transcript request’ tab.

Step 4: Type in the institution name or part of the name and click ‘search’ or hit the enter key. For example instead of typing in the ‘Some Name University’ you could type in ‘Some Name’. You may need to scroll through the entire list to ensure you have the correct location.

***QUICK TIP:** Do not use any punctuation when typing in the name of an institution. If you receive ‘no matches found’, try using a smaller part of the institution’s name.

Step 5: This will bring you to the order page that will show your name, rate/rank, etc., and the institution name. You will be asked if this is the institution you wish to have a transcript sent to. Please ensure you pay attention to the delivery method.

Please have your official military transcripts sent directly to:

Office of the Registrar
Transfer Evaluations, Room 1048H
Muskegon Community College
221 S. Quarterline Road
Muskegon, MI 49442

Air Force

Please send a request to the College of the Air Force (CCAF) at:

CCAF/RRR
130 West Maxwell Blvd
Maxwell AFB, AL 36112-6613
<http://www.au.af.mil/au/ccaf/>

Coast Guard

To receive your Coast Guard Transcript, you must complete a for 1560/04e (Educational Assessment Worksheet.) If your Educational Assessment Worksheet has already been completed, please request your Coast Guard Transcript by sending your completed 1560/04e to

USCG Institute
E-mail: CGI-PF-ed_transcripts@uscg.mil
Fax: 405.954.7249
Login at: [HTTPS://JST.DODED.MIL](https://JST.DODED.MIL) to order your transcript

Navy/Marine Corp

Email your JST requests to:
JST Technology Operational Center
Email: jst@doded.mil

The Joint Military Transcript 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.

Request for Transfer Course Equivalency Reevaluation

Muskegon Community College has established the following procedure for students requesting reevaluation of their transfer equivalency. The reevaluation guidelines are:

- Only courses from a regionally accredited institution with a “C” and above will be considered. An Official transcript must be on file before a reevaluation will be considered.
- Complete one request form for each department and include a copy of course descriptions and course syllabi which includes course objectives & outcomes for the semester and year the course was taken.
- Return form, course description and syllabus to the Registrar’s Office
- Results of your reevaluation are final and are based on documentation you submitted. Final results will be mailed to you within four weeks.
- Incomplete Reevaluation Forms and lack of documentation will not be considered for reevaluation.
- Approval of Registrar is required to start process.

Articulated Credit

Apply to Muskegon Community College online at www.muskegoncc.edu.

To apply for articulated credit students need to apply through their high school’s counseling office.

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:

Office of the Registrar, Room 1048-J
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 Office of the Registrar at (231) 777-0204 or email officeoftheregistrar@muskegoncc.edu when at least six credit hours of 100 level courses or above have been completed with a cumulative 2.0 GPA at Muskegon Community College.

Students may earn a maximum of 15 credit hours toward a certificate program and 30 credit hours for an Associate degree program.

Michigan Transfer Network

The Michigan Transfer Network at www.michigantransfERNETWORK.org is a valuable “single source” website that students, counselors and the public may use to check transfer equivalencies for courses among colleges and universities in Michigan. It is sponsored by the Michigan Association of Collegiate Registrars and Admissions Officers in partnership with Michigan State University.

Non-Conventional Credit

Some course requirements may be met by methods other than completing courses. Students may wish to explore with a counselor the following options:

- ♦ **Life Experiential Learning** - Credit may also be granted to students who are unusually well-prepared in a particular discipline if they can demonstrate that preparation through a process called the Life Experience Assessment Program (LEAP). Consult a counselor for information. Applications are available on MCC’s website at www.muskegoncc.edu/pages/2671.asp. There is a \$100 fee that must be paid at the MCC Student Welcome Center at the time of application and there is no guarantee that any credits will be awarded by Muskegon Community College. A maximum of eight credits may be awarded for each application. A maximum of eight credits may be awarded in any one subject area.
- ♦ **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 or a department chairperson 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 – 6) 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 add/or their equivalent in a subject area, or to supplement transfer credit to meet program requirements.

Reverse Transfer

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 the 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

Transcripts

Transcripts may be requested in person, or online. Transcripts that are released to the student are unofficial. Transcript request forms are available from the Student Welcome Center. 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. Official transcripts must be sent directly to a college/university or business. "Sealed transcripts" are available but are "issued to student." Transcript requests will not be processed if you have delinquent accounts at the College.

Unofficial transcripts may be printed online using the MyMCC Portal, under Student Planning then Academics..

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.
- ♦ **ONLINE** - Transcripts can be ordered online, 24/7 through the National Student Clearinghouse, with a \$5.25 fee per transcript recipient. Go to: <http://www.muskegoncc.edu/alumni-relations/transcript-request/>

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.

Muskegon Community College has implemented E-Transcripts through the National Student Clearinghouse.

Confidentiality of Records

Notification to Students of Rights Under FERPA

The Family Educational Rights and Privacy Act (FERPA) affords students certain rights with respect to their educational records. They are:

The **right** to inspect and review the student's education records within 45 days of the day the College receives a request for access. Students should submit to the 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 Student 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 Student 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

1. 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 Registrar. Forms are available online or at the counter in the Student Welcome Center.

Right-to-Know

Legal completion persistence rates

For the latest graduation rate and other performance-related data of MCC, please see the college dashboard at

www.muskegoncc.edu/dashboard.

To get more information on MCC’s tuition and price of attendance relative to other colleges, you can visit the College Affordability and Transparency Center of the US Department of Education at

collegecost.ed.gov/catc.

Institutional Governance for Internal Communication

MCC has five permanent advisory councils, representative of the major service functions of the college: Instructional Affairs Council, Student Services Council, Business Administration Council, Information Technology Council, and the Joint Sustainability Council. A sixth council, the Coordinating Council, serves as the clearinghouse for all actions put forth by the advisory councils. The Coordinating Council expedites and implements recommendations made by the five councils.

These councils, in cooperation with the administration, Faculty Association, Student Government Association and non-teaching associations, provide orderly channels for seeking opinions, expressing ideas and developing recommendations. It is expected that these councils will be primarily policy-planning and recommending in their functions. However, it is conceivable that the councils may, on occasion, serve as sounding boards for determining the merit of a new idea or to discuss the feasibility of calling for a review of established policies, practices and/or procedures. Individuals who have proposals for consideration should forward them to the appropriate council through the Council Chairperson.

Council by-laws, meeting agendas, and meeting minutes may be reviewed through Campus Governance on MyMCC.

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 according to each council's bylaws.
- 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 according to each council's bylaw.
- 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 refund appeals must be received no later than one semester from the last date of the semester being appealed, or for grade appeals, one year from the date the grade was officially recorded. Forms

are available on the MyMCC 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

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** or designee if step two is denied by the Department Chairperson to continue the appeal. The Vice President for Academic Affairs 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. If the student plans to attend the meeting, he/she must indicate on the appeal form the request to attend the meeting. The student will be notified of the meeting location, date and time by the Registrar 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.

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 attend the meeting. The student will be notified of the meeting location, date and time by the Registrar 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.

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 or designee to continue the appeal. Ask the Vice President for Academic Affairs 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 to the Student Welcome Center. 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 attend the meeting. The student will be notified of the meeting location, date and time by the Registrar 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

Tuition Refund Appeals Due to Verifiable Error of MCC

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

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 attend the meeting. The student will be notified of the meeting location, date and time by the Registrar 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.

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 attend the meeting. The student will be notified of the meeting location, date and time by the Registrar 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.

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 attend the meeting. The student will be notified of the meeting location, date and time by the Registrar 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.

Student Conduct Policies

To view the entire policy, visit:

<http://www.muskegoncc.edu/student-services-and-administration/wp-content/uploads/sites/111/2020/09/Student-Code-of-Conduct-2020-2021.pdf>

Muskegon Community College Equal Opportunity, Harassment, and Nondiscrimination Policy

Muskegon Community College is committed to providing a workplace and educational environment, as well as other benefits, programs, and activities, that are free from discrimination, harassment, and retaliation. To ensure compliance with federal and state civil rights laws and regulations, and to affirm its commitment to promoting the goals of fairness and equity in all aspects of the educational program or activity, Muskegon Community College has developed internal policies and procedures that provide a prompt, fair, and impartial process for those involved in an allegation of discrimination or harassment on the basis of protected class status, and for allegations of retaliation. Muskegon Community College values and upholds the equal dignity of all members of its community and strives to balance the rights of the parties in the grievance process during what is often a difficult time for all those involved.

To view the entire policy, visit
www.muskegoncc.edu/TitleIX

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Muskegon Community College

Main campus: 221 S Quarterline, Muskegon MI 49442

(231) 773-9131 ♦ toll-free (866) 711-4622

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