

GENERAL INFORMATION

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WELCOME



Welcome to Montcalm Community College. We are glad you're here and hope your experiences with us will be rewarding. This college was created to provide excellent local learning opportunities and our services and educational programs remain focused on helping our students succeed in their endeavors.

On the following pages, you can read about the college and learn more about our curriculum choices and various learning support services. As you participate in college programs or services, I know you will find our staff members to be pleasant and helpful. We are here to support your learning needs and we will do everything we can to help you achieve your educational goals.

I hope that you find this catalog helpful as you begin your next level of learning. Please don't hesitate to let us know what we can do to make your MCC experience more fulfilling. Best wishes for a bright future.

— Robert C. Ferrentino, President

ABOUT MCC

Montcalm Community College began in fall 1963 as an idea in the minds of a group of public-spirited citizens. It had become obvious to the people of Montcalm County that such factors as distance to existing colleges, rising educational costs, increasing demands upon institutions of higher education and the growing specialization of the workforce were combining to form a mandate for local posthigh school education.

MCC became a reality on March 2, 1965, when it was established by an overwhelmingly favorable vote. The first Board of Trustees was also elected and a one-mill annual tax levy was established.

Completion of a joint site survey resulted in the purchase of land on Sidney Road for the campus. MCC's 220-acre-campus is near both the geographical and population centers of the district and is accessible from all directions by county and state highways.

Five presidents have served MCC including Dr. Donald Fink, 1965-1971; Dr. Clifford Bedore, 1971-1978; Dr. Herbert Stoutenburg, 1978-1984; Dr. Donald C. Burns, 1984-2009; and Robert C. Ferrentino, J.D., 2009-present.

The college is accredited by the Higher Learning Commission, a member of the North Central Association (30 N. LaSalle St., Suite 2400, Chicago, Ill. 60602, 312-263-0456) and is an AQIP and Achieving the Dream participant.

MCC has progressed steadily since its approval by area voters in 1965. Credit courses are available to students desiring selected classes or classes leading to a certificate or degree. Upgrading and retraining courses, a wide variety of noncredit and recreation courses, employment services, counseling, financial aid assistance, career planning services and tutoring are also available. A dedicated staff, student body and community have helped make the dream of 1963 a viable community college — a learning community dedicated to meeting the educational needs of the people it serves.

Mission

Montcalm Community College is a leader in creating a learning community, contributing to shared economic, cultural and social prosperity for all our citizens.

Vision

Montcalm Community College is west-central Michigan's preeminent provider of and preferred choice for education, training and lifelong learning opportunities.

Values

Montcalm Community College subscribes to the following institutional values:

- We provide a caring environment for our students, staff and community.
- We expect competence and the pursuit of excellence from our students and staff.
- We work in concert with our community stakeholders to advance the philosophy of life-long learning.
- We are committed to providing open access and fostering success for all of our learners.

PREPARING PEOPLE FOR SUCCESSFUL TRANSFER

 Providing liberal arts, science and technical study programs at the freshman and sophomore levels that are transferable to other institutions of higher education.

PREPARING PEOPLE FOR COMPETENCE IN THE WORKPLACE

- Providing occupational programs and courses based on current standards and workplace competencies for those seeking career preparation.
- Providing consultation and human resource development for area employers and employees.

The Educational Program

The educational program at Montcalm Community College is based on a philosophy having as its chief goals the following outcomes:

- 1. For arts and sciences students, a twoyear college education of high quality is provided offering a firm grasp of the basic areas of knowledge: communication skills, social science, natural science, mathematics and humanities. In addition to this basic core of learning, a series of electives permits students to explore areas of special interest. It is expected that students who complete two years of academic study have an understanding of how knowledge is gained in the various academic disciplines and possess the skills to become a lifelong learner.
- 2. For applied science students, a high degree of occupational competence at the skilled or semiprofessional level should be achieved. For students who seek an associate degree as well as occupational competence, successful completion of the general education core is also required. Because associate-degreed technicians frequently assist professional workers such as physicians, engineers or teachers, graduates are expected to have competence in the realm of ideas and theories as a necessary complement to skill training and possess the skills to become lifelong learners.
- 3. For all students, an opportunity to explore both academic and occupational studies while still qualifying for an associate degree will be provided. Where educational goals are not aimed specifically at transfer to a four-year college or at a skill specialty, students may enjoy greater flexibility in planning their programs of study along lines of varied interest.
- For non-degree, non-certificate students, the opportunity to study for increased understanding, for greater job skill or for other personal reasons without reference to formal, prescribed educational pursuits is encouraged.

In all cases, MCC students are expected to pursue a chosen course of study with enthusiasm and the best effort of which they are capable at all times. Students and their instructors should approach the learning process collaboratively and with an attitude of optimum achievement. A high quality of performance is required of all in this learning community.

Assessment Policy

Academic assessment using COMPASS or ACT is required for all students pursuing a program of study at MCC or who wish to enroll in a course with a score listed as a prerequisite. Scores must be on file in Student Services. New students must complete and submit an Application for Admission prior to assessment. Students who, within the previous five years, have completed COMPASS or attained the required ACT assessment scores (18 or above in individual test modules) do not need to re-test unless by choice. Assessment fees may apply to those who choose to re-test.

Those who have earned a bachelor's degree, are age 60 or older, audit classes or obtain a waiver from the instructor may be exempted from assessment. Only COMPASS scores are accepted as placement scores for MATH prefix courses; ACT math scores cannot be used.

See page 10 for the Placement Score Equivalencies Chart.

Learning Outcomes

Montcalm Community College is committed to providing a learning community that is effective and meets the needs of learners. As one means of meeting that commitment, a continuous quality improvement process is used that involves measuring student learning and using the results to improve teaching and learning. Learning outcomes have been identified for each course and degree program offered by the college. To measure student learning, faculty use a variety of assessment methods during a course offering. Degree program and general education outcomes are assessed by a variety of methods including transfer studies, graduate follow-up studies, placement studies, licensure/certification results, portfolios, capstone courses and graduation studies.

General Education

Members of the faculty have identified a set of core competencies that each associate degree graduate from Montcalm Community College should possess. These competencies are considered integral to providing opportunities for lifelong learning, preparing people for successful transfer, and preparing people for competence in the workplace. The identified competencies are reflected in a recommended set of courses that make up the general education core requirements for each of the associate degrees offered at the college.

All associate-degree graduates are expected to demonstrate increased:

- competence in written communications;
- competence in oral communications;
- knowledge of the natural world and application of scientific methods;
- competence in local, national and global citizenship;
- competence in basic computational methods and mathematical concepts and applications;
- application of the tools of information technology to personal and professional work; and
- competence in critical thinking.

The Guarantee

FOR JOB COMPETENCY

Any graduate of an associate degree program in occupational studies judged by his or her employer as lacking in technical job skills normally expected of a job-entry-level employee will be provided further skill training of up to 16 semester credit hours by MCC without charge.

The employment must be full time and Student Services must certify the job as directly related to the graduate's program of study.

The initial date of employment of the graduate must be within one year of the graduation date.

The employer must certify in writing that the employee is lacking the job-entry-level skills identified in writing at the time of initial employment, and must specify the area(s) of skills deficiency within 90 days of the graduate's initial employment.

RETRAINING GUARANTEE

Skill retraining will be limited to 16 credit hours and to enrollment in courses regularly offered by MCC.

The skill retraining must be completed in one academic year.

The employer, the graduate and a college advisor, with the advice of appropriate teaching faculty, will develop an educational plan which specifies the courses constituting the 16 credit hours of further retraining.

The graduate must meet all prerequisites, corequisites and other enrollment requirements for retraining courses.

Failure, withdrawal or audit of retraining courses is creditable to the 16-credit-hour limit.

The graduate or the employer will bear the cost of books, supplies, uniforms, transportation, insurance and other related items. The college will waive tuition and fees.

ADMISSION

Admission Policy

Montcalm Community College is an "open door" institution, providing educational opportunities for all who seek them. Anyone who is 18 years of age or older or whose high school class has graduated, is eligible to attend MCC as a degree-seeking student. Anyone younger than age 18 may attend as a non-degree seeking student. Admission to the college does not guarantee admission to academic programs with specific entry requirements.

Montcalm Community College complies with applicable federal and state laws prohibiting discrimination, including Title IX of the education amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990 and the Michigan Handicappers' Civil Rights Act.

It is the policy of Montcalm Community College that no person; on the basis of race, sex, color, religion, national origin or ancestry, age, marital status, height, weight, disability or Vietnam-era veteran status; shall be discriminated against in employment, educational programs, activities or admissions. In addition, arrangements can be made to ensure that the lack of English-language skills is not a barrier to admission or participation.

New Student Enrollment Process

A PROSPECTIVE STUDENT SHOULD:

- apply for admission;
- apply for financial aid (if desired);
- provide proof of high school or GED completion, if applying for financial aid;
- complete new student orientation;
- activate student e-mail account;
- complete assessment, which is required before enrolling in many entry-level
- register for classes; and
- arrange payment for classes.

Admission Application

Applications for Admission are available from Student Services, located in the Donald C. Burns Administration/Library Building on the college's Sidney campus, and all MCC off-campus sites as well as area high school counseling offices and the MCC website at www.montcalm.edu/getting-started. There is no application fee.

Prospective students may apply online or submit a completed Application for Admission to MCC's Student Services Office. Official transcripts from previously attended colleges or universities must be sent directly from those institutions to MCC.

Students who are admitted and do not attend within 18 months of acceptance must reapply. Students who return to MCC after five years of non-attendance must also reapply.

Assessment

Academic assessment using COMPASS or ACT is required for all students pursuing a program of study at MCC or who wish to enroll in a course with a score listed as a prerequisite. Scores must be on file in Student Services. New students must complete and submit an Application for Admission prior to assessment. Students who, within the previous five years, have completed COMPASS or attained the required ACT assessment scores (18 or above in individual test modules) do not need to re-test unless by choice. Assessment fees may apply to those who choose to re-test.

Those who have earned a bachelor's degree, are age 60 or older, audit classes or obtain a waiver from the instructor may be exempted from assessment. Only COMPASS scores are accepted as placement scores for MATH prefix courses; ACT math scores cannot be used.

See page 10 for the Placement Score Equivalencies Chart.

Nursing and Allied Health Program Admission

Students who intend to apply to nursing or another allied health program must also meet the admission requirements for that particular program. General standards required by the health care professions include, but are not limited to, drug screens, finger printing, criminal background checks, immunizations, and other required documentation and certifications.

Admissions requirements for these programs can be obtained through the guide to Getting Started link on MCC's website and the MCC Admissions Office.

Admission of Non-degree Seeking Students

Applicants who wish to take selected courses for personal interest or enrichment should indicate this on their Application for Admission. These applicants are not required to submit college transcripts, but must complete entry requirements for specific courses. Non-degree applicants are not eligible for federal or state financial aid.

Admission of High School, Middle School and Elementary School Students

Students who wish to enroll in MCC courses prior to graduation from high school should meet with their school counselor to submit an Application for Admission and discuss readiness for college coursework.

Dual Enrollment

Dual Enrollment is an educational option for high school students. Students are officially enrolled in high school and simultaneously enrolled in one or more college classes. The classes may be taken for both college and high school credit. Students interested in dual enrollment must contact their high school counselor or principal for eligibility requirements and authorization to register. Students must meet all college admission and registration requirements. For additional information, visit www. montcalm.edu/dual-enrollment.

Guest Students from Other Colleges

Students currently enrolled at other colleges or universities may attend MCC on a guest student status by completing a Michigan Uniform Guest Student Application, available from the Admissions Office at the institution where the student is enrolled or MCC's website at www. montcalm.edu.

International Students

International students must complete an International Student Application for Admission as well as an MCC Application for Admission; both are available on the MCC website at www. montcalm.edu. International students must submit original certified transcripts, in English, of all previous high school and post-secondary coursework; a financial statement or affidavit of support indicating ability to meet all educational expenses; documentation of English language skills (TOEFL); and a letter indicating their educational plans. Students must have established local housing and transportation arrangements.

International students who wish to have international post-secondary credit transferred to MCC must submit a course-by-course credit evaluation available through either World Educational Services (WES) or the American Association of Collegiate Registrars and Admissions Officers (AACRAO).

New Student Orientation

Orientation is a key element of student success. Students learn strategies to assist them in acclimating to post-secondary education and learn about resources available to help them succeed. Because MCC is committed to academic success, all new credential-seeking students are required to complete a new student orientation session before beginning classes at MCC. In-person orientation is available prior to each semester on MCC's Sidney campus. Students can sign-up for orientation at www. montcalm.edu/orientation.

Academic Advisement

Educational counselors and academic advisors are available to assist students with academic planning and defining their educational goals. Students may receive assistance with course recommendations to meet education and program requirements, dropping and adding courses, petitioning procedures and issues

related to transfer. Academic advising is a collaborative effort between counselors or advisors and the students. Students are expected to read all pertinent MCC student information and participate in the advising process. Students are encouraged to meet with a counselor or academic advisor prior to registering.

Placement Score Equivalencies Chart

	COMPASS Score		ASSET Score	Course Placement	Pre/Co requisites
Reading	49-65	Reading	33-36	ENGL050	GNST156
	66-81		37-42	ENGL051	GNST100
	82 →		43→	ENGL100 and others	
Writing	21-37	Writing	35-38	ENGL070	GNST156
	38-69		39-43	ENGL071	GNST100
	70 →		44 →	ENGL100 and others	
Pre-Algebra	1-35	Numerical Skills	29-37	MATH050	GNST156
	36-43		38-40	MATH075	GNST100
	44		41 →	MATH100	
Algebra	34-65	Elementary Algebra	40-49	MATH104	
	66 →		50 →	MATH120	
College Algebra	31-45	Intermediate Algebra	36-40	MATH120	
	46 →		41 →	MATH120	
Trigonometry	31-45	College Algebra	33-37	MATH120	
	46 →		38 →	MATH120	

Transfer Students

Transfer from MCC

Students planning to transfer to another institution should be aware that each institution evaluates, accepts and applies transfer courses differently. Inorder to achieve the most efficient transfer of courses, students are encouraged to consult an MCC counselor or academic advisor as well as contact the transfer advisor at the receiving institution as soon as possible after enrolling at MCC. Each institution may vary in regard to the minimum grade required for a course to transfer and in the number of credits that may transfer.

It is recommended that students follow the transfer curriculum guide designed specifically for the major and institution in which they plan to transfer, if available. Curricular guides for many degree programs at Michigan colleges and universities are available via the home college or university website, MCC's advising office in the Student Success Center, or on the individual program pages at www.montcalm. edu/associate-degrees

Students who are uncertain about the college or university to which they intend to transfer are encouraged to initially follow the guidelines for earning the MACRAO endorsement and/or to follow the requirements for earning an associate degree in Arts, Science, Liberal Studies, or the Liberal Studies certificate. Students who transfer credit to MCC are encouraged to meet with a counselor or academic advisor to plan any subsequent transfer. Note: Not all Michigan colleges and universities participate in the MACRAO Agreement.

Students planning to transfer to another community college or an out-of-state institution should contact an admissions representative at that institution to plan their coursework at MCC.

PREPARING TO TRANSFER

Students should apply early for admission to the institution they have selected. An application fee may be required. Many institutions have application deadlines and a limit on the number of new students to be admitted to a specific program. Criteria for admission may include one or all of the following: the community college grade point average (GPA), high school GPA, and SAT/ACT scores. Presentation of a portfolio, an audition or interview may be a factor for acceptance into certain degree programs. Additional admission or program requirements may exist for specific programs, degrees or majors.

Students must submit a written request for an official copy of their MCC transcript to the Enrollment Services Office. Official transcripts must be sent directly from MCC to the receiving institution. Upon admission, the receiving institution will perform a credit evaluation of the transcripts.

Transfer students need to be aware of all deadlines for payment of tuition and fees, residence hall reservations, financial aid and scholarships, placement testing, etc. Academic scholarships awarded by senior institutions may be available to students transferring from MCC. Contact the Student Services Office for information on availability and application deadlines.

Before transferring, students are encouraged to visit the institution to which they plan to transfer. Campus tours are often available if arranged ahead of the visit. Students are encouraged to meet with an admissions representative, advisor, faculty or academic counselor at the transfer institution well in advance of their planned transfer.

MACRAO STATEWIDE COLLEGE AND UNIVERSITY ARTICULATION AGREEMENT

In 1973, the Michigan Association of Collegiate Registrars and Admissions Officers (MACRAO) Transfer Agreement was established to improve transfer student articulation between two-year and four-year colleges in Michigan.

MCC is a participant in the agreement. This agreement stipulates that 30 semester hours of 100-level and above, compatible, general coursework will be granted smooth transfer to participating colleges and universities and these credits will be applied toward a student's general education requirements at participating Michigan institutions. Not all Michigan colleges and universities participate in this agreement and some institutions have provisos to acceptance of the MACRAO endorsement.

Students completing the 30-credit-hour program must request their transcript show "MACRAO Agreement Satisfied." Students who feel they have met the requirements for

this agreement should complete a MACRAO Agreement Application, available in Enrollment Services, upon completion. Courses that meet the MACRAO requirements can be found under the Liberal Studies certificate on page 91.

Students completing the Liberal Studies certificate or an associate degree should contact an advisor or counselor to determine which courses meet specific degree requirements of the college or university to which he or she intends to transfer.

This information cannot be considered an agreement or contract between the individual student and MCC or its staff.

Transfer-in options

	What	How	Cost
College or University	Credits earned from regionally accredited institutions of higher learning are accepted; credits earned from non-regionally accredited post-secondary institutions may be evaluated on a case-by-case basis. Equivalent courses for which a C grade or higher was earned may be accepted in transfer. Transfer courses are not included in the MCC GPA. Courses for which there is not an equivalent may be assigned elective credit.	Students must have official transcripts sent directly from other post-secondary institutions. Only official transcripts of applied students will be evaluated.	No fee.
Articulatio	MCC has articulation agreements with several area high schools and career centers to apply credit for specified technical coursework at MCC. Credits granted through articulation may or may not transfer beyond MCC at the discretion of the receiving institution. More information is available at www. montcalm.edu/articulations.	MCC Articulation Application Request Form must be completed with the high school or career center counselor and submitted to the MCC Admissions Office. This request is valid only within 26 months after high school graduation. Credits will be added to the MCC transcript upon request.	No fee.
AP Exams	AP examination scores of three (3) or higher may receive MCC credit for equivalent courses. AP equivalencies are available at www.montcalm.edu/ getting-started/register.	The official test score transcript must be sent directly to MCC's Student Services for evaluation.	No fee.

CLEP ² and DSST ³ exams	CLEP or DSST exams with the ACE 4 recommended score or higher may receive MCC credit for equivalent courses. Additional information is available at www.montcalm.edu/getting-started/register.	Students must request an official transcript of the test results be sent to Student Services.	No fee.
Credit by Exam	Students who believe they have achieved the equivalent knowledge and/or skills of a particular course may choose to take a competency examination in order to earn credit for that specific college-level course. Exams are available only for certain courses. Students should contact a counselor for additional information. Credits granted through examination may or may not transfer beyond MCC at the discretion of the receiving institution.	Upon successful completion of the exam, the completed Credit /Waiver by Exam Form with instructor signature will be submitted to Student Services. The student must enroll in the course.	Full tuition for the course is due at the time the form is submitted to Student Services.
Waiver by Exam	Students who believe they have achieved the equivalent knowledge and/or skills of a particular course may choose to take a competency examination in order to waive a specific college-level course. Exams are available only for certain courses. Students should contact a counselor for additional information.	Upon successful completion of the exam, the completed Credit or Waiver by Exam Form with instructor signature will be submitted to Student Services; the requirement for taking that course may be waived. This is only available for a specific course once and is not available for a course in which a student has already received a grade. The student will be required to take the equivalent number of credit hours in other coursework not otherwise required in the program.	\$5-per-credit exam fee must be paid prior to the exam. The student does not enroll in the course.
Licensure or certification credit	Valid and current state or nationally recognized licensure or certification may be recognized for comparable college credit.	Students will present official documentation for approval by the appropriate academic administrator.	Fees to be determined by college's administration.
Military training	Students may be granted up to four credit hours of physical education upon submission of a DD214 or military transcript. Military coursework or training may receive transfer credit according ACE ⁴ recommendations.	Official military transcript must be sent to Student Services for evaluation.	No fee.

¹Advanced Placement (AP)

²College Level Examination Program (CLEP)

³DANTES Subject Standardized Test (DSST)

⁴American Council on Education (ACE)

Tuition & Fees

The rates below are current at publication and are subject to change. Refer to www. montcalm.edu/tuition for current tuition and fees. Residency status is based on the taxing district in which you reside. Tuition is based on the residency status of the student.

MCC District Residents

Tuition.....\$91 per credit hour

Residents of the MCC district have lived in the Carson City-Crystal, Central Montcalm, Greenville, Lakeview, Montabella, Tri County or Vestaburg public school district for at least six months at the time of enrollment. Students are required to furnish proof of residency such as a driver's license or tax receipts.

Michigan Non-District Residents

Tuition.....\$171 per credit hour

Non-district residents are those whose legal residence is established within the state of Michigan for a period of six consecutive months prior to the last day of registration for the term for which the student is enrolled.

Out-Of-State Residents

Tuition.....\$254 per credit hour

Out-of-state residents are U.S. citizens whose legal residence is established outside the state of Michigan for a period of six consecutive months prior to the last day of registration for the term for which the student is enrolled.

Students should be prepared to provide proof of residency at each registration. Acceptable documentation includes a valid driver's license, Michigan ID card, voter registration card, lease agreement in the student's name, business mail such as utility bill or bank statement, in the student's name.

Other Fees

College Services Fee	\$14/contact hour
Contact (Lab) Fee*	Same as
	per-credit-hour tuition
Materials Fee	See the class listings

*Some courses have lab or contact hours for which there is a Contact (Lab) Fee. In the semester course schedules these are shown in parentheses immediately following the credit hours.

SENIOR SCHOLARSHIPS

Adults age 60 or older who live in the MCC district may take MCC credit courses tuition free (limited to tuition and excess contact hour fees). Seniors are not required to pay college services fees for one course per semester. Seniors using this scholarship will not receive a student ID card.

MILITARY PERSONNEL & DEPENDENTS MCC offers in-state tuition for certain active-duty military students, spouses or their dependents. Contact Student Services or visit MCC's website for additional information.

Refund Policy

Tuition and fees are 100 percent refundable during the enrollment and drop period. No refunds of tuition and fees will be made for withdrawals after the end of the enrollment period.

Federal Refund Policy FOR STUDENTS RECEIVING TITLE IV AID

FOR STUDENTS RECEIVING TITLE IV AID Students who receive any form of Federal Title IV Student Financial Aid and withdraw from ALL classes before completing 60 percent of the semester may be required to repay a prorated portion of the federal aid they received.

Payment of Tuition and Fees

- 1. Tuition and fees are due by the posted semester due date. After the semester due date, the tuition and fees are due at the time of registration.
- 2. The college accepts cash, check or Visa, Discover and MasterCard credit cards.
- 3. Students who receive financial aid through the college will see the estimated amount applied to their student accounts after receiving an award notification. Any difference between the bill and financial aid is the responsibility of the student and can be paid using the credit terms listed below. No refunds will be granted after the drop deadline.

Credit Terms

PAYMENT PLAN INFORMATION

This convenient, interest-free payment plan is made available to MCC students through Nelnet Business Solutions. The payment plan can be used to pay tuition and fees. By enrolling in the plan early, students can make payments for up to four months for the fall semester, up to five months for the spring semester and up to three months for summer semester. Students wishing to enroll in the payment plan must be registered for classes and enroll in the plan by the semester payment due date.

PAYMENT METHODS

- Automatic bank payments (ACH) using a checking or savings account.
- Credit card/Debit card (MasterCard, Discover or American Express).
- Nelnet does not accept Visa cards.

COST TO PARTICIPATE

- \$25 enrollment fee per semester.
- \$30 returned payment fee if a payment is returned for non-sufficient funds.
- If a credit/debit card is used, a convenience fee, in addition to the enrollment fee, will be assessed.

To set up a payment plan choose the "SET UP A PAYMENT PLAN" link on the student accounts page of MyMontcalm.

FINANCIAL AID

Application for Financial Aid

MCC attempts to assist students with their expenses by constructing a package of grants, loans, scholarships and employment opportunities. The amount awarded through each program depends greatly upon an analysis of the applicant's financial situation. For this reason, students wishing to participate are required to complete a Federal Application ForStudent Aid (FAFSA) atwww.fafsa.ed.gov.

Information about all types of financial aid is available in the Financial Aid Office or by visiting www.montcalm.edu/financial-aid. Entering freshmen are encouraged to submit the FAFSA in January of their senior year of high school. For maximum award consideration, the FAFSA should be submitted by March 1 and all required documentation should be submitted by the priority processing date noted on the Financial Aid section on MyMontcalm.

Documentation Required

PRIOR TO PAYMENT OF FINANCIAL AID Students are not eligible to receive financial aid until the following documents are on file in the Financial Aid Office.

- Application for Admission
- Proof of high school graduation or equivalent
- Student Aid Report and necessary documentation to complete verification (if requested)
- Verified attendance through electronic process
- Financial aid award notification

Loan Default Policy

Students found in default of Title IV loans or owing a Title IV refund to any college will not be eligible to receive financial aid. Academic

transcripts will not be released to students who are found in default on Title IV federal loans or who owe any Title IV refund to MCC.

Enrollment Status

To participate in financial aid programs, students must enroll for a minimum of six semester hours in an eligible degree program. Exception to this requirement is the Pell Grant.

Full time: 12 credit hours and greater 3/4 time: 9 credit hours to 11 credit hours 1/2 time: 6 credit hours to 8 credit hours
Less than 1/2 time: 1 credit hour to 5 credit hours

Method and Frequency of Financial Aid Payments

Grant, scholarship and loan money is transferred to student accounts no earlier than one week after the drop/add period.

Financial Aid will be disbursed to the student accounts once attendance has been verified. Faculty will electronically indicate if a student is attending class two times during the semester. For late start classes, grant funds will not be disbursed until all classes have started and attendance has been verified. Loan funds may be paid to student accounts with only six (6) credits of attendance verified. For more information, visit the Finances section at my montcalm.edu.

Grant, scholarship and loan refunds will be issued by check when there is a credit balance on your account. These refund checks will be available for pick up in the Business Office with picture ID. The Business Office will notify students via their MCC student email when they have a refund available for pick up.

MCC Title IV Refund Distribution Policy

MCC refunds Title IV funds first to the Federal Stafford Loan Program, then to the Supplemental Educational Opportunity Grant and then to the Pell Grant program.

Student Budget and Award Packaging

The following sample budget includes the major expenditures that may be incurred by MCC students using the rates in effect at the time of publication. These budgets are used by the Financial Aid Office to calculate a student's financial need The following budget is based on the 2013-14 academic year.

DEPENDENT STUDENTS

(This is also used for determining need for Michigan Competitive Scholarship recipients.) *Tuition and fees*

(based on in district, full time)	\$2,548
Room and board	\$4,312
Books	\$970
Travel	\$1,488
Personal	\$959
College Service Fee	\$392
TOTĂL	\$10,669

INDEPENDENT STUDENTS

Tuition and fees

(based on in district, full time)	\$2,548
Room and board	\$11,130
Books	\$970
Travel	\$1,488
Personal	\$2,481
College Service Fee	\$392
TOTAL	\$19,009

Change of Address or Financial Circumstance

Financial aid recipients must inform the Financial Aid Office of changes in address or financial circumstances.

Citizenship and Residency Requirements

Federal financial aid is restricted to U.S. citizens and qualified aliens. State of Michigan aid is restricted to those having continuous residency in the state for 12 months prior to enrollment.

Types of Financial Aid Available

Scholarships are non-repayable money usually based on academic performance and/or demonstrated need

Grants are non-repayable money usually based on demonstrated need.

Loans are money that must be repaid after students leave college or enroll less than half time.

Employment is part-time work on and off campus, based on demonstrated need. The total hours a student works are determined by financial need. Students are paid every two weeks.

Sources of Financial Aid

FEDERAL PROGRAMS

Federal Pell Grant: This program offers grants up to \$5,645 to students meeting specified need requirements. It is paid in proportion to the number of credit hours for which the student is enrolled. Students are eligible until completion of the first baccalaureate degree, but not to exceed the equivalent of 12 semesters at fulltime enrollment.

Federal Supplemental Educational Opportunity Grant (SEOG): This program offers students with need grants up to \$600. Students must be Pell eligible to be considered for SEOG. It is awarded on a first-come basis until funds are fully awarded.

Federal College Work Study (CWS): This program offers work, on or off campus, to students with financial need to help meet their educational expenses. Jobs are arranged after considering the amount of the award and the student's class schedule. Students are paid bi-weekly.

Federal Direct Stafford Loan: A student may obtain a federally insured loan through the Department of Education. The federal government subsidizes interest on the subsidized Stafford Loan, based on financial need, while the student is enrolled at least half time. The federal government does not subsidize interest on the unsubsidized Stafford Loan that is not based on need. First-year students may borrow up to \$3,500 per academic year in subsidized loans. Second-year students may borrow up to \$4,500 per academic year in subsidized loans.

The interest rate on both subsidized and unsubsidized loans first disbursed on or after July 1, 2013, is 6.8 percent. Previous borrowers should review their promissory notes for repayment terms.

Students must be enrolled at least half time and attending classes to be eligible to receive a loan disbursement. Students must be in attendance and making satisfactory academic progress at the time the refund is disbursed.

To receive a subsidized Stafford Loan, the loan plus other financial aid being received from MCC may not exceed the student's total need for the academic year. To receive an unsubsidized Stafford Loan, the loan cannot exceed the student's total budget for the academic year.

STATE PROGRAMS

Michigan Competitive Scholarships: Scholarships of up to \$575 are awarded annually to state resident college freshmen whose American College Testing (ACT) Program scores qualify them and whose Financial Aid Applications show need. Undergraduate students may renew this scholarship for up to the equivalent of 10 semesters by maintaining eligibility.

Michigan Tuition Incentive Program (TIP): This program pays tuition and fees at the in-district rate. Students younger than age 20 who graduate from high school or obtain a GED and who are from lower-income families are eligible.

Michigan Indian Tuition Waiver: This program provides free tuition for North American Indians in public colleges or universities. Applicants must be certified by their tribal association and verified by the Inter-Tribal Council of Michigan to be not less than one-fourth quantum blood Indian.

MCC FOUNDATION SCHOLARSHIP PROGRAMS

Annually, scholarships are awarded to students pursuing education at MCC. Applications and information are available on the web at www.montcalm.edu/scholarships or by contacting the Financial Aid Office.

MCCF Beth Anderson Memorial Current or Returning Student Scholarship

MCCF Beth Anderson Memorial New Student Scholarship

MCCF Beth Anderson Memorial Short-term Job Training Scholarship

MCCF Doris M. Arntz Scholarship

MCCF Stanley & Blanche Ash Scholarship

MCCF Ash Foundation Scholarship

MCCF Travis L. Bingaman Memorial Scholarship

MCCF Louise D. Buescher Scholarship

MCCF Donald C. Burns Presidential Scholarship

MCCF William & Harriette Cook Scholarship

MCCF Dr. Gordon DeVries/Dr. Thomas Deurloo Memorial Scholarship

MCCF Beatrice & Manfred Doser Memorial Scholarship

MCCF Nancy Steele Allen Edwards Memorial Nursing Scholarship

MCCF Mildred Farmer-Angwin Scholarship

MCCF Festival Scholarship

MCCF Harold & Ruth Force Family Scholarship

MCCF Nancy Fox Scholarship

MCCF Don & Emma Goodell Scholarship

MCCF Mr. & Mrs. John Hathaway Scholarship

MCCF Grace Anne Hatto-Adler Memorial Scholarship

MCCF Anna Hertz-McCoy Memorial Scholarship

MCCF Erin K. Kitchenmaster Scholarship

MCCF Allen & Janet Kohn Scholarship

MCCF Kenneth J. & Gail E. Lehman Scholarship

MCCF Employee Endowed Scholarship

MCCF MCC-ESPA Scholarship

MCCF Judy K. DeVolder Nutt Scholarship

MCCF Ardene (Diz) Oswald Memorial Scholarship

MCCF Edward Reddig Scholarship

MCCF Grace M. Sagendorf Scholarship

MCCF Herbert N. Stoutenburg Scholarship

MCCF Camille Widdifield Memorial Scholarship

MCC Board of Trustees Scholarship

OTHER PROGRAMS

The Perkins Attendance Cost Assistance Program may provide direct cost assistance and support services to single parents, displaced homemakers or single, pregnant women, nontraditional job trainees, economically disadvantaged students or individuals with a disability or limited English proficiency who are enrolled in an eligible occupational program. This program is federally funded through the Carl D. Perkins Vocational and Technical Education Act and is subject to provisions of the Act. Contact the Student Services Office for more information.

The Department of Human Services provides public assistance and training programs that can be used by students under certain circumstances.

As part of staff development plans and benefit packages, many employers reimburse their employees and their dependents for successful completion of college courses.

A variety of programs and organizations provide scholarships and financial assistance to those meeting specific qualification criteria. Contact local organizations offering scholarships, a high school guidance counselor, the Financial Aid Office or the Counseling Office for information.

State and federal funding is tentative at the time awards are made. MCC cannot guarantee substitute awards if anticipated sources of assistance do not materialize. The amount of financial aid is contingent upon full-time enrollment for each semester awarded on the award notice. If enrollment changes, the award is adjusted accordingly.

FINANCIAL AID REPEAT POLICY

Financial aid awards can include aid for courses repeated up to twice.

SATISFACTORY ACADEMIC PROGRESS POLICY

Students receiving financial aid at MCC must maintain Satisfactory Academic Progress (SAP) in accordance with the guidelines listed below. The federal and state governments mandate the establishment and enforcement of a SAP policy for all institutions disbursing financial aid funds to students. A student is in good standing for financial aid if he/she meets the following standards and is accepted for continued enrollment under the academic policy. All withdrawals, incompletes, repetitions, academic amnesty, and E or U grades are evaluated into the percentage completion section of the SAP policy.

This policy will be applied after a student has been enrolled at MCC. Each spring, a review of all financial aid recipients will be conducted. Transfer credits from other institutions will be evaluated toward the maximum time frame allowed.

When measuring SAP, all credit hours for which the student has incurred a financial obligation are considered including the hours for which the student has personally paid for educational costs. Accountability starts with the student's entry date at MCC. The student's academic GPA (grade point average) may differ from the financial aid GPA.

In order to continue to receive financial aid funding, a student must:

- 1. Maintain a minimum required grade point average (see chart below).
- 2. Successfully complete a percentage of all credit hours attempted (see chart below).

Credit hours	Student must
attempted	successfully complete
1-12	50%
13 or above	70%
Cumulative	Grade point
semester hours	average
1-12	1.70
12 or more	2.0

3. Be progressing at a rate that would allow completion of the certificate or associate degree which the student is pursuing within a time frame which, by federal regulation, is 150 percent of the published credit hour requirements of the program. For example, if an associate degree program requires 60 credits, the degree must be completed in a maximum of 150 percent of 60 credits, including both attempted and completed credits. (Consult the MCC catalog to find the number of credits required in each certificate or associate degree program, and then multiply that number by 1.5 to determine the maximum number of credits.)

After completion of the spring semester each academic year, the Financial Aid Office will run a list of all students enrolled and receiving aid. The list will show the number of hours attempted and completed and percentage of completion, the grade point average, and the course progression rate. Those not making SAP at that time will be sent a letter telling them they are no longer eligible for financial aid. Students denied financial aid because of failure to make SAP may appeal the denial in writing to the Financial Aid Office, if there are

mitigating circumstances. The appeal must describe in detail all circumstances, which the student believes relevant to his or her inability to meet the SAP requirements. It must also include steps the student will take to correct the policy violation. Students must submit letters of appeal plus any other supporting documents to the Financial Aid Office. Students who do not meet the terms of this policy at the end of their first enrollment period will be placed on academic probation. Students who attain less than a 2.0 GPA for their first 15 credit hours will be academically dismissed.

A SAP Review Committee will assess the appeal and supporting documentation to determine if the appeal will be approved. The student will be advised in writing of the committee's decision. A student who appeals and is reinstated on a probationary status must be able to meet the SAP guidelines within one semester of enrollment. If one semester's enrollment will not be long enough for the student to meet the SAP policy, he/she will be placed on an academic plan. An academic plan is an individualized plan designed to allow the student to meet the SAP policy in a reasonable time frame. At the end of the probationary or academic plan semester, grades and other requirements will be reviewed to determine if the student has met the SAP guidelines. If a student becomes ineligible for financial aid due to a lack of SAP and no appeal is submitted or the appeal is denied, he/she may regain eligibility by meeting the SAP policy without the benefit of financial aid at MCC. To do this, the student must enroll and complete the courses that are applicable to his or her program of study using his/her own finances. The student must achieve the necessary completion rate along with the necessary grade point average to meet the SAP policy.

Veterans' Information

To receive educational funding from the Veteran's administration (VA), a student must complete the Veteran's Online Application available at the VONAPP website. After the application is completed online, the student must submit a copy of their Certificate of Eligibility (COE), discharge papers (DD214), and copy of current class schedule to the MCC VA Office. It will be certified on the VA Once

website by the MCC Certifying Official after the drop period.

All failing, incomplete, or unsatisfactory grades will be reported by the Certifying Official at the end of the semester. The Veteran will be notified by MCC's VA Department of this action via United States Postal Service.

Any changes in class schedules during the semester will be reported to the VA by the Certifying Official at that time.

STANDARDS OF ACADEMIC PROGRESS

Satisfactory pursuit of study or training toward completion of an educational or vocational goal must be maintained. Students receiving VA benefits will be certified only for classes that are required for their declared program of study. Elective courses in the program will be certified. No more than 60 required credits will be authorized.

Unsatisfactory progress can stop VA benefits. The MCC academic probation and dismissal policy is on page 28 of this catalog. Students receiving VA benefits who are placed on academic probation for two consecutive semesters or dismissed for unsatisfactory progress, will not be recertified for benefits until a minimum accumulated 2.0 GPA has been achieved at the student's expense. An appeal may be made to the Director of Financial Aid for special circumstances. The VA will be notified when a student remains on academic probation for two consecutive semesters or is dismissed for unsatisfactory progress. Students receiving VA benefits who receive incomplete or unsatisfactory grades are allowed one year from the end of the semester to complete the course and receive a grade. If the class is not completed in the year allowed, the VA may require repayment of funds received for the course.

The Student Services Office is located in the upper level of the Donald C. Burns Administration/Library Building on MCC's Sidney campus.

STUDENT SERVICES

Registration

Registration includes enrolling in courses and paying tuition and fees. Registration dates, times and options are outlined in the year-long schedule booklet as well as the MCC website at www.montcalm.edu and the MCC student portal at my.montcalm.edu.

Academic Counseling/Advising

Licensed professional counselors and academic advisors are available to assist students. Course advisement, assessment and interpretation, special needs, tutoring, career exploration and career decision-making, personal counseling referrals and other counseling services are available. Appointments may be made by contacting the Student Success Center at (989) 328-1264.

General Information

Emergency procedures, class schedules, lost and found and other general college information topics are handled in Student Services.

ACT Testing

The American College Test (ACT) information can be obtained by calling (989) 328-1231 or online at www.actstudent.org.

GED Testing

Information about scheduling the General Educational Development (GED) test is available by calling MCC's Greenville Campus at (616) 754-7706.

Student Records

Grade reports are available to students at the end of each semester of enrollment showing grades, hours attempted, hours completed, hours earned, honor points and GPA. To protect the student's privacy, this information is not given out by telephone. Grade reports are not released for students who have outstanding financial obligations to MCC or have overdue library materials. Grade reports

and unofficial transcripts can be viewed and printed through a secure link at my.montcalm. edu. It is the student's responsibility to check his/her grades at the end of each semester or academic session. The Academic Appeal Process is outlined on page 27. The archived transcript shall be considered the permanent academic record.

A signed, written request to Student Services is required to release a student's academic transcript to a third party. The request must include the student's name, including former names used while attending MCC, dates of attendance, student ID or last four digits of the social security number. No transcripts will be issued for students who have outstanding financial obligations to MCC or who have defaulted on student loans.

Unofficial copies of transcripts may be printed through My.Montcalm or sent to students at their address of record upon request; students who have moved must provide proof of identity and current address. Transcripts from other institutions, including high schools, cannot be released or copied.

Career Planning Services

Personal career counseling is available to students who are undecided about which college program or career to pursue. Career interest assessment and interpretation is available to assist with educational planning and decision making. Contact the Student Success Center at (989) 328-1264 for additional information. A credit course exploring career development is also available to students who are undecided (GNST110 Career Development).

Tutoring Services

MCC offers free tutoring assistance to students experiencing academic difficulty. Tutoring is offered on a drop-in basis for MCC students. Assigned times and designated locations are provided for students to walk in and receive academic assistance. To receive free tutoring assistance students must contact the Student

Success Center in room D318 in the Beatrice E. Doser Building on the college's Sidney campus.

Accessibility Services

MCC's Accessibility Services assists students in overcoming barriers so that they can focus on their education.

Students with disabilities often face significant challenges. Thus, reasonable accommodations offer opportunities to succeed in classes similar to the opportunities that students free from disabilities can take for granted. A reasonable academic accommodation ensures equal access and equal opportunity to participate in MCC's courses, services, activities and facilities. MCC is not obligated to provide an accommodation that requires a substantial change in the curriculum or alteration of any essential elements or functions of a program.

MCC adheres to the Americans with Disabilities Act of 1990, the Americans with Disabilities Act Amendment (ADAAA) of 2008, and Section 504 of the Rehabilitation Act of 1973, which prohibit discrimination on the basis of disability and require Montcalm Community College to make reasonable accommodations for those otherwise qualified individuals with a disability who request accommodations.

ESTABLISHING ELIGIBILITY

Accessibility services are available to all students with a disability who have been accepted at Montcalm Community College and have completed the COMPASS placement assessment. Students needing services should apply and register for classes early. To establish eligibility, the student must contact Accessibility Services to:

- 1. Complete and submit the intake form to Accessibility Services
- 2. Submit appropriate documentation from a qualified professional describing the disability and how it impacts the student's education as well as outlining suggested accommodations
- Make an appointment to meet with the Student Success counselor

- 4. Meet with the Student Success counselor to determine appropriate accommodations
- Complete and sign an accommodations support agreement

RECEIVING ACCOMMODATIONS

Accommodations are evaluated on a case-bycase basis and re-evaluated every semester. To receive accommodations in a timely manner, students must meet with the Student Success counselor and register for classes early. To receive accommodations for the semester, the student must:

- 1. Register for classes early
- Meet with a Student Success counselor to determine services and accommodations.
- 3. Provide faculty with outline of qualifying accommodations provided by the Student Success counselor. The outline of accomodations will not include details relating to the student's disability or any other clinical information about the student.
- Meet with each individual faculty member to establish the accommodations for the class.

STUDENT ACTIVITIES

Extracurricular organizations at MCC foster and facilitate student interests and skills, community activities, social interaction and quality of life. Involvement contributes to the emotional and physical well-being of students and community, and to their intellectual, cultural and social development. The programs are funded by a portion of the college services fee.

Clubs & Organizations

- Anime Club
- Art Club
- Business Professionals of America
- Culture & Travel Club
- Drama Club
- Electronics Club
- Equality Club
- Fitness Club
- Gamer's Club
- Ghost Hunters of Sidney Township
- Justice Studies Club
- Math Club
- Music Club
- Native American Club
- Phi Theta Kappa Honor Society/Alpha Tau Alpha Chapter
- React (Student Christian Fellowship)
- Religion & Philosophy Club
- Rotaract Club of MCC
- Veteran's Club
- Volleyball Club
- Water Polo Club

For the most current information about clubs and organizations and for guidelines to start a new club, visit the Campus Life tab at www. montcalm.edu, call (989) 328-1231 or e-mail clubs@montcalm.edu.

Activities

Examples of college-sponsored activities include club sports, excursions, travelogues, support groups, fund-raisers, lectures, intramurals, American Red Cross blood drives, self-help seminars, leadership development, and musical and dramatic performance groups.

Phi Theta Kappa Honor Society

Phi Theta Kappa is an international honor society for junior and community college students, with more than 1,200 chapters worldwide. MCC's Alpha Tau Alpha Chapter provides opportunities in leadership, scholarship, fellowship and service. To qualify for membership, students must complete a minimum of 12 MCC credit hours with a minimum 3.5 GPA and have letters of recommendation from two MCC faculty members. Students who have been granted academic amnesty are not eligible for membership. E-mail jessicas@montcalm. edu for more information.

ID Cards

Student ID cards are available upon registration at the recreation desk in the Activities Building. ID cards allow students free use of the gym, pool and fitness center during scheduled times; to check out recreation equipment; to use the library; and to attend college-sponsored functions.

Lockers

Lockers are available for rent each semester in the Activities Building.

College Procedures

MyMontcalm

MCC e-mail and the MyMontcalm web portal are provided to MCC students upon admission to facilitate communication between Montcalm Community College and the student. MCC e-mail and MyMontcalm web portal accounts are the official and primary means of communication with students. Students are responsible for all information in their MCC e-mail and MyMontcalm accounts. Students are required to use their MyMontcalm web portal to conduct business over a secure connection.

Semester System

Montcalm Community College operates on the basis of two semesters per year. The fall semester begins in August and is completed in December. The spring semester begins in January and ends in May. MCC also offers an accelerated summer session that runs from June to early August. Some courses may begin and/or end outside the designated dates for a semester or session. Courses transferred from a term or quarter-based institution will be given equivalent credit (1 quarter/term hour equals .67 semester hour).

Classification System

A freshman is a student who has completed fewer than 25 semester hours of study. A sophomore is a student who has completed at least 25 semester hours of study, but who has not yet qualified for an associate degree or a certificate.

A full-time student is one who enrolls for 12 or more credit hours per semester. Enrollment in 9 to 11.99 credit hours is considered three-quarter time and enrollment in 6 to 8.99 credit hours is half-time. When enrolling in more than 18 credit hours in a semester it is recommended that students meet with an academic counselor or advisor. Full time status for summer session is 6 or more credit hours (more than 9 credits should consult an academic advisor or counselor). This may vary for financial aid purposes.

Program Planning

In planning coursework, students should use counseling and advising services, faculty, catalog, semester class schedules and online resources. Some courses are offered every semester while others are on an irregular basis.

Program of Study Selection

Selection of a program of study takes place prior to initial registration; to make subsequent changes, students may complete and submit to Student Services a Change of Program form, which can be obtained in Student Services, the Student Success Center, or MyMontcalm. The MCC Catalog or individual program guides (available in Student Services or on the MCC website) list specific courses required for program completion. Exceptions to any program requirements will be made only by the dean of the appropriate academic division of the college and must be authorized in writing on a Course Waiver/Substitution form. Students are encouraged to meet with a counselor or advisor when changing their program.

Catalog of Record

Each student is responsible for knowing which is his/her catalog of record. A student has five years to complete a program under the MCC catalog in effect at the time of initial MCC acceptance, and/or after completing a change of program. If program requirements are changed in response to demands of external regulatory agencies or governing boards, students must meet those requirements.

Students pursuing more than one program are considered, for both programs, to be under the catalog of record effective for the last program change. (The five-year limit applies to students whose first MCC enrollment was fall semester 1998 or after.)

Upon completion of program requirements, students who wish to receive a diploma and have the completion of a degree or certificate verified and noted on their transcript must submit an application for graduation.

Registration

Registration for classes takes place for a designated period prior to the start of each semester. Changes to schedules may be made any time during scheduled registration dates; please refer to Dropping and Adding Classes below for additional information. Registration for classes that do not meet for the regular full semester schedule will be allowed until the beginning date of the class(es).

Registration may be completed either online or in person. Students are responsible for meeting course pre- and corequisites, which are indicated in the semester schedule.

Students wishing to audit a course must declare the intention by submitting a Course Audit Form at the time of registration (see audit information on page 26). Any change to this status must be made with Enrollment Services before the end of the drop period that applies to the course. Financial aid does not pay for audited courses.

Registration is complete when tuition and fees are paid in full through cash, check, credit card, NelNet payment plan or estimated financial aid. Estimated aid must be applied to the student account and balance must be covered in full. The payment deadline must be met.

Dropping and Adding Classes

After registration, students may drop or add classes during the registration period designated in the semester schedule. After classes begin, students may add a course only until the class first meets; once a class has met, enrollment is closed for that class. For classes without regularly scheduled meeting times, the class is considered as having met at midnight of the first Wednesday of classes. If a student seeks to add a class after the first meeting, the student must meet with a counselor or advisor. Final drop dates are published in the semester

schedule for courses meeting the full semester and noted for each course on the individual student's schedule (a printable pdf version) in MyMontcalm. All tuition and fees are refunded for classes dropped during the drop period.

Withdrawal Procedures

Students may withdraw from a course until the last class meeting, unless stated otherwise in the course syllabus.

- To discontinue a class after the drop/add period, students must obtain a Withdrawal Form from the Student Services Office, complete the required information and present the form to the instructor.
- The instructor will sign and date the form, and indicate the last date of attendance.
- The student is required to return the form to the Student Services Office upon completion.

A withdrawal grade has no effect on grade point average but may impact financial aid eligibility. Tuition and fees will not be refunded for withdrawal.

Class Attendance

Students are expected to attend all sessions of classes in which they are registered. Absence from classes shall not relieve students from the responsibility to complete assigned work. Students enrolled in online courses are expected to regularly participate as outlined by instructors.

Grading System

Academic achievement is appraised and recorded by the following system of letter grades:

GRADE	*QUALITY POINT VALUE
A	4.0
A-	3.7
B+	3.3
В	3.0
В-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	.7
E	0.0
W	Withdrew
I	Incomplete
V	Audit
S	Satisfactory completion
U	Unsatisfactory completion
AR	Articulated credit
TR	Transferred credit

*Quality Points are used to calculate the numerical value of grades earned. To calculate the Grade Point Average (GPA), total quality points are divided by the total GPA hours/credits earned at MCC.

INCOMPLETE GRADE

An Incomplete (I) is a temporary grade given in instances in which a student has completed the majority of the work required for the course, but, due to extenuating circumstances, cannot complete the necessary assignments by the end of the semester. The assignment of an Incomplete (I) indicates the instructor's belief that the student can complete requirements without repeating the course. The student must be passing the course to be eligible for an I grade.

Instructors may not assign an I without mutual agreement with the student and completion of an Incomplete Grade Contract form; if the student is unable to participate in the execution of the contract, the instructor will consult with the Dean of Instruction and Faculty and the Dean of Student and Enrollment Services to determine the parameters of the contract, which should represent the best interests of the student.

PROCEDURE:

- 1. An I is entered on the student's record when an Incomplete Grade Contract form is submitted to Enrollment Services by the grade due date for the semester. The I will not be entered without the contract.
- An I remains until course requirements are satisfied and a Grade Change form is received by Enrollment Services or until the deadline for completion has passed. If course requirements are not met by the deadline, the I will be changed according to the Incomplete Grade contract. course requirements should be met by the end of the subsequent semester or session, but if they are not, a new Incomplete Grade contract must be completed between the student and faculty member if the time for completion of the course requirements is to be extended. Under no circumstances shall the time for completion of course requirements extend past one year from the date of receipt of the original I grade.
 - a. Students receiving Veterans' benefits who receive an I may have up to one year to complete the course without repaying the VA for the class.
- An I is not averaged with other grades to establish grade point average. At the conclusion of the contract, the GPA will be recalculated.
- 4. Students desiring assistance with this process or who wish to appeal the parameters of the policy may contact the Dean of Student and Enrollment Services.

AUDIT applies when a student pays tuition for a course but is not required to complete assignments or examinations. Audit status must be declared in writing to Enrollment Services, no later than the last day of the drop period for the course.

REPEATED COURSE

The higher grade earned for the course will be computed in the GPA. Credit will be given only once for a course. The grade earned for an equivalent course taken at another institution will not remove the grade of the MCC course from computation in the GPA. Students should check with the Financial Aid Office to

determine if repeated courses are covered by financial aid funds. Courses may be taken a maximum of three times; courses from which a student withdraws are counted as an attempt. Exceptions are activity courses such as physical education or art; exceptions may be considered on a case-by-case basis. Some programs may have further limitations on course repeats.

UNGRADED COURSES

S (satisfactory completion) and U (unsatisfactory completion) grades are used only for the following courses: CMIS100, CRIM115 and GNST115. (These are subject to change.) An S grade will also be given when a student tests out of a course for credit.

Assigning of grades is the complete and irrevocable responsibility of each instructor.

Academic Appeal

Students who believe that they have been issued an incorrect or unfair grade for a course or courses completed at MCC have access to the following appeal provisions:

- Within 30 calendar days of the date 1. that grades are issued, the student must provide the instructor who issued the grade with a written explanation of the grade concern and schedule a meeting to discuss the concern. At that meeting, the faculty member will review his or her grading policy with the student, explain to the student the rationale for the grade issued, and render a written response to the student's appeal. Students desiring additional information or assistance with this process should contact the Dean of Student and Enrollment Services. If the student is satisfied with the decision of the faculty member, the grade as issued or as altered by the faculty member will become a permanent part of the student's official transcript.
- If the student is not satisfied with the decision of the faculty member, he/she will, within 14 calendar days of the faculty decision, make a written request for a review of the decision to the appropriate instructional administrator. The instructional administrator will schedule a meeting with the student and the faculty member to seek

a remedy. At the conclusion of this meeting, the instructional administrator will render a written decision. If agreed to by both the faculty member and the student, this decision will become a permanent part of the student's record.

If the student is dissatisfied with the de-3. cision of the instructional administrator, he/she will, within five calendar days of the decision, request in writing a hearing with the Chief Academic Officer. The Chief Academic Officer will schedule a hearing to occur within 10 working days of the written request from the student. All involved parties will be present for this hearing. Upon review of all evidence, issues and concerns, the Chief Academic Officer will render a decision, which will be final and binding on all parties. Documentation of this decision, along with all other written communication from this appeal process, will become a permanent part of the student's official academic record.

Honors

Each semester's honors list includes students who complete at least 12 semester hours in the semester and attain a grade point average of 3.3 to 3.69. The President's Honors List includes students who complete at least 12 semester hours in the semester with a GPA of 3.7 or higher. Part-time honors lists are based on the same GPAs and include students who complete at least six credits in the semester. Honors lists are not generated during academic sessions, such as summer.

Graduation honors published in the commencement program and local newspapers are calculated based on the GPA of the previous semester as spring semester grades are not due until after commencement. At the time program completion is verified, students will have honors or high honors noted on their transcripts based on final GPA calculation noted above.

Academic Probation and Dismissal

- The minimum GPA for making satisfactory progress is 2.0.
- 2. Students with an accumulated GPA below a 2.0 will be placed on academic probation.
- Students on academic probation who do not earn at least a 2.0 GPA for their next attempted semester will be subject to academic dismissal.
- 4. Students on academic probation or dismissal who earn at least a 2.0 GPA for their next attempted semester, but whose accumulated GPA remains below 2.0, will continue on probation or dismissal until the accumulated GPA reaches a 2.0 or higher.
- Students placed on academic dismissal must complete the Application for Readmision to be considered for readmission. This application is located at www. montcalm.edu/readmission.
- 6. Students who remain on academic probation for two consecutive semesters or who are dismissed for unsatisfactory progress may not be eligible to receive financial aid or veterans' benefits until a minimum 2.0 accumulated GPA has been achieved at the student's expense.
- 7. The Veterans' Administration will be notified when a student receiving VA benefits remains on academic probation for two consecutive semesters or is dismissed for unsatisfactory progress.
- 8. Transfer students shall be subject to all regulations from the beginning of their enrollment at MCC.
- Students will be notified through MCC student e-mail when they are placed on academic probation or academic dismissal.

Academic Amnesty

Recognizing that not all first-time students are prepared for a successful academic experience, academic amnesty is designed to give a student a reasonable second chance by providing an opportunity to remove a certain portion of course work from grade point average computation.

To qualify for academic amnesty, a student must have an overall GPA of 1.99 or below, and a minimum of three years must have elapsed between the time of the poor academic performance and the granting of the request for academic amnesty.

Academic amnesty will apply to no more than the first 30 credit hours attempted and these 30 hours may not be accumulated over more than the first three semesters of enrollment. Amnesty will apply to all courses taken during the period for which it is granted, regardless of the grade earned. Courses for which the student received a passing grade during this period may be applied toward completion of program requirements but grades for these courses will not be calculated in the student's grade point average. Academic amnesty is irrevocable.

All courses and grades will remain on the student's transcript with a notation that academic amnesty has been granted for the period approved.

A student for whom academic amnesty has been granted may not receive graduation honors recognition.

Academic amnesty will be granted to a student only once. To apply for academic amnesty, a student should contact the Dean of Student and Enrollment Services. After applying for amnesty, the student must complete six credit hours with a minimum 2.0 grade point average. Coursework being taken at the time of the request for amnesty will not be considered as part of this requirement. Upon completion of these requirements, the student must contact the Dean of Student and Enrollment Services to complete the amnesty approval process.

Graduation

DEGREES & ONE-YEAR CERTIFICATES

Graduation is the verification of program completion. Students who wish to receive a diploma and have the completion of a degree or certificate verified and noted on their transcript must submit an application for graduation. Students are urged to apply for graduation one semester before the semester in which they expect to complete their program. The Dean of Student and Enrollment Services will certify graduation eligibility and inform students of courses still needed, if any. Commencement is the ceremony at which candidates for graduation are recognized for their anticipated achievement. Students who participate in commencement should not assume that they have successfully completed all program requirements until receiving verification from the Dean of Student and Enrollment Services.

A student has five years to complete a program under the MCC catalog in effect at the time of initial acceptance or after making a program change. (The five-year limit does not apply to students who were enrolled prior to the fall semester of 1998.) Students may also choose to complete program requirements in any succeeding catalog. If program requirements are changed in response to demands of external regulatory agencies or governing boards, students must meet those requirements.

To be eligible for graduation, candidates for degrees and certificates must:

- Complete course and credit hour requirements as outlined in the catalog. A minimum of 60 credits is required for an associate degree and 30 credits for a certificate; courses numbered less than 100, such as, ENGL050 or MATH050 are not counted toward minimum credits needed for program completion. All approved course substitutions or waivers must be in writing and a copy of the signed course waiver/substitution form must be in the student's academic file.
- 2. Maintain an overall GPA of 2.0 or higher. Nursing students must meet grade requirements as noted for the nursing program.

- 3. Earn a minimum of 15 credits at MCC for an associate degree or 25 percent of the total credits required for a certificate.
- Apply for graduation.
- 5. Have no unpaid balance on their account with the college. Students with an outstanding balance will not be eligible to participate in commencement or receive their diploma or grade report until the account is paid.
- 6. Have no defaulted educational loans.

All students receiving a degree or one-year certificate who graduate during the academic year are invited and encouraged to participate in the annual May commencement ceremony.

JOB TRAINING PROGRAMS

Students completing a Job Training program must complete an application to receive a certificate of completion and have the program completion noted on their transcripts. Job Training program completers are not eligible to participate in the commencement ceremony.

To be eligible to receive their certificate of completion, candidates must:

- Complete course and credit hour requirements as outlined in the catalog. All course substitutions or waivers must be in writing and a copy of the signed course waiver/substitution form must be in the student's academic file.
- 2. Maintain an overall GPA of 2.0 or higher.
- Earn a minimum of 25 percent of the total required credits from MCC.
- 4. Apply for the certificate of completion.
- Have no unpaid balance on their account with the college. Students with an outstanding balance will not receive their certificate of completion, transcript or grade report until the account is paid.
- 6. Have no defaulted educational loans.

Tuition Appeal

Montcalm Community College realizes that, on rare occasions, a student may need to appeal the published withdrawal/refund deadlines due to extenuating circumstances that contribute to the inability of the student to complete the semester coursework. Examples may include military deployment, certain medical conditions, permanent changes in employment status, and/or family related illness or death.

The Tuition Appeal Application instructions are located in MyMontcalm, under the Academics Tab in the Forms link.

The Tuition Appeal committee will review all appeals and the results will be communicated to the student via postal mail. The outcome of the appeal is irreversible.

Requests for a Tuition Appeal do not necessarily include a change in the grade for the academic transcript. The academic appeal process should be used by the student who wishes to appeal the grade given for a course. That process is located on page 27 of this catalog.

Family Educational Rights and Privacy Act (FERPA)

The Family Education Rights and Privacy Act of 1974 provides for the protection of a student's right to privacy of information which MCC has in its possession. It also provides a reasonable guideline for release or disclosure of such information as is required by federal and state law and as is necessary for the effective functioning of the college. MCC accords all the rights under the law to all students.

As a part of the college's instructional program improvement efforts, and to meet the requirements of the Carl D. Perkins Vocational and Technical Education Act, Section 113 and the Workforce Investment Act of 1998, Section 122, MCC may use student Social Security Numbers to compile certain data for the purpose of instructional program improvement and Perkins and WIA reporting.

 Students have the right to inspect and review their educational records and to receive copies of any such records at a minimal cost.

- Student files are maintained in Student Services and the Dean of Student and Enrollment Services is responsible for their upkeep. Financial aid and Veterans' records are maintained in Financial Aid. Appropriate MCC personnel have access to student records.
- Students wishing to inspect their records may do so by contacting the Dean of Student and Enrollment Services.
- MCC will not disclose personally identifiable information from students' records without prior written consent except for directory information as defined in the Buckley Amendment Final Regulations Sub Part A 99.3. Definitions. Directory information includes the student's name, address, e-mail address, telephone number, date and place of birth, major field of study, full- or part-time status, participation in officially recognized activities, dates of attendance, degrees and awards received and date conferred, honors recognition, including selection for honorary organizations and the GPA range for selection, the most recent previous educational agency or institution attended and other similar information. Students have the right to refuse permission of their inclusion in directory information. Students may request of Enrollment Services in writing each semester, that MCC withhold all information pertaining to them.
- 5. MCC will, for each request and for each disclosure of personally identifiable information, maintain a record. This record may be inspected by the student.
- Students who believe that information contained in their records is inaccurate, misleading or in violation of their privacy or other rights may request of the Dean of Student and Enrollment Services that their records be amended.
- 7. Students who experience difficulties in viewing records, receiving copies, affecting amended changes, etc., may request a hearing with the college President and, if their issue remains unresolved, may file their concern with the Department of Education.

Policy Against Discrimination

MCC complies with applicable federal and state laws prohibiting discrimination, including Title IX of the education amendments of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990 and the Michigan Handicappers' Civil Rights Act. It is the policy of Montcalm Community College that no person; on the basis of race, sex, color, religion, national origin or ancestry, age, marital status, height, weight, disability or Vietnam-era veteran status; shall be discriminated against in employment, educational programs, activities or admissions. In addition, arrangements can be made to ensure that the lack of English-language skills is not a barrier to admission or participation. MCC Vice President for Administrative Services is MCC's EEO Officer/Title IX-Section 504 Coordinator and may be reached by calling (989) 328-2111.

Grievance Procedures

The following MCC grievance procedures are based on Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendment Act of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans With Disabilities Act of 1990, and Michigan Persons with Disabilities Civil Rights Act.

SECTION I

If any person believes that Montcalm Community College or any part of the school organization has inadequately applied the principles and/or regulations of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendment Act of 1972, Section 504 of the Rehabilitation Act of 1973, the Americans With Disabilities Act of 1990, and Michigan Persons with Disabilities Civil Rights Act, he or she may bring forward a complaint, which shall be referred to as a grievance, to the local civil rights coordinator, the Vice President for Administrative Services, 2800 College Drive, Sidney, Michigan 48885-9723, (989) 328-2111.

SECTION II

The person who believes he or she has a valid basis for grievance shall discuss the grievance informally and on a verbal basis with the local Civil Rights Coordinator, who shall in turn investigate the complaint, and reply with an answer to the complainant. He or she may initiate formal procedures according to the following steps.

Step 1: A written statement of the grievance signed by the complainant shall be submitted to the local Civil Rights Coordinator within five business days of receipt of answers to the informal complaint. The coordinator shall further investigate the matters of grievance and reply in writing to the complainant within five days.

Step 2: If the complainant wishes to appeal the decision of the local Civil Rights Coordinator, he or she may submit a signed statement of appeal to the college President within five business days after receipt of the coordinator's response. The President shall meet with all parties involved, formulate a conclusion, and respond in writing to the complainant within 10 business days.

Step 3: If the complainant remains unsatisfied, he or she may appeal through a signed, written statement to the MCC Board of Trustees within five business days of receipt of the President's response in step two. In an attempt to resolve the grievance, the Board of Trustees shall meet with the concerned parties and their representative within 40 days of the receipt of such an appeal. A copy of the Board's disposition of the appeal shall be sent to each concerned party within 10 days of this meeting.

Step 4: If at this point the grievance has not been satisfactorily settled, further appeal may be made to the Office for Civil Rights, Department of Education, Washington, D.C. 20201. Inquiries concerning the nondiscriminatory policy may be directed to Director, Office for Civil Rights, Department of Education, Washington, D.C. 20201.

The local coordinator, on request, will provide a copy of the college's grievance procedure and investigate all complaints in accordance with this procedure.

A copy of each of the acts and the regulations on which this notice is based may be found in the coordinator's office.

Code of Student Ethics

Students enrolled at Montcalm Community College are expected to conduct themselves as responsible adult men and women at all times. Students are subject to the jurisdiction of the college and civil authorities during their period of enrollment.

Students must follow generally accepted rules of good conduct. Any student behavior which violates these accepted practices, whether or not it is expressly forbidden, may subject the student to penalty. The Behavioral Intervention Team evaluates complaints of student misconduct and has the authority to require a student to follow disciplinary steps before returning to class within the semester. Enforcement of MCC rules and regulations is the responsibility of the Dean of Student and Enrollment Services. The student has the right to appeal any decision through established procedures.

Acts that seriously interfere with the basic purposes, necessities and processes of the academic community or that deny the essential rights of other students, faculty, staff or other citizens of the community will not be tolerated by MCC. Such acts are prohibited and may lead to probation, dismissal from the college and/or civil prosecution. The following rules and regulations are to serve as a guide to student conduct.

LAWS

The individual student is responsible for observing the laws enacted by federal, state and local governments as well as the rules and regulations established by MCC.

DEMONSTRATIONS AND ASSEMBLY

No person or persons shall assemble or demonstrate in a manner which obstructs the free movement of persons about the campus or the normal use of college buildings and facilities or obstructs the established operation of MCC.

COLLEGE AND INDIVIDUAL PROPERTY

The property and rights of others are to be respected at all times. Theft of any kind and destruction or mutilation of college or another individual's property is prohibited. Students are expected to use receptacles for trash, food waste, and food and drink containers.

ALCOHOLIC BEVERAGES AND DRUGS

Any student drinking, under the influence of or possessing alcoholic beverages on college property is subject to immediate disciplinary action. Students shall obey all federal, state and local laws pertaining to the use of drugs of any kind. Failure to obey these laws may result in probation, dismissal from the college and/or civil prosecution.

SMOKING/TOBACCO USE

MCC is a tobacco-free college. Students will not smoke or use tobacco at any MCC site, including on-campus and off-campus locations.

FIREARMS, EXPLOSIVES OR WEAPONS

Possession or use of firearms, firecrackers, explosives, toxic or dangerous chemicals, other lethal weapons, equipment or any material that can be construed as a weapon is not permitted on college property or at college or student sponsored functions.

GAMBLING

Gambling of any kind, on campus or at collegeor student-sponsored events, is prohibited.

CHEATING - PLAGIARISM

All students are expected to be honest in their studies. Dishonesty in completing assignments, examinations or other academic endeavors is considered an extremely serious violation of the rights of others at MCC and is subject to severe disciplinary action. Plagiarism, the failure to give credit for ideas, thoughts or material taken from another, is cheating.

DRESS

Students are expected to dress appropriately and in keeping with the adult community of which the college student is a part. The college reserves the right to make specific recommendations.

PARKING AND SPEED LIMITS

All students are to park in designated parking areas only. Students are to observe posted speed limits and obey traffic regulations.

RECORDS

Students and prospective students are to give honest and complete replies to all questions and requirements included in application forms and other documents required by MCC. Students are to keep the college informed of their current addresses and phone numbers while attending MCC.

GENERAL BEHAVIOR

Behavior considered inappropriate by the larger society, whether on campus or at a college- or student-sponsored activity, is subject to immediate disciplinary action.

ANTI-BULLYING

MCC is committed to a safe and civil educational environment for all student, employees and community members free from harassment, bullying or cyber-bullying. Therefore, bullying and cyber-bullying on campus or related to campus relationships or activities is prohibited. Initiation of, or participation in, harassment, bullying or cyber-bullying of students, staff, faculty or others will be subject to punishment up to and/or including probation, dismissal and/or civil prosecution.

PUBLICATIONS

Publications or advertisements not approved by MCC will not be authorized for posting or distribution on campus. Authorization to post or distribute materials may be obtained from the Dean of Student and Enrollment Services.

FINANCIAL RESPONSIBILITY

Students are expected to keep current any financial indebtedness to the college. Students owing money to the college for tuition, fees, loans, library fines, etc., may be denied admission to classes and may be denied permission to register for a succeeding semester or summer session until such accounts are paid. If any accounts are outstanding at the close of an academic semester or summer session, the student's grade report and/or release of official transcript will be delayed until such accounts are paid.

It is understood that final authority for the Student Code of Ethics and all regulations rests with the MCC President.

Provisions for Review of Disciplinary Decisions

Any MCC student who is subject to disciplinary action for conduct deemed to be illegal, unethical or not in accordance with the Code

of Student Ethics shall have access to the following appeal process:

- Within 10 days of the date that the disciplinary decision is rendered, the aggrieved student must submit a written request to the MCC employee rendering the decision to request an opportunity to discuss the matter. The ensuing discussion between the student and MCC employee may take place in-person or by some other means of communication, such as e-mail or telephone. During that discussion the student must supply the MCC employee with a written explanation of his/her actions and concerns regarding the disciplinary decision. The MCC employee will explain to the student his/her reason for rendering the disciplinary action. Within 10 days following this discussion, the MCC employee may revise or uphold his/her original decision.
- If the student is satisfied with the decision of the MCC staff, the prescribed disciplinary action will remain in effect. If the student is not satisfied with the MCC employee's decision, he/she will, within 14 calendar days of the decision, make a written request to the Dean of Student and Enrollment Services to review the decision. The Dean of Student and Enrollment Services will schedule a meeting with the student and the MCC employee to discuss the disciplinary action in accordance with MCC policy and seek a remedy of remaining conflicts. The Dean may consult other students, staff or others in an effort to obtain all pertinent facts. Within 10 days of the conclusion of this meeting, the Dean of Student and Enrollment Services will render a written decision.
- 3. Within five days of the decision rendered by the Dean of Student and Enrollment Services, the aggrieved student or the MCC employee may submit a written request to the President of the College to review the decision.
- 4. The review by the President shall be conducted in such a way as to assure both parties the right to provide supporting documentation, permission to question witnesses as needed, and such other pro-

cesses as may be necessary to provide exposure to two points of view.

 Upon review of all documentation, issues and concerns, the President will render a decision, which will be final and binding on all parties.

Substance Abuse Policy and Procedure

The following information is presented in accordance with the Drug-free Schools and Communities Act Amendments of 1989.

STANDARDS OF CONDUCT

It is the policy of Montcalm Community College that the transportation, possession or consumption of an alcoholic beverage or a controlled substance on college property is prohibited.

LEGAL SANCTIONS

Students who use alcoholic beverages or controlled substances on college property face disciplinary action, suspension from the college, and/or prosecution under the law. Any person who sells, provides, transports, possesses or consumes alcoholic beverages or controlled substances on college property may face immediate arrest and prosecution under applicable federal, state and local laws. Penalties under these laws may include fines, imprisonment or both.

HEALTH RISKS

Use of alcohol or controlled substances can result in illness, injury or death.

AVAILABLE COUNSELING AND TREATMENT PROGRAMS

All MCC students and employees will have access to substance awareness workshops, seminars, and classes offered at the college. A student or employee who voluntarily seeks assistance to overcome substance abuse problems will receive counseling services on a confidential and non-punitive basis. When necessary, referral will be made to a community agency for assessment, prescribed treatment and follow-up.

Treatment programs are available at:

Montcalm Center for Behavioral Health 611 N. State, Stanton, MI 48888 (989) 831-7520

Students and employees participating in counseling or a prescribed program are not exempt from college policies, procedures or rules.

DISCIPLINARY SANCTIONS

Students and employees who illegally use alcoholic beverages or controlled substances on college property face disciplinary action, suspension from the college, and/or prosecution under the law.

ACCESS TO CAMPUS FACILITIES

When facilities and classrooms are not needed for college educational purposes, MCC welcomes the surrounding community to utilize them. MCC expects that students, faculty, staff and the community will work together to preserve safe and well-maintained campus facilities. Students have access to MCC facilities except when the campus or any specific facility is closed or special events or projects prevent access. General public access to facilities such as the gym and pool is authorized only during scheduled times. Faculty access to MCC facilities is authorized when on college-related business.

Emergency Procedures

Montcalm Community College does not provide medical care beyond first aid. If an emergency condition is such that a person is incapable of a rational decision, a college employee will initiate this procedure. Ambulance and hospital expenses shall be borne by the person, his or her family or his or her insurance company. The first college employee to become aware of personal injury or illness shall provide reasonable assistance and the Vice President for Administrative Services or Director of Human Resources will be alerted as soon as possible.

PROCEDURE

The first college employee on the scene will:

 Have someone call for an ambulance, if needed, and briefly and accurately describe the accident. Call 911 on an outside line.

- If possible, have someone contact the parent, guardian or spouse as a courtesy and calmly explain the situation. Otherwise, the ambulance personnel or the receiving hospital will follow up with the next of kin. The receiving hospital will depend on the patient's preference and/or the seriousness of the accident.
- Remain with the patient until ambulance personnel arrive keeping him or her as comfortable as possible. Stay long enough to answer any questions the ambulance personnel may have.
- 4. File an accident report form with the Director of Human Resources no later than the next regular business day.

NOTE: The Michigan State Police Operations Center provides a 24-hour school violence hotline. You can call the toll-free hotline at 1-800-815-TIPS to anonymously report threats of violence or illegal weapons on campus. Any risk of immediate harm should still be reported by calling 911. To call 911, you can use any telephone on campus, including the red courtesy phones located in each building. Contact the MCC Dean of Student and Enrollment Services for details at (989) 328-1276.

Threatening Disasters on or Near Campus

Fire or explosion in any building mandates evacuation with expeditious safety. The signal is a loud, constant fire horn which will continue to sound until it has been switched off by college personnel. Directions are as follows.

- Exit the building. All students, employees
 of the college, and any visitors must exit
 regardless of the weather.
- 2. Use the nearest door to the outside.
- 3. Persons restricted in mobility by crutches, casts, wheelchairs or other handicaps should request and receive assistance as needed. It is recommended that such handicapped persons exit after the first big rush (dependent upon circumstances) thus avoiding the possibility of being pushed off balance, but being certain that dependable assistants have been advised of their need.

Tornado

There is a difference between a tornado watch and a tornado warning. These two terms are used by the U.S. Weather Bureau, the Sheriff's Office and the public news media. A tornado watch means a tornado may develop. A tornado warning means a tornado has been sighted in the area.

SAFETY PROCEDURES

- If a tornado warning condition exists in the immediate vicinity, a message will be sent to all buildings. The fire alarm must not be used.
- The message will state: "A tornado has been sighted in the area. You are to proceed to the nearest tornado shelter which is indicated on the chart posted in each classroom. Your cooperation will facilitate safety for all."

It is the responsibility of students and staff to become aware of the location of tornado shelters in all buildings.

INCLEMENT WEATHER

Montcalm Community College will cancel all or part of its operations only in case of extreme emergency caused by impassible roads, violent weather, energy loss or other conditions seriously endangering the health and safety of students, faculty and staff.

Every effort will be made to make the decision to cancel as early as possible, but no later than 7 a.m. for daytime classes and 3 p.m. for evening classes. Students may enroll in E2Campus, MCC's emergency notification system by going to www.montcalm.edu/alerts. Local radio and television stations will also be notified.

Students, faculty and staff should assume that the college is open unless they hear otherwise. They are asked not to call the college switchboard to ask about cancellations, but to refer to MCC's website or listen for the information on the following radio or television stations:

RADIO STATIONS

WGLM Greenville, 1380 AM & 106.3 FM WOOD Grand Rapids, 1300 AM &105.7 FM WION Ionia, 1430 AM & 92.7 FM WBRN Big Rapids, 1460 AM & 100.9 FM WCEN Mt. Pleasant, 1150 AM & 94.5 FM WCFX Mt. Pleasant, 95.3 FM WMLM St. Louis, 1520 AM WFYC Alma, 1280 AM & 104.9 FM WBBL Grand Rapids, 107.3 FM WBFX Grand Rapids, 101.3 FM WCSG Grand Rapids, 91.3 FM WFGR Grand Rapids, 98.7 FM WGRD Grand Rapids, 97.9 FM WGVU Grand Rapids, 88.5 FM WJNZ Grand Rapids, 1140 AM WJQK Grand Rapids, 99.3 FM WLAV Grand Rapids, 96.9 FM WLHT Grand Rapids, 95.7 FM WNWZ Grand Rapids, 1410 AM WSNX Grand Rapids, 104.5 FM WTKG Grand Rapids, 1230 AM WTRV Grand Rapids, 100.5 FM WVTI Grand Rapids, 96.1 FM

TELEVISION STATIONS

(CHECK CABLE LISTINGS)
WOOD Grand Rapids, Channel 8
WGVU Grand Rapids, Channel 35
WXSP Grand Rapids, Channel 15
WZZM Grand Rapids, Channel 13
WLNS Lansing, Channel 6
WWMT Kalamazoo, Channel 3
WXMI Battle Creek, Channel 4
WOTV Battle Creek, Channel 4
WWTV Cadillac, Channel 9

Reporting Crimes and Emergencies

Campus crime is a reality at small, rural community colleges. Preventing crime is a shared responsibility between Montcalm Community College and its campus community members. Public apathy is a criminal's greatest ally. You cannot assume that someone has reported criminal activity. Suspicion is the only reason you need for calling the police. Suspicion of a crime does not require proof. Whether you are or someone else is the victim, you should report a crime, suspicious activity or any other emergency on campus.

GENERAL SITUATIONS

If you suspect that a crime is being committed or has been committed, call or visit the Montcalm County Sheriff's Office immediately. It is located at 659 N. State, Stanton, MI 48888. For emergencies, call 911. For non-emergencies call (989) 831-5253. An emergency is any situation needing immediate attention.

When calling the sheriff's office, please provide your name, location of the incident, description of the scene and suspects and description of any vehicle involved in the incident, including a license plate number.

SPECIFIC SITUATIONS

- 1. If you are a victim of a crime, call 911 as soon as possible. If it is an assault, try to remember as much about the person as possible. Important characteristics include: sex, race, hair color, hair length and texture, body size, clothing description, scars and other noticeable markings, mode of travel, type of vehicle, color of vehicle and license number. The campus will be searched immediately for suspects and neighboring police agencies will be notified. In many incidents, the victim may already know the name of the person committing the assault.
- 2. If you see a suspicious person, call 911 as soon as possible. Do not approach the person yourself. When reporting suspicious activity, describe the behavior and give a general description of the suspicious persons. General descriptive information that is helpful includes: the number of persons, sex, race, dress, vehicle and location. Sheriff's deputies will investigate your report immediately. If all members of the campus community become security conscious and report suspicious activity, thefts and related incidents will be prevented or reduced.
- 3. Call 911 immediately if you receive a bomb threat. Then, contact the office of the Vice President for Administrative Services located in the Donald C. Burns Administration/Library Building on MCC's Sidney campus. If the office is closed, contact the Human Resources Office. If the Human Resources Office is closed, contact the custodian on duty in the Maintenance

building (next to Instruction North). Obtain as much information from the caller as possible including the location of the bomb, the time of explosion and the type of bomb. Observe the caller's voice and any background noises. This information can assist inidentifying the caller. Sheriff's deputies will search the area identified and contact a removal team if a device is found. The sheriff's office and college administrators will determine if evacuation is required.

 If there are any other emergencies such as a fire or people needing medical attention, call 911 immediately.

Campus Law Enforcement

MCC's campus law enforcement policy is based on the desire to ensure the reasonable safety of persons visiting or utilizing the college campuses. Practical response considers the location of campuses, the peak time periods of use, the range of persons who have access to the campuses, available law enforcement, college resources, legal obligations and the crime rate in the surrounding community.

Security concerns at MCC are coordinated through the Vice President for Administrative Services. The Montcalm County Sheriff's Office and other local police agencies administer law enforcement responsibilities. Twenty-four-hour patrol, dispatch services and emergency services are coordinated with local municipal emergency and law enforcement agencies.

MCC shall make timely reports to the campus community of crimes considered to be a threat to other students and employees. These reports include crimes as described in the Annual Security Report and are reported to local law enforcement agencies. The reports shall be provided to students and employees in a timely manner to help prevent similar occurrences.

Crime Prevention

MCC recognizes the benefits of both preventative and reactive efforts. Crime prevention is best achieved through interaction with and outreach to students, faculty and staff. Campus safety and crime prevention is a shared responsibility between MCC students and employees.

Crime prevention at MCC is part of a community-based program. The main goal is to improve the quality of life for members of the campus community. MCC's crime prevention program stresses community awareness/interaction through the dissemination of materials and presentations geared toward students, faculty and staff. MCC's annual efforts include:

- 1. Posting of crime prevention awareness information in college buildings.
- Disseminating crime prevention material in handbooks and in the Student Services Office
- 3. Utilizing county and state police crime prevention specialists as speakers.
- 4. Disseminating the Annual Security Report to all current employees and students and to all prospective employees and students who request it.

Noncredit

Montcalm Community College is dedicated to providing educational experiences for all residents in our community. The noncredit courses, workshops and seminars offered will help you prepare for the challenges of the 21st century by providing current and useful information on topics of interest to you in your personal or professional life.

Courses

NONCREDIT COURSES for professional and personal development are offered throughout the year. These change as the needs of the community change. Courses have included computer instruction, management training, builder's pre-licensure preparation, SCECH's for teachers and a variety of online courses. Noncredit courses are available on MCC's campus, online and throughout the community. Registration for noncredit and recreation courses is accepted online, by mail, in person and by phone (if paying by credit card). The tuition waiver for senior citizens is not available for noncredit and recreation courses.

RECREATION CLASSES are popular with all ages. Swimming classes, which are conducted in MCC's NCAA-sized swimming pool, are offered for infants through senior citizens. Lifeguard training and water safety instructor training courses are conducted in cooperation with the physical education department and are offered for credit and noncredit. Other health courses such as weight training, aerobics and personalized body conditioning are offered in the MCC gym and fitness center.

The MCC fitness center is an air-conditioned, self-directed exercise center featuring state-of-the-art fitness equipment, treadmills, stationary bicycles and a free-weight area. MCC also has the only indoor rock climbing wall in Montcalm County. After instruction in the basic techniques of climbing, successful students are issued authorization cards that permit use of the wall during open climbing sessions. MCC's gym, swimming pool and fitness center are also open to the public during designated hours.

Programs

SUMMER DAY CAMPS for children offer a learning experience in a fun environment.

MCC's LIFE-LONG LEARNERS (LLL) program addresses the desire of citizens, ages 55 and older, to continue learning by attending presentations or noncredit courses at a nominal fee. The LLL is open to all persons regardless of previous education. Members govern the group and lead some of the academic coursework in lieu of professional faculty. Members enjoy academic pursuits without concern for credit, grades or prerequisites.

SPECIAL EVENTS focus on cultural, economic and social topics and are available to the community throughout the year.

For information about current courses and recreational opportunities, visit www.montcalm. edu or e-mail community@montcalm.edu.

Workforce Education

MCC offers high quality, guaranteed training programs in a variety of formats to area businesses. Services include quality, customized training for business and industry in a format that fulfills customer demand. Competency-based instruction is offered in flexible delivery formats.

MCC also offers an extensive list of courses that includes information technology, manufacturing skills and technology, business literacy, quality and teamwork. Other business services include business consultation, needs assessments, employee assessments, grant petitions, evaluations, records retention, apprenticeships and contracted training administration. Workplace skills may be assessed and evaluated using the DACUM assessment process.

MCC's Workforce Education services are located at MCC's Greenville Campus.

For more information about Workforce Education services, contact (989) 328-1254 or e-mail community@montcalm.edu.

College Facilities

On Campus

ACTIVITIES BUILDING: This building contains a NCAA-size pool, a gymnasium with climbing wall and fitness center, the MCC Bookstore operated by Barnes & Noble, Subway restaurant and a student lounge area. All facilities are available to students and community members.

DONALD C. BURNS ADMINISTRATION/ LIBRARY BUILDING: This building houses administrative offices, the student services office, financial aid and the library. Public computers, Internet access and study areas are available in the library.

BARN THEATER: MCC's performing arts facility, the Barn Theater, is located west of College Drive.

BEATRICE E. DOSER BUILDING: This building houses seminar and conference space, the Student Success Center, computer labs and classrooms, general classrooms, a telecommunications classroom and instructors' offices.

BOOKSTORE: The MCC Bookstore, operated by Barnes & Noble, is located in the Activities Building. It offers textbooks, supplies and a variety of items bearing the MCC name.

FOUNDATION FARMHOUSE: The Foundation farmhouse is a charming and comfortable meeting center located on Sidney Road west of College Drive.

INSTRUCTION EAST BUILDING: This twostory building contains labs, classrooms and instructors' offices and is a primary instruction area for the college's math, science and allied health offerings.

INSTRUCTION NORTH BUILDING: This is MCC's visual arts building. It features a gallery, open display areas and classrooms for ceramics, drawing, painting and photography.

INSTRUCTION WEST BUILDING: This building contains auditoriums, classrooms and instructors' offices.

MONTCALM HERITAGE VILLAGE: The village, located on the west side of campus, includes historical buildings and artifacts. An annual Heritage Festival takes place on campus in August.

NATURE TRAILS: The Kenneth J. Lehman Nature Trails encompass three miles of hiking and cross-country skiing trails that wind their way through more than 100 acres adjacent to the college's main campus. Biology students use the nature trails for short field trips and research projects. More than 70 numbered markers have been installed along the trails and, with a guide map, visitors discover many species of flowers, trees and possibly wildlife as well as an outdoor classroom for studying botany and biology in a natural setting.

STANLEY P. ASH BUILDING: This two-story facility includes science classrooms, an auditorium, nursing, chemistry and biology laboratories, and instructors' offices.

For information about facility rental, email room. reservations@montcalm.edu.

Off Campus

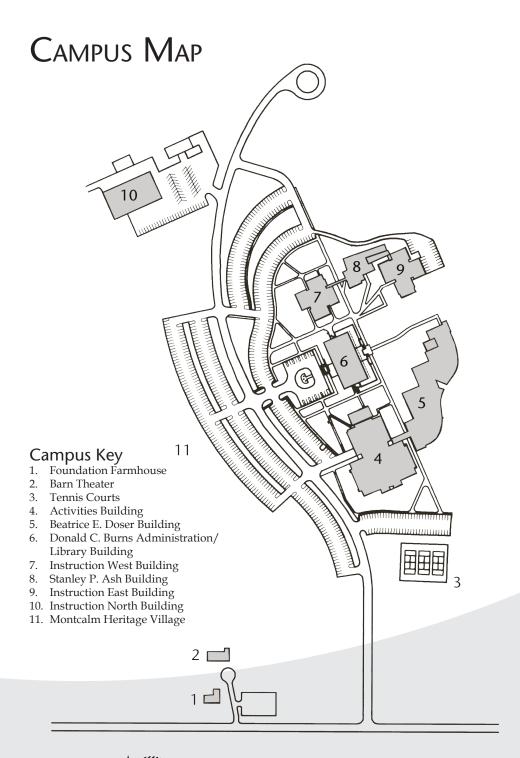
GREENVILLE: MCC's Stanley and Blanche Ash Technology Learning Center (TLC) is located at 1325 Yellow Jacket Drive in Greenville. This center offers open-entry, open-exit skills training to meet business and industry needs. The TLC also houses classrooms, a large conference facility, computer and learning labs and display areas.

GREENVILLE: MCC's Bill Braman Family Center for Education is located at 1315 Yellow Jacket Drive in Greenville. This center features a technology lab, flexible classrooms, computer stations, wireless high-speed Internet connections and meeting spaces.

HOWARD CITY: The Panhandle Area Center (PAC) is located at 1401 S. Ensley Street in Howard City. This center offers classrooms, a computer lab and office space for MCC activities.

IONIA: MCC's Ionia Educational Center (IOEC) is located adjacent to Ionia High School at 250 E. Tuttle Road in Ionia. This facility provides a suite of offices as well as several conference rooms and classrooms.

Handicapped students and senior citizens with limited mobility are encouraged to use MCC's facilities. The buildings are barrier-free and every attempt is made to provide additional accommodations if required.





2800 College Drive, Sidney, MI 48885-9723 * (989) 328-2111

Degrees & Certificates

Montcalm Community College offers associate of arts, science, liberal studies, general studies and applied science degrees, as well as several certificate programs. Specific curriculum requirements for each of the degree and certificate programs begin on page 45. Associate degrees require a minimum of 60 credits; certificates require a minimum of socredits. All program course requirements must be met. Students planning to transfer to a four-year college or university are advised to consult with a counselor or advisor during their first semester.

Associate Degrees

ASSOCIATE OF ARTS DEGREE

ASSOCIATE OF GENERAL STUDIES DEGREE

ASSOCIATE OF LIBERAL STUDIES DEGREE

ASSOCIATE OF SCIENCE DEGREE

ASSOCIATE OF APPLIED SCIENCE DEGREES Accounting Automotive Technology Aviation Maintenance Business Administration/Entrepreneurship Business Administration/Management Business Administration/Marketing **Business Information Systems** Computer Support Technology Cosmetology Management Criminal Justice/Corrections Criminal Justice/General Dietary & Food Service Management Early Child Education **Education Paraprofessional** Electronics Technology Engineering Technology Industrial Technology Information Security Medical Office Administration Nursing

Office Administration Restaurant & Food Industry Management Skilled Trades Technical Drafting & Design Welding

Multiple Degree Procedure

Students may receive more than one Associate of Applied Science (AAS) degree if they fulfill the requirements. The completion of a certificate program coupled with general education courses is not sufficient to qualify.

Students who have been awarded an Associate of Arts (AA), Associate of Science (AS), Associate of Liberal Studies (ALS) or Associate of Applied Science (AAS) degree are not eligible to receive an Associate of General Studies (AGS) degree. Students may not earn an AGS degree and another degree in the same semester. Students who have been awarded an AS degree are not eligible to receive an ALS degree.

Certificate Programs

Automotive Technology Computer Support Cosmetology Criminal Justice/Corrections Electronics Technology Entrepreneurship Information Processing Assistant Lawn & Landscape Management Liberal Studies Machine Tool Operation Medical Assistant **Pre-Nursing** Small Business Development/ Management - Automotive Technology **Technical Drafting** Welding Technology

Applied Associate Degree Partnerships

FERRIS STATE UNIVERSITY

Dental Hygiene Diagnostic Medical Sonography Dietary & Food Service Management Radiography Respiratory Care Restaurant & Food Industry Management

MID-MICHIGAN COMMUNITY COLLEGE Radiography

Job Training Programs

Apprenticeship Training Automotive Brake Systems Automotive Electrical & Electronic Systems Automotive Engine Performance Automotive Heating & Air Conditioning Automotive Suspension & Steering Child Development Associate CIS Job Readiness Corrections Officer Training Digital Publishing & Presentation Emergency Medical Technician Entrepreneurship Health Care Access Manager Health Care Access Representative Input Productivity Long-Term-Care Nurse Assistant Office Applications Renewable Energy Retail Retail Management Supervision Web Design Specialist

Certificates & Associate Degrees through Articulation

MCC credits transfer to many other colleges and universities. The following partnerships have been developed to facilitate transfer. These partnerships allow students to earn certificates and degrees at other institutions.

Ferris State University Michigan State University

Bachelor's Degrees through Articulation

American Public University
Central Michigan University
Cleary University
Davenport University
Ferris State University
Hotel Management
Grand Valley State University
Kaplan University
Northwood University
Saginaw Valley State University
University of Phoenix
Walsh College
Western Governors University

For current information about articulation, go to the Program Pages at www.montcalm.edu.

Virtual Learning

MCC participates in the Michigan Community College Virtual Learning Collaborative (MC-CVLC) which allows students to take courses and earn certificates and associate degrees via the Internet from other community colleges around the state. Additional information can be obtained in MCC's Student Services or by visiting the website at www.mccvlc.org.

ARTICULATED BACHELOR'S DEGREE

HOTEL MANAGEMENT

MCC offers a Bachelor of Science Degree in Hotel Management with an Associate of Applied Science Degree in Restaurant & Food Industry Management in partnership with Ferris State University (FSU). The program prepares students for management in all areas including sales and marketing, rooms division, food and beverage divisions, facilities operations and more. Both degrees are awarded by FSU.

General Education Requirements

To be admitted to this degree program, either a completed Associate degree or at least 48 transferable semester credit hours ("C" or better on 4.0 scale) from an accredited college or university with a 2.35 overall GPA and credit for, or placement into, ENGL 100 or MATH 104 are required. Official transcripts from all accredited colleges/universities must be submitted with the FSU application.

Program Requirements

TOTAL MCC CREDITS

DELIVERED BY MONTCALM COMMUNITY COLLEGE

D ELLI . LIKED D		· · · · · · · · · · · · · · · · · · ·	
Course	Ferris Equiv.	Course Name	Cr. Hrs.
MGMT 245	MGMT 373	Human Resource Management	3
ACCT 115	ACCT 201	Principles of Accounting 1	3
ACCT 116	ACCT 202	Principles of Accounting 2	3
MGMT 237	MGMT 301	Concepts of Management	3
MRKT 233	MKTG 321	Principles of Marketing	3
MATH 190	STQM 260	Elementary Statistics	3
COMM 210	COMM 121	Speech	3
ENGL 100*	ENGL 150	Freshman English I	3
ENGL 101*	ENGL 250	Freshman English II	3
MCC*	VARIES	Social Awareness Elective	3
ECON 215*	ECON 221	Principles of Macroeconomics	3
ECON 216*	ECON 222	Principles of Microeconomics	3
MCC*	VARIES	Scientific Understanding (one must be a lab)	7-8
MATH 104	MATH 115	Intermediate Algebra	4
MCC*	VARIES	Cultural Enrichment	
		(one cultural enrichment elective must be 200+ level)	9
MCC	VARIES	General Education Electives	6

^{*} These transfer credits are satisfied with the MACRAO Stamp. NOTE: Must satisfy Global Consciousness and Race, Ethnicity, Gender requirements if the MACRAO Stamp is not completed.

61-62

C		
Course	Course Name	Cr. Hrs.
RFIM 101	Orientation to Hospitality Mgmt	1
RFIM 113	Sanitation and Safety	3
RFIM 115	Food & labor Cost Control System	3
RFIM 207	Beverage Mgmt	3
RFIM 211	Purchasing: Hospitality Industry	3
RFIM 227	Industry Exploration	3
RFIM 292	Rest & Food Industry Internship	3
Choose 3 Courses Below	v	9
RFIM 111 or	Principles of Food Science	3
RFIM 114 or	Menu Planning/Nutrition	3
RFIM 127 or	Principles of Cooking & Baking	3
RFIM 214 or	Design/Layout of Food Serv. Fac.	3
RFIM 226 or	World Cuisines	3
RFIM 229 or	Dining Room Service Management	3
Choose 3 Courses Below	v	9
HOMT 301 or	Property-Facilities Management or	
HOMT 305 or	Convention and Meeting Sales or	
HOMT 403 or	Hospitality Law or Front Office	
HOMT 404 or	Procedures/Accounting or	
HOMT 405 or	Resort/Recreation Mgmt.&Tourism	
HOMT 401 or	Special Event Planning	
HOMT 392	Hotel Management Internship	3
HOMT 499	Hospitality Policies and Issues	3
FINC 322	Financial Management	3
ISYS 321		3
BLAW 321		3
		3
BUSN 499		3
ENGL 325	Advanced Business Writing	3
TOTAL FERRIS CREDI	ITS	61
HOMT 392 HOMT 499 FINC 322 ISYS 321 BLAW 321 MGMT 370 BUSN 499 ENGL 325	Hotel Management Internship Hospitality Policies and Issues Financial Management Business Information Systems Contracts & Sales Quality/Operations Management Interdisciplinary Integrating Experience Advanced Business Writing	

Contact Information: Ferris Statewide, (231) 591-2340 or 800-562-9130 or FerrisStatewide@ferris.edu or www.ferris.edu/statewide

Delivery Locations:

This program and the Ferris courses are offered to students of Montcalm Community College at the following locations:

122-127

· Ferris State University, Big Rapids, MI

CREDITS REQUIRED FOR DEGREE

• Select courses delivered online and/or in a mixed delivery format (i.e. a mix of online and face-to-face instruction)

Advising Notes: It is recommended that potential applicant meet with an advisor to review the program and course schedule and have any questions answered prior to completing an application. Students completing the MACRAO Stamp may have different general education courses requirements. Meeting with a Ferris advisor prior to the selection of any electives or general education classes shown above could reduce the chance of completing a course that will not transfer. Once admitted, students continue to meet with an advisor as they work towards graduation.

Disclaimer: This is a guide for students who plan to transfer to Ferris State University. This guide is not intended to be a contract with Ferris. The information on this guide is subject to change. Students should contact Ferris to keep informed of changes. Final responsibility for verifying all transfer information lies with the student.

Associate Degrees

ASSOCIATE OF ARTS (AA)

Students seeking the Associate of Arts degree may concentrate their studies in numerous content areas. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

Both of the following: ENGL100 & ENGL101

Oral Communications:

One of the following: COMM210, COMM220, ENGL212 or THEA261

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 OR MATH251 (MATH100 does not satisfy MACRAO requirements.)

Social Science:

Must include either POLI110 or OR a combination of POLI240 plus at least three of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI240, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235 or SOCI271, WMST100

Humanities: 11 credits

Courses must be taken from more than one subject area (have different prefixes) except if taking HUMN200 AND HUMN201: ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN100, HUMN110, HUMN200, HUMN201, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS101 OR competency testing, CMIS115, CMIS175

Program Requirements

Elective Credits as needed

Associate of General Studies (AGS)

The Associate of General Studies degree is for students interested in obtaining a degree with customized content reflective of personal college-level interests that are not necessarily focused on transfer or occupational interests. General Studies degree students must successfully complete the general education requirements. Students should consult a counselor for program planning assistance.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210, COMM220, CRIM136, ENGL212, NRSG120A or THEA261

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251 (MATH100 does not satisfy MACRAO requirements)

Social Science:

Must include either POLI110 OR a combination of POLI240 plus at least one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI240, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR at least two of the following (with different prefixes): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN100, HUMN110, HUMN200, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS101 OR competency testing, CMIS115, CMIS175

Program Requirements

Elective Credits as needed

ASSOCIATE OF LIBERAL STUDIES (ALS)

Students seeking the Associate of Liberal Studies degree may concentrate their studies in numerous content areas. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

Both of the following: ENGL100 & ENGL101

Oral Communications:

One of the following: COMM210, COMM220, ENGL212 or THEA261

<u>Laboratory Science:</u>

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics

One of the following: MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

Must include either POLI110 or OR a combination of POLI240 plus at least two of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI240, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271 or WMST100

Humanities: 8 credits

Courses must be taken from more than one subject area (have different prefixes) except if taking HUMN200 AND HUMN201: ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN100, HUMN110, HUMN200, HUMN201, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS101 OR competency testing, CMIS115, CMIS175

Program Requirements

Elective Credits as needed

Associate of Science (AS)

Students seeking the Associate of Science degree may concentrate their studies in numerous content areas. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

Both of the following: ENGL100 & ENGL101

Oral Communications:

One of the following: COMM210, COMM220, ENGL212 or THEA261

<u>Laboratory Science:</u>

Biological Science:

Choose two of the following AGRI110, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208 or ENVR110

Physical Science:

Choose one pair: CHEM220/CHEM221 OR CHEM251/CHEM252 OR PHYS230/ PHYS231

Mathematics:

One of the following: MATH159, MATH250 or MATH251

Social Science:

Must include either POLI110 OR a combination of POLI240 plus at least two of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST 252, HIST253, HIST255, HIST256, HIST257, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235 or SOCI271, WMST100

Humanities: 8 credits

Courses must be taken from more than one subject area (have different prefixes) except if taking HUMN200 AND HUMN201: ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN100, HUMN110, HUMN200, HUMN201, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS101 OR competency testing, CMIS115, CMIS175

Program Requirements

Elective Credits as needed

ACCOUNTING

This program leads to an Associate of Applied Science degree with an emphasis in accounting and provides the background and skills necessary for an entry-level job in the accounting field. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

<u>Laboratory Science:</u>

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR POLI240 and ECON215

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 OR CMIS175

Program Requirements

Course Name	Course #	Cr.
Principles of Accounting I	ACCT115	4
Principles of Accounting II	ACCT116	4
Computerized Accounting	ACCT212	4
Tax Accounting	ACCT246	3
Introduction to Business	BUSN135	3
Legal Environment of		
Business	BUSN200	3
Principles of		
Macroeconomics	ECON215	3
Small Business Management	MGMT235	3
Organizational Behavior	MGMT250	3
Electives as needed		

Suggested Electives

Strategic Management	MGMT275	3
Business Communications I	BUSN180	3
Principles of Marketing	MRKT233	3
Retailing	MRKT234	3
Advertising	MRKT248	3
Human Resource		
Management	MGMT245	3
Marketing in		
Virtual World	MRKT275	3

AUTOMOTIVE **T**ECHNOLOGY

This program, approved by the National Automotive Technicians Education Foundation (NATEF), leads to an associate of applied science degree with a specialty in automotive technology and provides the background and skills necessary for a job in the automotive field. It is designed for students seeking entrylevel employment and/or State of Michigan certification. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

AUTOMOTIVE TECHNOLOGY CERTIFICATE AND JOB TRAINING PROGRAMS ARE ALSO AVAILABLE.

Humanities:

HUMN100 OR HUMN200, OR HUMN201, OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
Emergency Health Care	AHEA100	2
Automotive Service	AUTO103	1
Basic Automotive Electrical	AUTO112	2
Advanced Automotive		
Electrical	AUTO113	2
Fundamentals of Welding	WELD101	3

Students must also choose four of the following five specializations:

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specializations:		
Automotive Brake Systems	AUTO107	4
and Automotive Brake Syste	ems	
Field Experience	AUTO292B	4
Automotive Suspension		
& Steering	AUTO109	4
and Automotive Suspensior	ı	
& Steering Field Experience	AUTO292C	4
Automotive Electrical &		
Electronic Systems	AUTO203	4
and Automotive Electrical &	Electronic	
Systems Field Experience	AUTO292D	4
Automotive Engine		
Performance	AUTO205	4
and Automotive Engine Per	formance	
Field Experience	AUTO292E	4
Automotive Heating &		
Air Conditioning	AUTO262	4
and Automotive Heating &	Air Conditionir	ıg

Minimum of 60 unduplicated credits (100 level or higher) required.

AUTO292F

Field Experience

AVIATION MAINTENANCE

Students must be admitted to the School of Missionary Aviation Technology (SMAT) program, before entering Montcalm Community College's program (MCC).

MCC offers this program in conjunction with the SMAT in Ionia, Michigan. To gain admittance to SMAT's program, students should contact SMAT directly, or see an MCC counselor to learn more about SMAT's admission process.

The Airframe and Powerplant (A&P) Mechanics program is a one-year comprehensive program offered by SMAT. The program is FAA approved and provides training and preparation for the FAA written, oral, and practical mechanics tests. Students take all aviation maintenance courses from SMAT, and take all general education courses from MCC. Students must pass all SMAT courses with a grade of "C" or better. Once all SMAT coursework is complete, students are awarded 40 credits at MCC as the AVMA295 transfer course.

Upon completion of this 64-credit program students will receive an Associate of Applied Science Degree from MCC.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: PHYS101 or PHYS111

Mathematics:

MATH 100 or higher (competency testing available)

Social Science:

POLI110 OR a combination of POLI240 plus one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI246, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235

Humanities:

HUMN100 OR HUMN200, OR HUMN201, OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

CMIS115 (Prerequisites: CMIS100 and CMIS101)

Program Requirements

Courses taken from the School of Missionary Aviation Technology

(www.smat.edu)

AVI144,
AVI150,
15
13
AVI157,
AVI162,
15
AVI177,
10

Students must complete all courses at SMAT with a C or better.

Students must complete all three SMAT maintenance programs to be awarded credit.

Students are awarded 40 credits for AVMA295 after successfully completing Maintenance I, Maintenance II, Maintenance III, and all AVI courses with a C or better at the School of Missionary Aviation Technology.

AVMA295-Aviation Maintenance Transfer Credit

(40 credit, 20 lecture, 20 lab)

Curriculum for this course is delivered by the School of Missionary Aviation Technology. To receive credit for this course, students must complete all related courses for Maintenance I, Maintenance II, and Maintenance III from the School of Missionary Aviation Technology (www. smat.edu) with a grade of C or better

Business Administration/ Entrepreneurship

This program leads to an associate of applied science degree with an emphasis in new business development and provides the skills necessary for an entry-level job in the field of small business management. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR POLI240 and ECON215

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 OR CMIS175

Program Requirements

Course # (Cr.
CCT105	3
CCT115	4
CCT246	3
USN151	1
USN200	3
USN260	3
MIS175	4
CON215	3
IGMT235	3
IGMT245	3
<i>'8</i> :	
1RKT230	3
4RKT233	3
IRKT234	3
IRKT248	3
	CCT105 CCT115 CCT246 USN151 USN200 USN260 CMIS175 CON215 IGMT235 IGMT245 g: IRKT230 IRKT233 IRKT234

Minimum of 60 unduplicated credits (100 level or higher) required.

MRKT275

3

Marketing in a

Virtual World

Business Administration/Management

This program leads to an associate of applied science degree with an emphasis in management and provides the skills necessary for an entry-level job in the fields of business management and supervision. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

<u>Laboratory Science:</u>

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR POLI240 and ECON215

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 OR CMIS175

Program Requirements

Course Name	Course #	Cr.
	ACCT115	4
Principles of Accounting I		-
Principles of Accounting II	ACCT116	4
Legal Environment of		
Business	BUSN200	3
International Business	BUSN260	3
Principles of		
Macroeconomics	ECON215	3
Concepts of Management	MGMT237	3
Human Resource		
Management	MGMT245	3
Organizational Behavior	MGMT250	3
Strategic Management	MGMT275	3
Choose at least one of the follow	ving:	
Marketing Research	MRKT230	3
Principles of Marketing	MRKT233	3
Retailing	MRKT234	3
Advertising	MRKT248	3
Marketing in a		
Virtual World	MRKT275	3
Electives as needed		

Suggested Electives

Computerized Accounting	ACCT212	4
Tax Accounting	ACCT246	3
Introduction to Business	BUSN135	3
Customer Relations	BUSN151	1
Business Communications I	BUSN180	3
Principles of Marketing	MRKT233	3
Retailing	MRKT234	3
Advertising	MRKT248	3

Business Administration/Marketing

This program leads to an associate of applied science degree with an emphasis in marketing and provides the skills necessary for an entry-level job in the field of business marketing. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR POLI240 and ECON215

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 OR CMIS175

Program Requirements

Course Name	Course #	Cr
		Cr.
Principles of Accounting I	ACCT115	4
Legal Environment		
of Business	BUSN200	3
International Business	BUSN260	3
Principles of		
Macroeconomics	ECON215	3
Organizational Behavior	MGMT250	3
Strategic Management	MGMT275	3
Marketing Research	MRKT230	3
Principles of Marketing	MRKT233	3
Retailing	MRKT234	3
Advertising	MRKT248	3
Marketing in a		
Virtual World	MRKT275	3
Electives as needed		

Suggested Electives

Principles of Accounting II	ACCT116	4
Computerized Accounting	ACCT212	4
Tax Accounting	ACCT246	3
Introduction to Business	BUSN135	3
Customer Relations	BUSN151	1
Business Communications I	BUSN180	3
Human Resource		
Management	MGMT245	3

Business Information Systems

This program leads to an associate of applied science degree with a specialty in business information systems and provides the background and skills necessary for a job in the business information systems field. It is designed for students seeking entry-level business/management careers with companies that use microcomputers and commercially available software packages. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 OR CMIS175

Program Requirements

Course Name	Course #	Cr.
Principles of Accounting I	ACCT115	4
Legal Environment of		
Business	BUSN200	3
Introduction to		
Programming and Logic	CMIS130	4
Microcomputer Applications	CMIS175	4
Microcomputer Spreadsheets	CMIS250	3
Microcomputer Data Base		
Applications	CMIS255	4
Advanced Microcomputer		
Applications	CMIS260	4
Systems Analysis & Design	CMIS265	4
Concepts of Management	MGMT237	3
Organizational Behavior	MGMT250	3

COMPUTER SUPPORT TECHNOLOGY

This associate of applied science degree program specializes in computer technology support and provides the background and skills necessary for entry-level jobs as computer help-desk technicians or computer support technicians. Students in this program study mathematics, circuits, operating system maintenance, programming, network management, computer hardware maintenance and peripheral maintenance. Most courses are a combination of lecture and laboratory providing the student with practical handson experience. This program is designed to prepare students for numerous COMPTIA and TestOut certifications. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

PHYS111

Mathematics:

One of the following: MATH120, MATH159,

MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus at least one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200 OR HUMN201 or two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr
Customer Relations	BUSN151	1
Introduction to		
Programming & Logic	CMIS130	4
Introduction to		
Programming C++	CMIS131	4
Introduction to HTML	CMIS132	3
Electronic Circuit Analysis	CSTC100	3
Electronic Fabrication	CSTC105	1
Introduction to Networking	CSTC127	3
Digital Logic	CSTC130	3
Network Management	CSTC133	3
Computer Maintenance I	CSTC171	3
Computer Maintenance II	CSTC172	3
Network Security	CSTC237	3
Technical Writing for		
Business & Industry	INDS140	3
Introduction to		
College Physics II	PHYS112	3

A COMPUTER SUPPORT CERTIFICATE PROGRAM IS ALSO AVAILABLE.

Cosmetology Management

This program provides the background and skills necessary to customers and to operate as shop managers in today's business setting. Some may wish to emphasize entrepreneurial skills with plans to open their own shops in the future. In addition to the courses required for degree completion, students must be eligible for state cosmetology licensure testing. Students who hold a valid, current State of Michigan Cosmetology license may be granted up to 29 general cosmetology credits toward this degree. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 OR CMIS175

Program Requirements

Course Name	Course #	Cr.
Accounting for Small		
Business	ACCT105	3
OR		
Principles of Accounting I	ACCT115	4
Cosmetology 1	COSM120	12
Cosmetology 2	COSM130	12
Cosmetology 3	COSM135	6
Cosmetology 4	COSM220	16
Cosmetology 5	COSM230	16
Small Business		
Management	MGMT235	3

A COSMETOLOGY CERTIFICATE PROGRAM IS ALSO AVAILABLE.

CRIMINAL JUSTICE/CORRECTIONS

This associate of applied science degree program prepares successful graduates for careers in corrections. It includes the 15 credit hours needed for job training certification, degree requirements, and other career-related courses. The program is also designed to provide transferability to four-year colleges and universities that offer a bachelor's degree in criminal justice or related fields. A counselor should be consulted if the student plans to transfer to a four-year institution.

Students with a criminal record should consult with the State of Michigan to verify that they are eligible to work in this field. Students are encouraged to meet with an MCC counselor prior to starting this program for help with the verification process.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:
One of the following: ENGL100 or ENGL101

Oral Communications: CRIM136

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252,

HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200OR HUMN201 or two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
Introduction to		
Criminal Justice	CRIM100	3
Introduction to Corrections	CRIM110	3
Stress Management for		
Correctional Officers	CRIM115	1
Corrections Institutions/		
Facilities	CRIM120	3
Communication in		
Criminal Justice	CRIM136	3
Defensive Tactics	CRIM137	2
Emergency Intervention		
Techniques	CRIM138	2
American Criminal Law	CRIM210	3
Legal Issues in Corrections	CRIM220	3
Parole, Probation, and		
Community Corrections	CRIM235	3
Client Relations in		
Corrections	CRIM250	3
Client Growth &		
Development	CRIM260	3
Freshman English II	ENGL101	3
Electives as needed*		

Suggested Electives

Organizational Behavior	MGMT250	3
Criminal Justice Practicum	CRIM290	5
General Psychology	PSYC120	3

A CRIMINAL JUSTICE/CORRECTIONS CERTIFICATE AND CORRECTIONS OFFICER JOB TRAINING PROGRAM ARE ALSO AVAILABLE.

CRIMINAL JUSTICE/GENERAL

This associate of applied science degree program prepares successful graduates for careers in the criminal justice field. It is also designed to provide transferability to four-year colleges and universities that offer a bachelor's degree in criminal justice or related fields. A counselor should be consulted if the student plans to transfer to a four-year institution.

Students with a criminal record should consult with the State of Michigan to verify that they are eligible to work in this field. Students are encouraged to meet with an MCC counselor prior to starting this program for help with the verification process.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:
One of the following: ENGL100 or ENGL101

Oral Communications: COMM210

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

Both of the following: POLI240 and PSYC120

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131,

ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
Introduction to		
Criminal Justice	CRIM100	3
Introduction to Corrections	CRIM110	3
Corrections Institutions/		
Facilities	CRIM120	3
Police Administration and		
Operations	CRIM125	3
Criminal Investigation	CRIM130	3
Defensive Tactics	CRIM137	2
American Criminal Law	CRIM210	3
Juvenile Delinquency	CRIM230	3
Introduction to		
Security Systems	CRIM240	3
Freshman English II	ENGL101	3
Electives as needed		

Suggested Electives

Introduction to Computer		
Information Systems	CMIS115	3
Communication in		
Criminal Justice	CRIM136	3
Criminal Justice Practicum	CRIM290	5
Organizational Behavior	MGMT250	3
Elementary Spanish I	SPAN130	4

A CRIMINAL JUSTICE/CORRECTIONS CERTIFICATE AND CORRECTIONS OFFICER JOB TRAINING PROGRAM ARE ALSO AVAILABLE.

DIETARY & FOOD SERVICE MANAGEMENT

MCC offers an Associate of Applied Science Degree in Dietary and Food Service Management in partnership with Ferris State University. This program prepares students to become certified as a CDM (Certified Dietary Manager) and includes 150 hours of supervised clinical experience. Graduates will be experts at managing dietary operations, and will work together with registered dietitians to provide quality nutritional care for clients in a variety of non-commercial settings. The degree is awarded by FSU.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, or SOCI271, WMST100

Minimum of 60 unduplicated credits (100 level or higher) required.

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
DELIVERED BY MCC		
Nutrition for Healthy Living	g AHEA140	2
Medical Terminology	AHEA215	3
Principles of		
Macroeconomics	ECON215	3
Principles of Accounting I	ACCT115	4
Concepts of Management	MGMT237	3
Human Resource		
Management	MGMT245	3

Program Requirements

DELIVERED BY FERRIS STATE UNIVERSITY

Orientation to Hospitality		
Management	RFIM101	1
Sanitation and Safety	RFIM113	3
Food and Labor Cost		
Control Systems	RFIM115	5
Principles of Cooking		
and Baking	RFIM127	3
Purchasing: Hospitality		
Industry	RFIM211	3
Design/Layout of		
Food Service Facilities	RFIM214	3
Restaurant and Food		
Industry Internship	RFIM292	3
Management of Patient		
Dietary Needs	CAHS122	3
Patient Services	CAHS222	3

EARLY CHILD EDUCATION

This program is for students who desire training that satisfies state requirements for the Child Development Associate (CDA), Head Start programs, day-care centers, home day care and related areas. A counselor should be consulted if the student plans to transfer to a four-year institution.

Students with a criminal record should consult with the Michigan Department of Education to verify that they are eligible to work in this field. Students are encouraged to meet with an MCC counselor prior to starting this program for help with the verification process.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, or SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 OR CMIS175

Program Requirements

Course Name	Course #	Cr.
Emergency Health Care	AHEA100	2
Child Development: Infants		
& Toddlers	ECDV110	3
Child Development:		
Preschoolers/Schoolage	ECDV120	3
Infant/Toddler Curriculum	ECDV131	3
Preschool Curriculum	ECDV135	3
Administration of Early		
Childhood Programs	ECDV150	3
Children with Special Needs	ECDV160	3
Children's Literature	ENGL235	3
General Psychology	PSYC120	3
Electives as needed		

Suggested Electives

Mathematics for the		
Elementary Teachers 1	MATH151	4
Music for the Elementary		
Classroom	MUSI110	3
Art for the Elementary		
Teacher	ARTS225	3
Child Psychology	PSYC221	3
CDA: The Credentialing		
Process	ECDV200	1
Small Business Management	MGMT235	3
Legal Environment		
of Business	BUSN200	3
Michigan Child Care		
Futures: Basic	ECDV140	1
Michigan Child Care Futures	: :	
Advanced	ECDV141	1
Introduction to Teaching	EDUC100	3
Organizational Behavior	MGMT250	3
Sociology	SOCI230	3
Elementary Spanish	SPAN130	4

A CHILD DEVELOPMENT ASSOCIATE JOB TRAINING PROGRAM IS ALSO AVAILABLE.

EDUCATION PARAPROFESSIONAL

This program prepares students to be qualified educational paraprofessionals in Title I schools and other school districts complying with the No Child Left Behind Act of 2001. The Education Paraprofessional program offers students a solid foundation in general education courses as well as education-related courses. Numerous elective courses are available to tailor the program to each student's specific interests. Students with a criminal record should consult with the Michigan Department of Education to verify that they are eligible to work in this field. Students are encouraged to meet with an MCC counselor prior to starting this program for help with the verification process.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:
One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210, COMM220 or ENGL212

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus one of the following: ANTH260,ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN201 OR HUMN201 OR two of the following (with different prefixes): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
Introduction to Teaching	EDUC100	3
General Psychology	PSYC120	3
Child Psychology	PSYC221	3
Electives as needed		

Suggested Electives

Emergency Health Care AHEA100	0 2
Art for the Elementary	
Teacher ARTS225	3
American Sign Language I COMM12	25 3
American Sign Language II COMM12	26 3
Juvenile Delinquency CRIM230	3
Child Development:	
The School Age Child ECDV125	5 3
Children with Special Needs ECDV160	3
Children's Literature ENGL235	3
Youth Literature ENGL236	3
Career Development GNST110	1
Dealing with Stress GNST120	1
Mathematics for	
Elementary Teachers I MATH15	1 4
Mathematics for	
Elementary Teachers II MATH15	2 3
Music in the Elementary	
Classroom MUSI110	3
Intro. to Physical Fitness PHED110) 1
Abnormal Psychology PSYC225	3
Intro. to Social Science II SOCI111	4
Sociology SOCI230	3
Social Problems SOCI235	3

ELECTRONICS TECHNOLOGY

This program prepares students for diagnosis and repairs of complex electronic devices. Through proper selection of electives, emphasis may be placed on computers or industrial electronics. A counselor or instructor can help select the proper elective courses for these areas. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

<u>Laboratory Science:</u> PHYS111

Mathematics:

One of the following*: MATH120, MATH159, MATH250 or MATH 251

Social Science:

POLI110 OR a combination of POLI240 plus at least one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235 SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
DC Electronics	ELEC111	3
AC Electronics	ELEC112	3
Semiconductors &		
Instrumentation	ELEC115	3
Digital Logic	CSTC130	3
Electronic Circuits	ELEC210	3
Digital Electronics	ELEC230	3
Microprocessors	ELEC240	3
Industrial Electrical		
Maintenance I	ELEC251	2
Industrial Electrical		
Maintenance II	ELEC252	2
Industrial Electrical		
Maintenance III	ELEC253	2
Industrial Electrical		
Maintenance IV	ELEC254	2
College Algebra	MATH159	4
Introduction to		
College Physics II	PHYS112	3
Electives as needed		

Suggested Electives

Introduction to		
Programming & Logic	CMIS130	4
Introduction to		
Programming C++	CMIS131	4
Introduction to HTML	CMIS132	3
Computer Maintenance I	CSTC171	3
Computer Maintenance II	CSTC172	3
Statistical Process Control	INDS104	1
Industrial Safety	INDS155A	1.5
Industrial First Aid	INDS155B	0.5
Basic Fluid Power	INDS253	3
Manufacturing Processes	INDS260	2
Industrial Quality Control	INDS270	3

COMPUTER SUPPORT AND ELECTRONICS TECHNOLOGY CERTIFICATE PROGRAMS ARE ALSO AVAILABLE.

Engineering Technology

Graduates of this program have a well-rounded background preparing them for work in engineering technology. This program offers many hours of practical experience to compliment the theory. This program may be transferable to a four-year university for a degree in engineering technology. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

COMM210

<u>Laboratory Science:</u> PHYS230

Mathematics:

Two of the following: MATH120, MATH159, MATH250 or MATH251

Social Science:

POLI110 or a combination of POLI240 plus at least one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL265, ENGL240, FREN120, FREN121, GERM101, GERM102, HUMN110,

HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
Introductory Chemistry	CHEM105	4
Microcomputer Applications	CMIS175	4
Freshman English II	ENGL101	3
OR		
Technical Writing for		
Business & Industry	INDS140	3
Basic Machine Operations	INDS220	3
Advanced Machine		
Operations	INDS221	3
Introduction to CAD	TDSN250	4
Electives as needed		

Suggested Electives

Industrial Electrical		
Maintenance III	ELEC253	2
Industrial Electrical		
Maintenance IV	ELEC254	2
Industrial Control		
Systems-Siemens	ELEC263	4
Metallurgy & Heat		
Treatment	INDS130	2
Introduction to		
Material Science	INDS230	3
Basic Fluid Power	INDS253	3
Advanced Pneumatics	INDS255	3
Manufacturing Processes	INDS260	2
Industrial Problem Solving	INDS265	2
Industrial Quality Control	INDS270	3
Advanced CAD	TDSN251	4
Fundamentals of Welding	WELD101	3

INDUSTRIAL TECHNOLOGY

Graduates of this program have a well-rounded background preparing them for work in industrial manufacturing. This program offers many hours of practical, hands-on experience to complement the theory and may be transferable to a four-year university. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

PHYS111

Mathematics:

One of the following: MATH120, MATH159, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus at least one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
DC Electronics	ELEC111	3
Basic CNC Operation	INDS102	2
Metallurgy and		
Heat Treatment	INDS130	2
Basic Machine Operation	INDS220	3
Basic Fluid Power	INDS253	3
Manufacturing Processes	INDS260	2
Industrial Quality Control	INDS270	3
Introduction to		
College Physics II	PHYS112	3
Technical Drafting I	TDSN100	4
Industrial Communications	TDSN103	2
Reading Engineering		
Drawings	TDSN105	2
Layout & Precision		
Measurement	TDSN106	2
Geometric Dimensioning &		
Tolerancing	TDSN125	2
Introduction to CAD	TDSN250	4
Welding Elective	WELD	3
-		

MACHINE TOOLOPERATION, TECHNICAL DRAFTING AND WELDING TECHNOLOGY CERTIFICATE PROGRAMS ARE ALSO AVAILABLE.

INFORMATION SECURITY

MCC offers an Associate of Applied Science Degree in Information Security in partnership with Kaplan University. This program prepares students for careers in homeland security, criminology, data recovery, data security and other related areas. It is designed to provide students with the requisite knowledge to take the Certified Information Systems Security Professional (CISSP) exam and the EnCase Certified Examiner (EnCE) exam.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

AGRI110,BIOL100,BIOL105,BIOL110,BIOL115, BIOL121,BIOL122,BIOL201,BIOL202,BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM251, CHEM252, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251.

Social Science:

POLI110 OR a combination of POLI240 plus at least one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

<u>Humanities</u>: HUMN100 OR HUMN200 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221,

ENGL235, ENGL236, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN201, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

<u>Computer Literacy:</u> CMIS115 or CMIS175

Program Requirements

AT MCC		
Course Name	Course #	Cr.
Electronic Circuit Analyses	CSTC100	3
Introduction to Networking	CSTC127	3
Network Management	CSTC133	3
Computer Maintenance I	CSTC171	3
Computer Maintenance II	CSTC172	3
Network Security	CSTC237	3

INITATEDOLTA	,
Course #	Cr.
IT390	6
ISCY210	4
IT411	6
ISCY220	4
IT412	6
ISCY230	4
IT478	6
ISCY240	4
	ISCY210 IT411 ISCY220 IT412 ISCY230 IT478

Suggested Electives

Course Name	Course #	Cr.
Digital Logic	CSTC130	3
Networking Security	IT484	4
transfers to MCC as	ISCY250	
(Kaplan prerequisite IT388)		

LANDSCAPE AND LAWN MANAGEMENT

MCC offers an Associate in Applied Science in Landscape & Lawn Management in partnership with Michigan State University. This program combines horticulture and business courses to prepare students for careers in the landscape and nursery industry.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

BIOL110

Mathematics:

One of the following: MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251.

Social Science:

POLI110 OR a combination of POLI240 plus at least one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST257, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235

Humanities: 4 credits

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL265, FREN120, FREN121, GERM101, GERM102, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
Freshman English II	ENGL 101	3
Small Business Management OR	MGMT 235	3
Concepts of Management	MGMT 237	3
PLUS THREE OF THE FOLL	OWING:	
Accounting for		
Small Business	ACCT 105	3
Tax Accounting	ACCT 246	3
Legal Environment		
of Business	BUSN 200	4
OR		
Retailing	MRKT 234	3
Advertising	MRKT 248	3

LANDSCAPE & LAWN MANAGEMENT PROGRAM = minimum of 24 MSU credits is required

Required courses

Placement Training/		
Internship	AT 293	3
Fund. of Soil Science	CSS210	3
World of Turf	CSS202	2
World of Turf Lab	CSS202L	1
Basics of Applied		
Entomology	ENT 111	2
Landscape Plant		
Identification I	HRT 211	3
Landscape Plant		
Identification II	HRT 212	3
Landscape Maintenance	HRT 213	2
Landscape & Turf		
Business Operations	INDS265	2
Applied Plant Pathology		
for Ornamentals & Turf	PLP104	3

Electives

Landscape Design	HRT 111	3
Landscape Irrigation	HRT 218	3
Independent Study in Hort	HRT 290	1-4
Study Abroad	HRT 475	4 min

MEDICAL OFFICE ADMINISTRATION

This program prepares students who wish to specialize in medical transcription and medical office procedures for employment or advancement. A counselor should be consulted if the student plans to transfer to a four-year institution.

Students with a criminal record should consult with the State of Michigan to verify that they are eligible to work in this field. Students are encouraged to meet with an MCC counselor prior to starting this program for help with the verification process.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200, OR HUMN201, OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
Accounting for Small		
Business	ACCT105	3
OR Principles of		
Accounting I	ACCT115	4
Medical Insurance		
& Coding	AHEA113	2.5
Medical Terminology	AHEA215	3
Business Mathematics	BUSN160	3
Business Communications I	BUSN180	3
Ten-Key Numeric Entry	CMIS104	1
Document Production I	CMIS106	2
Input Technologies	CMIS146	2
Microsoft Outlook	CMIS153	1
Records Management	CMIS190	3
Document Production II	CMIS206	2
Medical Office Procedures	CMIS220	3
Voice Transcription:		
Medical	CMIS235	3
Office Administration	CMIS270	3
Document Production III	CMIS284	2

Nursing

This associate in applied science degree program prepares students for employment opportunities as nurses. This program is designed to provide the credits necessary for eligibility for practical nursing licensure, registered nursing licensure, and transferability for a bachelor's degree in nursing.

The licensed practical nurse (LPN) who wishes to become a registered nurse is considered an advanced standing student. An advanced standing student must hold a current unencumbered LPN license and must apply to the nursing program. Those with a current LPN license must meet the prerequisite general education and nursing course requirements (see page 94). For more information LPNs are encouraged to meet with a counselor.

Admission to the nursing program is based on seat availability and is limited based on regulatory agencies and program requirements. Admission to this program is highly competitive and requires a nursing program application to be completed and submitted to the Health Occupations Office. These applications can be obtained in the Student Services Office or on MyMontcalm. Students interested in applying to this program are to meet with a counselor or advisor to discuss additional requirements.

Students who intend to apply to this program must meet the standards required by the health care profession. This includes (but is not limited to) drug screens, criminal background checks, immunizations, and other required documentation. See the admission section on page 9 of this catalog for more details.

MCC's Health Occupations programs require a clear criminal background check result. Students with a conviction history may not be eligible to participate in any Health Occupations program at MCC and should consult with an attorney to discuss their options.

Prerequisite courses may apply to this program.

General Education courses below must be taken in the sequence listed for the Pre-Nursing Certificate program on page 94.

General Education Requirements

Written Communications

One of the following*: ENGL100 OR ENGL101

Oral Communications

One of the following*: NRSG120A

Laboratory Science

All of the following*: BIOL201, BIOL202, BIOL203 and CHEM105

Mathematics

One of the following*: MATH100, MATH102, MATH104, MATH120, MATH159, MATH250 or MATH251

Social Science

PSYC120 and either POLI110 OR POLI240

Humanities

Minimum of three credits from the following: PHIL222 (recommended) or ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN100, HUMN110, HUMN200, HUMN201, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, SPAN130 or SPAN131

Computer Literacy

One of the following*: NRSG120B, CMIS101 or CMIS115

*Some general education requirements have time expirations for meeting program requirements. See the Pre-Nursing Certificate description on page 94 for more information.

Program Requirements

All NRSG courses require a grade of C+ or better.

Course #	Cr.
NRSG130	4.5
NRSG140	3
NRSG150	4.5
NRSG160	3.5
NRSG170	5
	NRSG130 NRSG140 NRSG150 NRSG160

ELIGIBLE TO TAKE PN LICENSURE EXAM

Role Transition	NRSG200	1.5
Community Mental Health	NRSG210	4.5
Nursing Care of the		
Childbearing Family	NRSG220	3
Advanced Nursing Care		
of Children	NRSG230	3
Advanced Nursing Care		
of the Adult Client	NRSG240	8
Leadership & Management	NRSG250	3

ELIGIBLE TO TAKE RN LICENSURE EXAM

OFFICE ADMINISTRATION

This program provides background and skills in general business, accounting and communication, as well as the use of computer productivity tools. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

<u>Laboratory Science:</u>

One of the following: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 and one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200, OR HUMN201, OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
Accounting for Small		
Business	ACCT105	3
OR Principles of		
Accounting I	ACCT115	4
Introduction to Business	BUSN135	3
Business Mathematics	BUSN160	3
Business Communications II	BUSN185	3
Ten-Key Numeric Entry	CMIS104	1
Document Production I	CMIS106	2
Input Technologies	CMIS146	2
Microsoft Outlook I	CMIS153	1
Microcomputer		
Applications	CMIS175	4
Records Management	CMIS190	3
Document Production II	CMIS206	2
Office Administration	CMIS270	3
Document Production III	CMIS284	2
Concepts of Management	MGMT237	3

AN INFORMATION PROCESSING ASSISTANT CERTIFICATE PROGRAM IS ALSO AVAILABLE.

Restaurant & Food Industry Management

MCC offers an Associate of Applied Science Degree in Restaurant & Food Industry Management in partnership with Ferris State University. This program prepares students for employment in the food service industry. The degree is awarded by FSU.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH120, MATH159, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI246, POLI110, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
DELIVERED BY MCC		
Principles of		
Macroeconomics	ECON215	3
Principles of Accounting I	ACCT115	4
Concepts of Management	MGMT237	3
Human Resource		
Management	MGMT245	3
DELIVERED BY FERRIS STA	ATE UNIVERS	SITY
Orientation to Hospitality		
Management	RFIM101	1
Sanitation and Safety	RFIM113	3
Food and Labor Cost		
Control Systems	RFIM115	3
Beverage Management	RFIM207	3
Purchasing: Hospitality		
Industry	RFIM211	3
Industry Exploration	RFIM227	3
Restaurant and Food		
Industry Internship	RFIM292	3
SELECT 3 COURSES LISTE	D BELOW	
Principles of Food Science	RFIM111	3
Menu Planning/Nutrition	RFIM114	3
Principles of Cooking		
and Baking	RFIM127	3
Design/Layout of Food		
Service Facilities	RFIM214	3
World Cuisines	RFIM226	3
Dining Room Service		
Dining Room Service		

Minimum of 60 unduplicated credits (100 level or higher) required.

RFIM229

3

Management

Skilled Trades

This innovative program is designed for individuals who already hold a current journeyman card that is recognized by the State of Michigan, or the U.S. Department of Labor. Students who provide appropriate documentation verifying their journeyman status will receive 29 credits for SKTR295. Students must then complete all general education coursework at MCC, and as many suggested electives as necessary to earn at least 60 credits.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: CHEM105 or PHYS111

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus at least one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236,

ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
Iourneyman Credit	SKTR295	29

Suggested Electives

ELEC253	2
ELEC254	2
INDS130	2
INDS230	3
INDS253	3
INDS255	3
INDS260	2
INDS265	2
INDS270	3
	ELEC254 INDS130 INDS230 INDS253 INDS255 INDS260 INDS265

TECHNICAL DRAFTING & DESIGN

Learn the skills to enter the workplace as a versatile draftsperson capable of making basic design decisions and addressing future technological advances in the drafting and design profession. A counselor should be consulted if the student plans to transfer to a four-year institution.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Mathematics:

One of the following: MATH120, MATH159, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 plus one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI246, POLI110, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200 OR HUMN201 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr
Basic Machine Operation	INDS220	3
Basic Fluid Power	INDS253	3
Manufacturing Processes	INDS260	2
Technical Drafting I	TDSN100	4
Industrial Communication	TDSN103	2
Reading Engineering		
Drawings	TDSN105	2
Descriptive Geometry	TDSN110	3
Geometric Dimensioning &		
Tolerancing	TDSN125	2
Tool and Die Design I	TDSN135	2
Tool and Die Design II	TDSN136	2
Product Design	TDSN215	3
Jig & Fixture Design	TDSN230	3
Introduction to CAD	TDSN250	4
Advanced CAD	TDSN251	4

A TECHNICAL DRAFTING CERTIFICATE PROGRAM IS ALSO AVAILABLE.

WELDING

This program provides the background, skills, knowledge, understanding and techniques needed to produce quality weldments. Students gain knowledge of various materials and an understanding of the effects that heat and stress have on welded materials. Students should develop sufficient skills for American Welding Society Certification.

Prerequisite courses may apply to this program.

General Education Requirements

Written Communications:

One of the following: ENGL100 or ENGL101

Oral Communications:

One of the following: COMM210 or COMM220

Laboratory Science:

One of the following: CHEM105 or PHYS111

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH250 or MATH251

Social Science:

POLI110 OR a combination of POLI240 and at least one of the following: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities:

HUMN100 OR HUMN200 OR two of the following (courses must have different prefixes and only one may be a foreign language): ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265, FREN120, FREN121, GERM101, GERM102, HUMN110, HUMN270,

HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Computer Literacy:

One of the following: CMIS115 or CMIS175

Program Requirements

Course Name	Course #	Cr.
Emergency Health Care	AHEA100	2
Electronic Circuit Analysis	ELEC110	3
Metallurgy and Heat		
Treatment	INDS130	2
Basic Machine Operations	INDS220	3
Introduction to		
Material Science	INDS230	3
Reading Engineering		
Drawings	TDSN105	2
Layout and Precision		
Measurement	TDSN106	2
Fundamentals of Welding	WELD101	3
Welding Processes I	WELD111	3
Welding Processes II	WELD113	3
Welding Processes III	WELD131	3
Welding Processes IV	WELD133	3
Electives as needed		

Suggested Electives

Basic Fluid Power	INDS253	3
Advanced Pneumatics	INDS255	3
Industrial Problem Solving	INDS265	2
Industrial Quality Control	INDS270	3
Introduction to CAD	TDSN250	4
Advanced CAD	TDSN251	4

CERTIFICATE PROGRAMS

AUTOMOTIVE TECHNOLOGY

This program provides the background and skills to obtain entry-level jobs as automotive technicians. Many of the courses are applicable toward the Automotive Technology Entrepreneurship certificate and the Automotive Technology Applied Science Associate degree programs.

Students interested in receiving an associate degree should see a counselor.

Prerequisite courses may apply to this program.

Program Requirements

Course Name	Course #	Cr.
Emergency Health Care	AHEA100	2
Automotive Service	AUTO103	1
Basic Automotive Electrical	AUTO112	2
Advanced Automotive		
Electrical	AUTO113	2
Fundamentals of Welding	WELD101	3

Students must also choose three of the following five specializations:

Automotive Brake Systems	AUTO107	4
and Automotive Brake Sys	stems	
Field Experience	AUTO292B	4
Automotive Suspension		
& Steering	AUTO109	4
and Automotive Suspensi	on &	
Steering Field Experience	AUTO292C	4
Automotive Electrical &		
Electronic Systems	AUTO203	4
and Automotive Electrical	&	
Electronic Systems Field		
Experience	AUTO292D	4

Automotive Engine		
Performance	AUTO205	4
and Automotive Engine		
Performance Field		
Experience	AUTO292E	4
•		
Automotive Heating & Air		
Conditioning	AUTO262	4
and Automotive Heating &	&	
Air Conditioning Field		
Experience	AUTO292F	4
2perrerree	110102721	-

AN AUTOMOTIVE TECHNOLOGY ASSOCIATE OF APPLIED SCIENCE DEGREE AND JOB TRAINING PROGRAMS IN EACH OF THE AUTOMOTIVE AREAS ARE ALSO AVAILABLE.

AUTOMOTIVE TECHNOLOGY/ENTREPRENEURSHIP

This program provides students with the knowledge and skills necessary to start and manage a new business venture in the automotive technology field.

Students interested in receiving an associate degree should see a counselor.

Prerequisite courses may apply to this program.

Program Requirements

Course Name	Course #	Cr.
Accounting for		
Small Business	ACCT105	3
OR Principles of		
Accounting I	ACCT115	4
Emergency Health Care	AHEA100	2
Automotive Service	AUTO103	1
Basic Automotive		
Electrical	AUTO112	2
Advanced Automotive		
Electrical	AUTO113	2
Customer Relations	BUSN151	1
Legal Environment of		
Business	BUSN200	3
Computer Literacy	CMIS101	3
Freshman English I	ENGL100	3
OR Technical Writing for		
Business & Industry	INDS140	3
Small Business Management	MGMT235	3
Fundamentals of Welding	WELD101	3

Students must also choose two of the following five specializations:

Automotive Brake Systems and Automotive Brake Sys	AUTO107 stems AUTO292B	4
Field Experience Automotive Suspension & Steering and Automotive Suspension & Steering Field	AUTO109	4
Experience	AUTO292C	4
Automotive Electrical & Electronic Systems and Automotive Electrical	AUTO203	4
Electronic Systems Field Experience	AUTO292D	4
Automotive Engine Performance and Automotive Engine	AUTO205	4
Performance Field Experience	AUTO292E	4
Automotive Heating & Air Conditioning and Automotive Heating &	AUTO262	4
Air Conditioning Field Experience	AUTO292F	4
AN ASSOCIATE OF APPLIE	ED SCIENCE	

DEGREE IN AUTOMOTIVE TECHNOLOGY IS ALSO AVAILABLE.

COMPUTER SUPPORT

Cosmetology

This certificate program provides students training in the installation, maintenance, and upgrading of hardware, software and peripherals used with computer systems. This program is designed to prepare students for numerous COMPTIA and TestOut certifications. A counselor should be consulted if the student plans to transfer to a four-year institution.

Students interested in receiving an associate degree should see a counselor.

Prerequisite courses may apply to this program.

Program Requirements

Course Name	Course #	Cr.
Customer Relations	BUSN151	1
Introduction to Computer		
Information Systems	CMIS115	3
Introduction to Programming	g	
& Logic	CMIS130	4
Electronic Circuit Analysis	CSTC100	3
Electronic Fabrication	CSTC105	1
Introduction to Networking	CSTC127	3
Digital Logic	CSTC130	3
Computer Maintenance I	CSTC171	3
Computer Maintenance II	CSTC172	3
Freshman English I*	ENGL100	3
OR Technical Writing for Business		
and Industry	INDS140	3
Elementary Algebra	MATH100	4
, 0		

^{*}This alternate course is recommended for students with adequate background who are considering the associate degree.

A COMPUTER SUPPORT TECHNOLOGY ASSOCIATE OF APPLIED SCIENCE DEGREE IS ALSO AVAILABLE.

Minimum of 30 unduplicated credits (100 level or higher) required.

This Michigan Department of Commerce Division of Licensing and Regulations-approved program prepares students to take the State Licensing Board Examination. More than 900 hours are spent in lab work and 1,500 attendance hours are required. Admission is granted for fall semester only. To begin second-year coursework, students must have passed all written tests with a minimum of 75 percent and completed at least 690 clock hours. Departmental approval is required for any exceptions. This program is offered in 18-week semesters.

Students interested in receiving an associate degree should see a counselor.

Prerequisite courses may apply to this program.

Program Requirements

Course Name	Course #	Cr.
Customer Relations	BUSN151	1
Computer Literacy	CMIS101*	3
Cosmetology 1	COSM120	12
Cosmetology 2	COSM130	12
Cosmetology 3	COSM135	6
Cosmetology 4	COSM220	16
Cosmetology 5	COSM230	16

^{*}This program requirement may be waived by competency testing.

A COSMETOLOGY MANAGEMENT ASSOCIATE OF APPLIED SCIENCE DEGREE IS ALSO AVAILABLE.

CRIMINAL JUSTICE/CORRECTIONS

This certificate program prepares students for careers with state, county or city correctional agencies. It meets the Michigan Corrections Officer Training Council employment guidelines. Coursework is transferable to most colleges and universities offering degrees in corrections, and provides students with communications coursework necessary for today's corrections environment.

Students with a criminal record should consult with the State of Michigan to verify that they are eligible to work in this field. Students are encouraged to meet with an MCC counselor prior to starting this program for help with the verification process.

Students interested in receiving an associate degree should see a counselor.

Prerequisite courses may apply to this program.

Program Requirements

Course Name	Course #	Cr.
Speech	COMM210	3
OR Interpersonal		
Communication	COMM220	3
Introduction to		
Criminal Justice	CRIM100	3
Introduction to Corrections	CRIM110	3
Corrections Institutions/		
Facilities	CRIM120	3
Communication in		
Criminal Justice	CRIM136	3
Legal Issues in Corrections	CRIM220	3
Client Relations in		
Corrections	CRIM250	3
Client Growth and		
Development	CRIM260	3
Freshman English I	ENGL100	3
Freshman English II	ENGL101	3
Introduction to		
Social Science I	POLI110	4
OR American Political		
System	POLI240	3

CRIMINAL JUSTICE AND CRIMINAL JUSTICE/CORRECTIONS ASSOCIATE OF APPLIED SCIENCE DEGREES AND A CORRECTIONS OFFICER JOB TRAINING PROGRAM ARE ALSO AVAILABLE.

Electronics Technology

This certificate program stresses the fundamentals for understanding and analyzing electronic devices. Many of the credits earned in this program are applicable toward the Electronics Technology associate degree.

Students interested in receiving an associate degree should see a counselor.

Prerequisite courses may apply to this program.

Program Requirements

Course Name	Course #	Cr.
Customer Relations	BUSN151	1
DC Electronics	ELEC111	3
AC Electronics	ELEC112	3
Semiconductors &		
Instrumentation	ELEC115	3
Digital Logic	CSTC130	3
Electronic Circuits	ELEC210	3
Digital Electronics	ELEC230	3
Microprocessors	ELEC240	3
Industrial Electrical		
Maintenance I	ELEC251	2
Freshman English I	ENGL100	3
Applied Algebra	MATH110	2
OR Elementary Algebra*	MATH100	4

*This alternate course is recommended for students with adequate background who are considering the associate degree.

AN ELECTRONICS TECHNOLOGY ASSOCIATE OF APPLIED SCIENCE DEGREE IS ALSO AVAILABLE.

Minimum of 30 unduplicated credits (100 level or higher) required.

Entrepreneurship

This certificate program provides the knowledge and skills necessary to handle bookkeeping, determine prices, deal with customers, employ some computer applications and assist in new business development.

Students interested in receiving an associate degree should see a counselor.

Prerequisite courses may apply to this program.

Program Requirements

Course Name	Course #	Cr.
Accounting for		
Small Business	ACCT105	3
OR Principles of		
Accounting I	ACCT115	4
Customer Relations	BUSN151	1
Business Mathematics	BUSN160	3
Legal Environment		
of Business	BUSN200	3
International Business	BUSN260	3
Introduction to Computer		
Information Systems	CMIS115	3
Microsoft Outlook I	CMIS153	1
Microcomputer		
Applications	CMIS175	4
OR all of the following:		
Microsoft Word III	CMIS285	2
Microsoft Excel III	CMIS286	2
Microsoft Access III	CMIS287	2
Microsoft PowerPoint III	CMIS288	2
Freshman English I	ENGL100	3
Small Business Management	MGMT235	3
Principles of Marketing	MRKT233	3
Retailing	MRKT234	3

Information Processing Assistant

This program provides a background in office administration and computer productivity tools for initial employment in the information processing field.

Students interested in receiving an associate degree should see a counselor.

Prerequisite courses may apply to this program.

Program Requirements

		_
Course Name	Course #	Cr.
Employability Skills	BUSN141	3
Customer Relations	BUSN151	1
Business Mathematics	BUSN160	3
Business Communications I	BUSN180	3
Ten-Key Numeric Entry	CMIS104	1
Introduction to Computer		
Information Systems	CMIS115	3
Input Technologies	CMIS146	2
Microsoft Outlook I	CMIS153	1
Microcomputer Applications	CMIS175	4
OR all of the following:		
Microsoft Word III	CMIS285	2
Microsoft Excel III	CMIS286	2
Microsoft Access III	CMIS287	2
Microsoft PowerPoint III	CMIS288	2
Office Administration	CMIS270	3
Document Production III	CMIS284	2
Electives as needed		

Minimum of 30 unduplicated credits (100 level or higher) required.

Suggested Electives

Introduction to Business	BUSN135	3
PDF Publishing	CMIS163	2
Microsoft Publisher I	CMIS176	1
Microsoft Publisher II	CMIS280	2
Field Experience	CMIS290	3
Organizational Behavior	MGMT250	3

ANOFFICE ADMINISTRATION ASSOCIATE OF APPLIED SCIENCE DEGREE IS ALSO AVAILABLE.

LANDSCAPE AND LAWN MANAGEMENT

MCC offers a Certificate in Landscape & Lawn Management in partnership with Michigan State University. This program combines horticulture and business courses to prepare students for careers in the landscape and nursery industry.

Prerequisite courses may apply to this program.

MCC Program Requirements

Course Name	Course #	Cr.
Freshman English II	ENGL 101	3
Small Business Management	MGMT 235	3
OR		
Concepts of Management	MGMT 237	3
PLUS THREE OF THE FOLL	OWING:	
Accounting for		
Small Business	ACCT 105	3
Tax Accounting	ACCT 246	3
Legal Environment		
of Business	BUSN 200	4
OR		
Retailing	MRKT 234	3
Advertising	MRKT 248	3

LANDSCAPE & LAWN MANAGEMENT PROGRAM = minimum of 24 MSU credits is required

MSU Program Requirements

Placement Training/		
Internship	AT 293	3
Fund. of Soil Science	CSS210	3
World of Turf	CSS202	2
World of Turf Lab	CSS202L	1
Basics of Applied		
Entomology	ENT 111	2
Landscape Plant		
Identification I	HRT 211	3
Landscape Plant		
Identification II	HRT 212	3
Landscape Maintenance	HRT 213	2
Landscape & Turf		
Business Operations	INDS265	2
Applied Plant Pathology		
for Ornamentals & Turf	PLP104	3
Electives		
Liccuvcs		

Landscape Design	HRT 111	3
Landscape Irrigation	HRT 218	3
Independent Study in Hort	HRT 290	1-4
Study Abroad	HRT 475	4 min

Other MSU HRT & CSS courses may be acceptable electives. Course offerings are subject to change. Consult with MSU Program Coordinator.

LIBERAL STUDIES

This certificate is designed for students who plan to transfer without completing a degree at MCC. Students completing this certificate are also eligible for the MACRAO Endorsement (see pages 11-12.) If a student is interested in transferring, an MCC counselor/advisor should be consulted for an academic plan specific to the transfer institution. Students interested in receiving an associate degree should see a counselor.

Prerequisite courses may apply to this program.

Program Requirements

Written Communications: ENGL100 and ENGL101

Mathematics and Science: 8 credits

Courses must be taken from more than one subject area and must include a laboratory science: AGRI110, BIOL100, BIOL105, BIOL110, BIOL115, BIOL121, BIOL122, BIOL201, BIOL202, BIOL203, BIOL208, CHEM105, CHEM220, CHEM221, CHEM250, CHEM251, CHEM252, ENVR110, ENVR271, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250, MATH251, PHYS101, PHYS111, PHYS112, PHYS230 or PHYS231

Social Science: 8 credits

Courses must be taken from more than one subject area: ANTH260, ANTH265, ECON215, ECON216, HIST250, HIST251, HIST252, HIST253, HIST255, HIST256, HIST257, POLI110, POLI240, POLI246, POLI250, PSYC120, PSYC221, PSYC223, PSYC225, SOCI111, SOCI230, SOCI235, SOCI271, WMST100

Humanities: 8 credits

HUMN200 AND HUMN201 OR choose from the following: (Courses must be taken from more than one subject area.) ARTS120, ARTS225, CHIN130, CHIN131, ENGL195, ENGL200, ENGL201, ENGL212, ENGL220, ENGL221, ENGL230, ENGL235, ENGL236, ENGL240, ENGL265,FREN120, FREN121, GERM101, GERM102,HUMN100,HUMN110,HUMN200, HUMN201, HUMN270, HUMN271, MUSI100, MUSI101, MUSI110, PHIL220, PHIL221, PHIL222, SPAN130 or SPAN131

Minimum of 30 unduplicated credits (100 level or higher) required.

Machine Tool Operation

This certificate program provides the knowledge and skills necessary to obtain entry-level jobs in metalworking industries as machinist helpers. Many of the courses are applicable toward an associate degree or an apprenticeship certificate. Students interested in receiving an associate degree should see a counselor.

Prerequisite courses may apply to this program.

Program Requirements

Course Name	Course #	Cr.
Freshman English I	ENGL100	3
OR Technical Writing for		
Business & Industry	INDS140	3
Machine Tool Theory	INDS100	2
Basic CNC Operation	INDS102	2
Metallurgy and		
Heat Treatment	INDS130	2
Basic Machine Operation	INDS220	3
Advanced Machine		
Operation	INDS221	3
Basic Fluid Power	INDS253	3
Manufacturing Processes	INDS260	2
Industrial Quality Control	INDS270	3
Applied Algebra	MATH110	2
OR Elementary Algebra*	MATH100	4
Applied Geometry	MATH111	2
OR Intermediate Algebra*	MATH104	4
Reading Engineering		
Drawings	TDSN105	2
Layout and Precision		
Measurement	TDSN106	2
Fundamentals of Welding	WELD101	3

*These alternate courses are recommended for students who are considering the associate degree.

AN ASSOCIATE OF APPLIED SCIENCE DEGREE IN INDUSTRIAL TECHNOLOGY IS ALSO AVAILABLE.

MEDICAL ASSISTANT

A Medical Assistant is a multi-skilled allied healthcare professional who performs administrative and clinical duties under the supervision of a licensed health care practitioner. A student completing this certificate program is qualified to work as a medical assistant in a variety of settings including medical offices, outpatient facilities, health maintenance organizations, health departments, business and industry and insurance companies. Minimum COMPASS or ACT test scores are required for math, reading and writing.

Progression in the medical assistant program is determined academically by the minimum grade of a C+ (78 percent) in each medical assistant course (AHEA109, AHEA111, AHEA112, AHEA113, AHEA114, AHEA115 and AHEA126.) and can be repeated only once. An attempt is counted if a student fails or withdraws from the course. In all other required courses, students must earn a minimum grade of C.

All courses must be completed within two years to facilitate the student's success in the externship setting and the national certification examination. The instructors have determined the following as critical areas and students should be conscious of the time frames. If the time limit has been exceeded (first year complete AHEA111, AHEA112 and AHEA115; second year complete for AHEA100, AHEA109, AHEA113 and AHEA114), a mandatory validation of knowledge and skills is necessary prior to applying for the externship (AHEA126). Contact the program director to make the necessary arrangements. Students must also complete a criminal background check (CBC) before enrolling in AHEA109.

Students who intend to apply to nursing or another allied health program must meet the admission requirements for that particular program. General standards required by the health care professions include, but are not limited to, drug screens, finger printing, criminal background checks, immunizations, and other required documentation and certifications.

Some prerequisite courses or testing may apply to this program. Immunizations, a health certification form and health physical examination are additional requirements of the program and will be addressed in AHEA109. Any student who has a serious illness, injury or pregnancy while in the program will be required to obtain a doctor's written release.

Montcalm Community College is accredited by the Commission on Accreditation of Allied Health Education Programs (www.caahep. org) upon the recommendation of the Medical Assisting Education Review Board (MAERB).

MCC's Health Occupations programs require a clear criminal background check result. Students with a conviction history may not be eligible to participate in any Health Occupations program at MCC and should consult with an attorney to discuss their options.

Students interested in receiving an associate degree should see a counselor.

Prerequisite courses may apply to this program.

Program Requirements

Course Name	Course #	Cr.
Emergency Health Care	AHEA100	2
Foundations of Medical		
Assisting	AHEA109	2
Clinical Procedures	AHEA111	4
Medical Laboratory		
Procedures	AHEA112	4
Medical Insurance and		
Coding	AHEA113	2.5
Medical Administrative		
Procedures	AHEA114	3
Pharmacology in		
Allied Health	AHEA115	3
Body Systems and Disease	AHEA116	3
OR Introduction to Anator	ny	
and Physiology**	BIOL105	4
Externship	AHEA126	6
Medical Terminology	AHEA215	3
Business Communications I	BUSN180	3
Computer Literacy*	CMIS101	3

^{*}This requirement may also be met through competency testing.

^{**}BIOL105 is recommended for students who are considering an associate degree.

Pre-Nursing

Students must successfully complete the Pre-Nursing Certificate to be eligible for admission into Montcalm Community College's Associate Degree Nursing (ADN) program. Please contact the Admissions Office for more information.

Prerequisite courses may apply to this program. Criminal background checks and drug screenings are required.

Program Requirements

in required sequence

Course Name	Course #	Cr.
College Success for		
Health Occupations ¹	GNST105	0.5
Anatomy & Physiology I ²	BIOL202	4
Freshman English I ³	ENGL100	3
General Psychology ³	PSYC120	3
Anatomy & Physiology II ²	BIOL203	4
Introduction to		
Social Science I ³	POLI110	4
OR American Political		
System ³	POLI240	3

Humanities³ 3-4
Minimum of three credits from the following:
PHIL222 (recommended) or ARTS120,
ARTS225, CHIN130, CHIN131, ENGL195,
ENGL200, ENGL201, ENGL212, ENGL220,
ENGL221, ENGL230, ENGL235, ENGL236,
ENGL240, ENGL265, FREN120, FREN121,
GERM101,GERM102,HUMN100,HUMN110,
HUMN200, HUMN201, HUMN270,
HUMN271, MUSI100, MUSI101, MUSI110,
PHIL220, PHIL221, SPAN130 or SPAN131.

Mathematics:

One of the following: MATH100, MATH102, MATH104, MATH120, MATH159, MATH190, MATH250 or MATH251

Microbiology ²	BIOL201	4
Introductory Chemistry ⁵	CHEM105	4
Communication Concepts	NRSG120A/	
in Nursing ⁶	NURS121A 1	.5

Minimum of 30 unduplicated credits (100 level or higher) required.

Computer Concepts	NRSG120B/	/
in Nursing ⁷	NURS121B	0.5
OR Computer Literacy ⁸	CMIS101	3
OR Introduction to Compu	ıter	
Information Systems9	CMIS115	3
Nutrition & Diet	NRSG110/	
Therapy in Nursing ⁶	NURS111	2

Suggested Electives

Assist with nursing program success

AHEA103	3.5
AHEA106	1
AHEA116	3
AHEA215	3
	AHEA116

- Should be taken in the first semester of the Pre-Nursing Certificate or as soon as minimum COMPASS scores have been attained
- 2. 3.0 grade or higher in last four years prior to program entry/maximum of two attempts
- 3. 2.0 grade or higher
- 4. 3.0 grade or higher in last four years prior to program entry
- 5. 2.0 grade or higher in last four years prior to program entry/maximum of two attempts
- 2.3 grade or higher in last 18 months prior to program entry/maximum of two attempts; core nursing course
- 7. 2.3 grade or higher/maximum of two attempts; competency test available
- 8. 2.3 grade or higher; competency test available
- 9. 2.3 grade or higher

10. Competency test available

AN ASSOCIATE OF APPLIED SCIENCE IN NURSING IS ALSO AVAILABLE.

STUDENTS SHOULD ALSO CONSIDER HIGHER LEVEL COURSES TRANSFERABLE TO BACHELOR OF NURSING (BSN) PROGRAMS.

Technical Drafting

This certificate program provides students with the knowledge and skills necessary for entry level detailer or beginning drafter positions.

Students interested in receiving an associate degree should see a counselor/advisor.

Prerequisite courses may apply to this program.

Program Requirements

Course Name	Course #	Cr.
Customer Relations	BUSN151	1
Introduction to Computer		
Information Systems	CMIS115	3
Basic Machine Operation	INDS220	3
Basic Fluid Power	INDS253	3
Manufacturing Processes	INDS260	2
Applied Algebra	MATH110	2
OR Elementary Algebra*	MATH100	4
Applied Geometry	MATH111	2
OR Intermediate Algebra*	MATH104	4
Technical Drafting I	TDSN100	4
Industrial Communication	TDSN103	2
Reading Engineering		
Drawings	TDSN105	2
Introduction to CAD	TDSN250	4
Advanced CAD	TDSN251	4

*These alternate courses are recommended for students with adequate background who are considering the associate degree.

A TECHNICAL DRAFTING & DESIGN ASSOCIATE OF APPLIED SCIENCE DEGREE IS ALSO AVAILABLE.

Minimum of 30 unduplicated credits (100 level or higher) required.

Welding Technology

This certificate program stresses the development of techniques and understanding of quality weldments. Effects of heat and stress on welded materials are studied and practiced in the laboratory. Students may develop sufficient skill for American Welding Society Certification*. Students interested in receiving an associate degree should see a counselor/advisor.

Prerequisite courses may apply to this program.

Program Requirements

Course #	Cr.
AHEA100	2
INDS130	2
INDS220	3
INDS253	3
MATH110	2
MATH100	4
TDSN105	2
TDSN106	2
WELD101	3
WELD111	3
WELD113	3
WELD131	3
WELD133	3
	AHEA100 INDS130 INDS220 INDS253 MATH110 MATH100 TDSN105 TDSN106 WELD101 WELD111 WELD113 WELD131

^{*}The college does not certify welders.

AN ASSOCIATE OF APPLIED SCIENCE DE-GREE IN WELDING IS ALSO AVAILABLE.

^{**}This alternate course is recommended for students with adequate background who are considering the associate degree.

JOB TRAINING PROGRAMS

Apprenticeship Training

Students must be employed and sponsored by their employer and a training agreement must be set up between the employer, the employee and the Bureau of Apprenticeship and Training, and MCC. MCC coordinates the training plan and provides related instruction. Each semester usually includes one to three courses of apprenticeship-related instruction. A competency examination or official transcripts may result in a waiver of a required course. The employer establishes entrance requirements in accordance with the Bureau of Apprenticeship and Training standards. Continuation in the job training program depends on employment status and achievement levels. Upon completion of all coursework and on-the-job training, apprentices may be eligible for Journeyman status.

This sample schedule of related instruction is for apprentice tool-and-die makers. The actual requirements may vary with the training agreement. Instruction for machinists, electricians, mold-and-die makers and welders is also available.

Current Journeyman status, verified by the Bureau of Apprenticeship and Training, is awarded 29 credits toward the Skilled Trades Associate Degree. Students interested in receiving an associate degree should see a counselor/advisor.

Prerequisite courses may apply to this program.

Sample Schedule

Course Name	Course #	Cr.
Computer Literacy	CMIS101	3
OR Introduction to	01/110101	
Windows	CMIS102	1
Machine Tool Theory	INDS100	2
Basic CNC Operation	INDS102	2
Metallurgy &		
Heat Treatment	INDS130	2
Industrial Safety	INDS155A	1.5
Industrial First Aid	INDS155B	0.5
Industrial Quality Control	INDS270	3
Applied Algebra	MATH110	2
Applied Geometry	MATH111	2
Applied Right Angle		
Trigonometry	MATH112	2
Applied Oblique Angle		
Trigonometry	MATH113	2
Industrial Communication	TDSN103	2
Reading Engineering		
Drawings	TDSN105	2
Layout & Precision		
Measurement	TDSN106	2
Tool and Die Design I	TDSN135	2
Tool and Die Design II	TDSN136	2
Introduction to CAD	TDSN250	4
Welding Processes I	WELD111	3

Automotive Brake Systems

Students have the option of choosing among several automotive specialty areas or choosing to complete more than one area. Each area contains an automotive servicing and field experience component designed to provide entry-level skills.

Students interested in completing an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Requirements

Course Name	Course # Cr.
Automotive Service	AUTO103 1
Basic Automotive Electrical	AUTO112 2
Automotive Brake Systems	AUTO107 4
Automotive Brake Systems	
Field Experience	AUTO292B 4

Automotive Electrical & Electronic Systems

Students have the option of choosing among several automotive specialty areas or choosing to complete more than one area. Each area contains an automotive servicing and field experience component designed to provide entry-level skills.

Students interested in completing an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Course Name	Course # (r.
Automotive Service	AUTO103	1
Basic Automotive Electrical	AUTO112	2
Advanced Automotive		
Electrical	AUTO113	2
Automotive Electrical &		
Electronic Systems	AUTO203	4
Automotive Electrical & Electr	onic	
Systems Field Experience	AUTO292I)4

Automotive Engine Performance

Students have the option of choosing among several automotive specialty areas or choosing to complete more than one area. Each area contains an automotive servicing and field experience component designed to provide entry-level skills.

Students interested in completing an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Requirements

Course Name	Course #	Cr.
Automotive Service	AUTO103	1
Basic Automotive Electrical	AUTO112	2
Advanced Automotive		
Electrical	AUTO113	2
Automotive Electrical &		
Electronic Systems	AUTO203	4
Automotive Electrical &		
Electronic Systems		
Field Experience	AUTO292D	4
Automotive Engine		
Performance	AUTO205	4
Automotive Engine		
Performance		
Field Experience	AUTO292E	4

Automotive Heating & Air Conditioning

Students have the option of choosing among several automotive specialty areas or choosing to complete more than one area. Each area contains an automotive servicing and field experience component designed to provide entry-level skills.

Students interested in completing an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Course Name	Course #	Cr.
Automotive Service	AUTO103	1
Basic Automotive Electrical	AUTO112	2
Advanced Automotive		
Electrical	AUTO113	2
Automotive Heating &		
Air Conditioning	AUTO262	4
Automotive Heating &		
Air Conditioning		
Field Experience	AUTO292F	4

Automotive Suspension & Steering

Students have the option of choosing among several automotive specialty areas or choosing to complete more than one area. Each area contains an automotive servicing and field experience component designed to provide entry-level skills.

Students interested in completing an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Requirements

Course Name	Course #	Cr.
Automotive Service	AUTO103	1
Basic Automotive Electrical	AUTO112	2
Automotive Suspension		
& Steering	AUTO109	4
Automotive Suspension &		
Steering Field Experience	AUTO292C	4

CHILD DEVELOPMENT ASSOCIATE

The Child Development Associate (CDA) credential is conferred by the Council for Early Childhood Recognition (CECR). To be awarded this credential, students must complete requirements including work experience, supervised training and related instruction. Students who complete the ECDV courses listed below will meet the related instruction required by CERC. ECDV200 Introduction to CDA, provides an overview of requirements for the CDA credential.

Students with a criminal record should consult the Michigan Department of Education to verify that they are eligible to work in this field. Students are encouraged to meet with an MCC counselor/advisor prior to starting this program for help with the verification process.

Students interested in receiving an associate degree should see a counselor/advisor.

Prerequisite courses may apply to this program.

Requirements

Course #	Cr.
ECDV110	3
ECDV120	3
ECDV131	3
ECDV135	3
ECDV150	3
PSYC120	3
	ECDV110 ECDV120 ECDV131 ECDV135 ECDV150

AN EARLY CHILDHOOD DEVELOPMENT ASSOCIATE OF APPLIED SCIENCE DEGREE IS ALSO AVAILABLE.

CIS JOB READINESS

This job training program is tailored for students entering or retooling for today's workplace, needing up-to-date basic computer information skills.

Students interested in receiving an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Requirements

Course Name	Course #	Cr.
Business Communications I	BUSN180	3
Keyboarding	CMIS100	1
Computer Literacy	CMIS101	3
Ten-Key Numeric Entry	CMIS104	1
Introduction to Computer		
Information Systems	CMIS115	3
Input Technologies	CMIS146	2
Microsoft Outlook I	CMIS153	1
Microsoft Publisher I	CMIS176	1

Corrections Officer Training

This 15-credit-hour job training program satisfies the Michigan Corrections Officer Training Council (MCOTC) educational requirement for corrections officers. Students must achieve a minimum 2.0 grade in each course to receive certification of successful completion from MCC. To be considered for employment by Michigan Department of Corrections, students must have a high school diploma or GED and pass a written Civil Service exam, a physical fitness exam, a personal interview, a background investigation and a drug screening.

Students with a criminal record should consult the State of Michigan to verify that they are eligible to work in this field. Students are encouraged to meet with an MCC counselor/advisor prior to starting this program for help with the verification process.

Students interested in receiving an associate degree or certificate should see a counselor.

Prerequisite courses may apply to this program.

Requirements

Course Name	Course #	Cr.
Introduction to Corrections	CRIM110	3
Corrections Institutions/		
Facilities	CRIM120	3
Legal Issues in Corrections	CRIM220	3
Client Relations in		
Corrections	CRIM250	3
Client Growth and		
Development	CRIM260	3

A CRIMINAL JUSTICE — CORRECTIONS ASSOCIATE OF APPLIED SCIENCE DEGREE AND A CRIMINAL JUSTICE — CORRECTIONS CERTIFICATE ARE ALSO AVAILABLE.

DIGITAL PUBLISHING & PRESENTATION

This job training program is designed for students interested in desktop publishing or digital and web-based presentations.

Students interested in receiving an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Course Name	Course #	Cr.
Two-Dimensional Design		
& Color	ARTS140	3
Computer Literacy	CMIS101	3
Macromedia Dreamweaver	CMIS114	3
Introduction to Computer		
Information Systems	CMIS115	3
Digital Images & Editing I	CMIS161	3
Digital Illustration	CMIS162	3
Microsoft Publisher I	CMIS176	1
Microsoft Publisher II	CMIS280	2

Emergency Medical Technician

Students learn the fundamentals of pre-hospital emergency medicine, including critical interventions for ill and injured patients. Basic anatomy and physiology, patient assessment, bandaging, splinting, oxygen administration and how emergency medical services systems function are covered

The following coursework prepares successful students to take the National Registry examination for licensure as an Emergency Medical Technician. The Emergency Medical Technician course includes lecture, lab and clinical time as approved by the Michigan Department of Community Health. Successful students are eligible to take the National Registry exam for EMT-Basic and may receive licensure. This program can be completed by taking AHEA200 or AHEA200B with a current Medical First Responder license.

Students who intend to apply to nursing or another allied health program must also meet the admission requirements for that particular program. General standards required by the health care professions include, but are not limited to, drug screens, finger printing, criminal background checks, immunizations, and other required documentation and certifications.

Legal Consideration (Felony Statement): Previous treatment for substance abuse or conviction of a misdemeanor punishable by imprisonment for a maximum term of two years may prevent an applicant from taking the National Registry exam. Individuals with a conviction history must submit a written explanation of the circumstances for which subsequent determination should be made regarding licensure eligibility in the State of Michigan.

Students interested in receiving an associate degree should see a counselor/advisor.

Prerequisite courses may apply to this program.

Course Name	Course #	Cr.
Emergency Medical		
Technician	AHEA200	9.5
OR		
MFR-EMT Articulation	AHEA200B	6
(Student must have a Medic	al First Respor	nder
license.)	-	

Entrepreneurship

This job training program gives students many of the tools necessary to start and run a new business. The courses focus on steps to starting a new business, techniques for managing the business, skills for dealing with customers and proper bookkeeping techniques for a small business.

Students interested in receiving an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Requirements

Course Name	Course #	Cr.
Accounting for		
Small Business	ACCT105	3
OR Principles of		
Accounting I	ACCT115	4
Introduction to Business	BUSN135	3
Customer Relations	BUSN151	1
Legal Environment of		
Business	BUSN200	3
Freshman English I	ENGL100	3
Small Business Management	MGMT235	3
O		

Health Care Access Manager

This program prepares students for a career as a Patient Account Technician. It covers skills for constructing and validating various types of insurance claims, dealing with insurance company payment denials, analyzing unpaid claims and follow up collection techniques. After successfully completing these courses, students are eligible to take the Certified Patient Account Technician (CPAT) exam from the American Association of Healthcare Administrative Management (AAHAM), a nationally recognized certification in this area. This exam is taken in class. This program includes both online and classroom instruction.

MCC's Health Occupations programs require a clear criminal background check result. Students with a conviction history may not be eligible to participate in any Health Occupations program at MCC and should consult with an attorney to discuss their options.

Students interested in receiving an associate degree or certificate should see a counselor.

Prerequisite courses may apply to this program.

Course Name	Course #	Cr.
Medical Terminology	AHEA215	3
Health Care Revenue		
Cycle I	AHEA130	6
Health Care Revenue		
Cycle II	AHEA230	6
Computer Literacy	CMIS101	3

Health Care Access Representative

This program prepares students for careers in Health Care Admission and Billing Processes. The program includes understanding the revenue cycle within health care settings and the impact of current trends within the industry. Recognition of billing, collection, regulatory issues and requirements are part of the program. Customer-focused communication including interviewing skills and determining coordination of benefits are explored. The role of third party reimbursement is examined including insurance companies such as Medicare, Medicaid, Blue Cross, TRICARE and CHAMPVA. Compliance issues and billing and coding skills are also taught. After successfully completing these courses, students are eligible to take the Certified Health Care Access Associate (CHAA) exam offered by the National Association of Healthcare Access Management (NAHAM), a nationally recognized certification in this area. This exam is taken in class. Both online and classroom instruction are required.

MCC's Health Occupations programs require a clear criminal background check result. Students with a conviction history may not be eligible to participate in any Health Occupations program at MCC and should consult with an attorney to discuss their options.

Students interested in receiving an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Requirements

Course Name	Course #	Cr.
Medical Terminology	AHEA215	3
Health Care Revenue		
Cycle I	AHEA130	6
Computer Literacy	CMIS101	3

Input Productivity

This job training program prepares students for fields requiring computer-based data entry.

Students interested in receiving an associate degree should see a counselor/advisor.

Prerequisite courses may apply to this program.

Course Name	Course #	Cr.
Keyboarding	CMIS100	1
Computer Literacy	CMIS101	3
Ten-Key Numeric Entry	CMIS104	1
Document Production I	CMIS106	2
Input Technologies	CMIS146	2
Microsoft Outlook I	CMIS153	1
Document Production II	CMIS206	2
Document Production III	CMIS284	2

Long-Term Care Nurse Assistant

Classroom lecture, simulated labs and supervised clinical experience in long-term care facilities are combined to provide the basic nursing skills and knowledge necessary for students to give patient care appropriately and safely. Upon successful completion (C or better grade) students are eligible for employment in health care facilities and to apply for the State of Michigan Competency test. This course can also be used to articulate into the nursing program at Montcalm Community College.

MCC's Health Occupations programs require a clear criminal background check result. Students with a conviction history may not be eligible to participate in any Health Occupations program at MCC and should consult with an attorney to discuss their options.

Students interested in receiving an associate degree or certificate should see a counselor/advisor.

Requirement

Course Name	Course #	Cr.
Long-Term-Care		
Nurse Assistant	AHEA103	3.5

Office Applications

This one-semester job training program is for Microsoft Office users who wish to upgrade or update their Office Suite skills.

Students interested in receiving an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Course Name	Course #	Cr.
Input Technologies	CMIS146	2
Microsoft Outlook I	CMIS153	1
Microsoft Publisher II	CMIS280	2
Microsoft Word III	CMIS285	2
Microsoft Excel III	CMIS286	2
Microsoft Access III	CMIS287	2
Microsoft PowerPoint III	CMIS288	2

Renewable Energy

The Renewable Energy job training program offers a comprehensive introduction to renewable energy and energy efficiency.

Students interested in receiving an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Requirements

Course Name	Course #	Cr.
Energy and the		
Environment	ENVR110	4
OR Introduction to		
Renewable Energy	ENVR105	2
AND The Science		
of Energy	ENVR106	2
Residential Analysis	SUSN107	2
Use of Solar Photovoltaics	SUSN108	2
Wind Power	SUSN109	2
Solar Thermal Energy	SUSN110	2
Geothermal Power	SUSN111	2

RETAIL

This job training program gives students the tools necessary to obtain an entry-level job in the retail industry. The courses focus on skills needed to obtain employment, skills for dealing with customers and the retailing industry.

Students interested in receiving an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Course Name	Course #	Cr.
Employability Skills	BUSN141	3
Customer Relations	BUSN151	1
Freshman English I	ENGL100	3
Principles of Marketing	MRKT233	3
Retailing	MRKT234	3

Retail Management

This job training program gives students many of the tools necessary to obtain an entry-level management position in the retail industry. The courses focus on skills needed to obtain employment, effective tactics for dealing with employees, skills for dealing with customers, the nature of business and the retail industry.

Students interested in receiving an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Requirements

Course Name	Course #	Cr.
Introduction to Business	BUSN135	3
Employability Skills	BUSN141	3
Customer Relations	BUSN151	1
Freshman English I	ENGL100	3
Organizational Behavior	MGMT250	3
Principles of Marketing	MRKT233	3
Retailing	MRKT234	3

SUPERVISION

This job training program gives students the tools necessary to obtain an entry-level position in supervision. The courses focus on skills needed to obtain employment, effective tactics for dealing with employees, skills for dealing with customers, the nature of business and effective management and leadership techniques.

Students interested in receiving an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Course Name	Course #	Cr.
Introduction to Business	BUSN135	3
Employability Skills	BUSN141	3
Customer Relations	BUSN151	1
Freshman English I	ENGL100	3
Concepts of Management	MGMT237	3
Human Resource		
Management	MGMT245	3
Organizational Behavior	MGMT250	3

WEB DESIGN SPECIALIST

This job training program is designed for students interested in web design, creation and authoring tools.

Students interested in receiving an associate degree or certificate should see a counselor/advisor.

Prerequisite courses may apply to this program.

Course Name	Course #	Cr.
Keyboarding	CMIS100	1
Computer Literacy	CMIS101	3
Macromedia Dreamweaver	CMIS114	3
Introduction to HTML	CMIS132	3
Microsoft Access I	CMIS158	1
Digital Images & Editing I	CMIS161	3
Microsoft Access II	CMIS258	1
Microsoft Access III	CMIS287	2

Course Code Index

Use this index by finding the subject of interest. The letter prefix that follows tells where to find descriptions of the courses which cover that subject matter. For example, accounting course descriptions would be found under ACCT.

Accounting/ACCT
Acting/THEA
Advertising/MRKT

Algebra/ MATH

Allied Health/AHEA

American Sign Language/COMM

Analytic Geometry/MATH

Anatomy/BIOL

Animal Science/AGRI
Anthropology/ANTH
Applied Math/MATH
Apprentice/INDS & TDSN

Art/ARTS

Art Appreciation/ARTS

Automotive Maintenance/AUTO Aviation Maintenance/AVMA

Biology/BIOL

Blueprint Reading/TDSN

Botany/BIOL

Business Communications/CMIS

Business Law/BUSN

Business Mathematics/CMIS

Calculus/MATH
Ceramics/ARTS
Chemistry/CHEM

Child Development/ECDV

Chinese/CHIN

Communications/COMM

Composition/ENGL

Computer Applications/CMIS
Computers/CMIS & CSTC

Corrections/CRIM
Cosmetology/COSM
Criminal Justice/CRIM

Desktop Publishing/CMIS

Digital Publishing/CMIS

Drafting & Design/TDSN

Drama/THEA

Drawing/ARTS

Early Childhood

Development Education/ECDV

Economics/ECON

Education/EDUC

Electronics-Industrial/ELEC

Emergency Health Care/AHEA

Emergency Medical Technician/AHEA

English/ENGL

Environmental Sciences/ENVR

Fitness/PHED French/FREN

General Business/BUSN General Studies/GNST Geography/GEOG German/GERM Government/POLI

Heat Treatment Metals/INDS

History/HIST

Humanities/HUMN Hydraulics/INDS

Industrial Electronics/ELEC Information Security/ISCY Information Systems/CMIS

Journalism/COMM Keyboarding/CMIS Law-Business/BUSN Law Enforcement/CRIM

Landscape & Lawn Management/LMGT

Literature/ENGL

Machine Apprentice/INDS
Machine Shop/INDS
Management/MGMT
Marketing/MRKT
Mathematics/MATH

Mathematics-Business/BUSN

Medical Assistant/AHEA

Medical Information Systems/CMIS

Medical Insurance & Coding/AHEA

Medical Terminology/AHEA

Metallurgy Theory / INDS

Mold & Die Design Apprentice/TDSN

Music/MUSI

Nursing/NRSG

Oral Interpretation/ENGL

Painting/ARTS

Philosophy/PHIL

Phlebotomy/AHEA

Photography/ARTS

Physical Education/PHED

Physical Science/PHYS

Physics/PHYS

Physiology/BIOL

Plastics/TDSN

Political Science/POLI

Pre-Nursing/NRSG

Psychology/PSYC

Reading/ENGL

Religion/PHIL

Safety and First Aid/INDS or AHEA

Sculpture/ARTS

Secretarial Studies/CMIS

Shop Drawing/TDSN

Sketching/ARTS

Skilled Trades/SKTR

Small Business/ACCT & BUSN

Social Science/POLI or SOCI

Sociology/SOCI

Spanish/SPAN

Speech/COMM

Statistics/MATH

Supervision and Management/MGMT

Sustainability/SUSN

Taxation-Business/ACCT

Technical Drafting/TDSN

Theater/THEA

Tool & Die Apprentice/TDSN

Transcription/CMIS

Trigonometry/MATH

Web Design/CMIS

Welding Technology/WELD

Word Processing/CMIS

Writing/ENGL

Zoology/BIOL

Course Descriptions

Course Descriptions

ACCOUNTING

ACCT105 Accounting for Small Business

(3 credit, 3 lecture, 0 lab) [Minimum reading test score of 82 on COMPASS or ENGL051 and 36 on COMPASS Pre-Algebra test]*

This course provides basic accounting principles and practices from a theoretical and practical approach, with emphasis on the small business. Although it is not a prerequisite for ACCT115, it is strongly recommended prior to ACCT115.

OFFERED: fall and spring semesters

ACCT115 Principles of Accounting I

(4 credit, 4 lecture, 0 lab) [Minimum reading test score of 82 on COMPASS or ENGL051 and 36 on COMPASS Pre-Algebra test]*

This introduction to accounting fundamentals covers the meaning and purpose of accounting statements; the theory of debits and credits; accounts payable and receivable; the trial balance; adjusting and closing entries; and accounting for notes, deferred and accrued items. Approximately 10-12 hours per week of study time is required. OFFERED: fall semesters

ACCT116 Principles of Accounting II

(4 credit, 4 lecture, 0 lab) [ACCT115]*

This course covers basic procedures for accumulating and using the accounting data needed for managerial planning, controlling and decision making.

OFFERED: spring semesters

ACCT212 Computerized Accounting

(4 credit, 4 lecture, 0 lab) [ACCT115]*

This course covers the installation, set up, and operation of computerized accounting software and includes general ledger, accounts receivable, accounts payable, inventory, payroll, job costing and various accounting reports.

OFFERED: spring semesters

ACCT246 Tax Accounting

(3 credit, 3 lecture, 0 lab) [ACCT105 or ACCT115]*

This course covers practices and procedures for state and federal income taxes for individuals, sole proprietorships and partnerships. OFFERED: fall semesters

AGRICULTURAL SCIENCES

AGRI110 Introduction to Animal Science

(4 credit, 3 lecture, 2 lab)

This course describes the history and development of animal agriculture in the United States and the world. The relationship of animal agriculture to human needs and production systems, marketing and environmental concerns is discussed. Current issues and goals of U.S. farm animal production is presented. Labs include several field trips to explore different types of production and industries in the local area.

OFFERED: spring semesters

ALLIED HEALTH

AHEA100 Emergency Health Care

(2 credit, 2 lecture, 0 lab)

This course covers CPR and first aid for wounds, shock, burns, poisoning, etc. Students successfully completing the course qualify for American Heart Association (AHA) Health Care Provider CPR and AHA Heartsaver First Aid/CPR certifications. OFFERED: every semester

AHEA102 Basic Phlebotomy Technique

(3 credit, 1.5 lecture, 3 lab) [A background check is required.]*

This course presents the theory and practical skills necessary for securing employment in the medical field as an entry level phlebotomist. Upon successful completion, students have an understanding of laboratory-related documentation, regulations, OSHA and Bloodborne Pathogen protocols. Specimen collection, labeling, processing and storage plus practice in basic venipuncture techniques using a variety of equipment and capillary blood collections are also covered. OFFERED: fall and spring semesters

AHEA103 Long-Term Care Nurse Assistant

(3.5 credit, 2 lecture, 3 lab) [A background check is required.]*

Classroom lecture, simulated labs and supervised clinical experience in long-term care facilities are combined to provide the basic nursing skills and knowledge necessary for students to provide patient care appropriately and safely. Upon successful completion students are eligible for employment in health care facilities and to apply for the State of Michigan Competency test. This course can also be used to articulate into the nursing program at Montcalm Community College.

OFFERED: every semester

AHEA106 Dosages & Solutions Nursing/Allied Health

(1 credit, 1 lecture, 0 lab) [MATH100 or a minimum score of 34 in COMPASS Algebra placement domain]*

This course offers a clear and concise method of calculating medication dosages. Adult and pediatric medication calculations are included. The content includes how to read medication labels and physician orders relating to medications; convert metric, apothecary and household measurements; compute IV drip rates; reconstitute powders and administer heparin and insulin.

OFFERED: fall and spring semesters

AHEA109 Foundations of Medical Assisting

(2 credit, 2 lecture, 0 lab) [Background check and minimum score of 82 on COMPASS Reading Test or ENGL051, 70 on COMPASS Writing Test or ENGL071, and 36 on COMPASS Pre-Algebra Test or MATH075; Pre- or corequisite: AHEA215, BUSN180, CMIS101 and AHEA116 or BIOL105]*

In this course students learn about the role of the medical assistant in a variety of healthcare settings and about the history of medicine, medical practice systems and ethical and legal concepts. They also learn therapeutic communication skills, risk management procedures and basic principles and applications of psychology for the medical assisting profession.

OFFERED: fall and spring semesters

AHEA111 Clinical Procedures

(4 credit, 2 lecture, 4 lab) [AHEA109, AHEA215, CMIS101 and AHEA116 or BIOL105]*

This course covers the clinical skills performed by the medical assistant. Included are vital signs, positioning and draping, electrocardiography (EKG), sterilization and asepsis, administration of injections, and assisting with specialty exam procedures and

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

minor office surgery. Essentials of disease conditions, Standard Precautions and OSHA Guidelines are also covered.

OFFERED: fall and spring semesters

AHEA112 Medical Laboratory Procedures

(4 credit, 2 lecture, 4 lab) [AHEA109, AHEA215, CMIS101 and AHEA116 or BIOL105]*

This course presents the theory and procedures for medical laboratory skills performed in a physician's office. Topics covered are microbiology, hematology and urinalysis. OSHA guidelines are emphasized as well as laboratory safety and quality control in the collection and testing of laboratory samples.

OFFERED: spring semesters

AHEA113 Medical Insurance & Coding

(2.5 credit, 2 lecture, 1 lab) [AHEA215] Insurance claim forms for a physician's office, diagnostic and procedural coding, major sources of health insurance and their billing requirements and the larger picture of health care financing are covered in this course. Students generate forms for Blue Shield, Medicare, Medicaid and commercial carriers. Emphasis is placed on the use of billing reference manuals and coding books to accurately verify insurance company rules for billing.

OFFERED: fall and spring semesters

AHEA114 Medical Administrative Procedures

(3 credit, 2 lecture, 1 lab) [AHEA215 and CMIS101]*

This course covers the theory and skills in administrative duties and other office management tasks performed in a medical office/clinic setting. It includes clerical, bookkeeping, accounting and other operational procedures. Students develop marketable skills in the use of computer software for the medical profession. This course is identical to CMIS220.

OFFERED: fall and spring semesters

AHEA115 Pharmacology for Allied Health

(3 credit, 2.5 lecture, 1 lab) [AHEA109, AHEA215, CMIS101 and AHEA116 or BIOL105]*

This course is designed for medical assistant and other allied health students. It provides the theoretical framework for the fundamental principles and concepts of pharmacology. Topics essential to understanding drugs, legislation relating to drugs, drug classifications and actions and drug references are discussed. Basic mathematical dosage calculations and basic principles for medication administration are also included and practiced in a correlating lab session. The responsibility of the medical assistant in understanding and administering drugs and safety for the client are emphasized.

OFFERED: spring semesters

AHEA116 Body Systems and Disease

(3 credit, 3 lecture, 0 lab) [Minimum scores of 82 on COMPASS Reading Test, 70 on COMPASS Writing Test, and MATH075 or 36 on COMPASS Pre-Algebra Test]*

This course is designed for medical assistant and other allied health students. It is a one-semester non-laboratory based course that provides an introduction to each system of the human body and the pathologic conditions associated with each system. The fundamentals of body structure and function, basic mechanisms and concepts of disease and terminology and laboratory tests related to the systems and disease processes are examined. OFFERED: fall and spring semesters

AHEA126 Medical Assistant Externship

(6 credit, 1 lecture, 10 lab) [Instructor Approval]* This course has two parts: externship and seminar. The externship requires students to perform 160 hours of unpaid work experience in an ambulatory health care setting under the supervision of a licensed, registered or certified health care professional. The purpose of the externship is to provide work experience

116 * Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

in administrative and clinical skills as well as interact with patients and other health care personnel. The 16-hour seminar reviews the externship experience and discusses job readiness, résumé preparation, certification and continuing education.

OFFERED: fall and spring semesters

AHEA130 Health Care Revenue Cycle I

(6 credit, 6 lecture, 0 lab) [Minimum of 82 on COMPASS Reading test or ENGL051; minimum of 70 on COMPASS Writing test or ENGL071; minimum of 36 on COMPASS Pre-algebra or MATH075; AHEA215 and CMIS101]*

This course is designed to prepare students for a career in health care admissions and billing processes. The course includes understanding the revenue cycle within health care settings and the impact of current trends within the industry. Recognition of billing and collection regulatory issues and requirements are part of the course. Customer focused communication including interviewing skills and determining coordination of benefits are explored. The role of third party reimbursement is examined including insurance companies such as Medicare, Medicaid, Blue Cross and CHAMPVA. Compliance issues, billing and coding skills are also taught. At the end of this course students sit for the Certified Healthcare Access Associate (CHAA) examination offered by the National Association of Healthcare Access Management, the only nationally recognized certification in this area. The course includes both online and classroom instruction.

OFFERED: fall semesters

AHEA140 Nutrition for Healthy Living

(2 credit, 2 lecture, 0 lab)

Nutrition for Healthy Living is an introductory course for those students who are interested in learning about nutrition for personal reasons, as well as those considering a major in health or science-related fields. It focuses on concepts that are fundamental to nutrition as well as methods to adopt healthier dietary practices. This course could be taken as an

introduction to nutrition for nursing students but does not take the place of the required nutrition course in the nursing curriculum. OFFERED: fall and spring semesters

AHEA170 Wilderness and Remote First Aid

(1.5 credit, 0 lecture, 1.5 lab)

This course is designed to give students a foundation of first aid principles and skills and the confidence to use those skills in emergency situations. Students learn essentials in providing care in delayed help situations as well as wilderness survival skills. CPR for the Professional Rescuer is also included in this course. This course is identical to PHED170.

OFFERED: fall semesters

AHEA200 Emergency Medical Technician

(9.5 credit, 6 lecture, 7 lab) [Background check and minimum score of 82 on COMPASS Reading Test, 70 on COMPASS Writing Test, and MATH075 or 36 on COMPASS Pre-Algebra Test1*

This course allows students to complete the educational requirements for Emergency Medical Technician in one semester. The course includes orientation to pre-hospital emergency medicine, legal responsibilities, anatomy, physiology and pathophysiology, diagnostic signs, triage, basic cardiac life support, injuries to the body, illnesses of the body, childbirth, mental health, environmental emergencies, communications, emergency vehicle operation and extrication. Students learn patient assessment, splinting and bandaging, oxygen administration, and basic and advanced airway management. Clinical rotations include ride time on ambulances and assignments to hospital emergency rooms. Students must have or earn a Professional CPR card prior to beginning clinical rotations. Upon successful completion, students are eligible to take the National Registry examination and apply for licensure as an Emergency Medical Technician.

OFFERED: fall and spring semesters

st Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

AHEA200B MFR-EMT Articulation

(6 credit, 4.75 lecture, 2.5 lab) [Instructor Approval]*

This course, for students with a Medical First Responder license, further explores critical interventions for ill and injured patients and incorporates patient transport in an ambulance. Students learn anatomy, physiology, and pathophysiology, and become proficient at patient assessment, bandaging, splinting, oxygen administration and basic and advanced airway management. Clinical rotations include ride time on ambulances and assignments to hospital emergency rooms. Upon successful completion, students may take the National Registry examination and apply for licensure as an Emergency Medical Technician (EMT) through the Michigan Department of Community Health.

OFFERED: as needed

AHEA215 Medical Terminology

(3 credit, 3 lecture, 0 lab)

This course is a study of medical terminology which is designed to assist medical secretarial, nursing and science students in mastering medical terms. With an understanding of basic terms, students are prepared to pursue additional education in the medical environment.

OFFERED: every semester

AHEA230 Health Care Revenue Cycle II

(6 credit, 6 lecture, 0 lab) [AHEA130]*

This course is designed for students interested in a career as a patient account technician. Skills for constructing and validating various types of insurance claims are taught. Dealing with denials of payment by various insurances is also a focus of the course. Skills necessary to analyze unpaid claims and follow up and apply collection techniques are explored. At the completion of the course,

students sit for the Certified Patient Account Technician (CPAT) examination from the American Association of Healthcare Administrative Management. This course includes both online and classroom instruction.

OFFERED: spring semesters

ANTHROPOLOGY

ANTH260 Cultural Anthropology

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]*

This course covers different cultures, particularly preliterate ones, and includes food-gathering and settlement patterns, status and kinship systems, economic and political organization, religion, language, art and special concepts and methods used by cultural anthropologists.

OFFERED: fall and spring semesters

ANTH265 Indian Cultures of North America

(3 credit, 3 lecture, 0 lab)

This course is designed to provide students with basic background in North American Indian life and culture from prehistoric times to the present day. It consists of an overview of the rich variety of cultures across the continent with an emphasis on comparison and contrast. Emphasis is placed on both Great Lakes and Plains cultures. Archeological sites and study of contemporary issues in areas such as health and education round out the course. Students have the opportunity to enhance their educational experience and earn additional credit by participating in optional field labs.

OFFERED: fall and spring semesters

ART

ARTS120 Introduction to Art

(2 credit, 1 lecture, 2 lab)

This course combines instruction in design theory and art appreciation with studio work in a variety of two- and three-dimensional materials and techniques.

OFFERED: fall and spring semesters

ARTS122 Drawing I

(3 credit, 1 lecture, 3 lab)

This course includes instruction in the basic drawing techniques of contour, gesture, shading, proportion and perspective. Studio work provides drawing experiences using a variety of subjects and materials.

OFFERED: fall semesters

ARTS123 Drawing II

(3 credit, 1 lecture, 3 lab) [ARTS122]*

This course further develops the drawing techniques of contour, gesture, shading and proportion as they apply to still life, the human figure, landscape and architecture. Composition and expression are also explored and students use a variety of materials to draw subjects in the studio and in the field.

OFFERED: spring semesters

ARTS125 Painting I

(3 credit, 1 lecture, 3 lab)

This studio course includes basic instruction in color mixing and the techniques of painting with oils or acrylics. Studio work is in the student's chosen medium.

OFFERED: fall and spring semesters

ARTS126 Painting II

(3 credit, 1 lecture, 3 lab) [ARTS125]* This studio course emphasizes composition and color theory.

OFFERED: fall and spring semesters

ARTS130 Ceramics I

(3 credit, 1 lecture, 3 lab)

This studio course includes instruction in the basic materials, techniques and aesthetics of working in clay. Studio work consists of forming, decorating and glazing hand-built pottery and sculpture, and an introduction to basic techniques of throwing on the potter's wheel.

OFFERED: fall and spring semesters

ARTS131 Ceramics II

(3 credit, 1 lecture, 3 lab) [ARTS130]*

This studio course emphasizes further development of hand-built and wheel-thrown forms and exploration of decorating, glazing and firing techniques.

OFFERED: fall and spring semesters

ARTS140 Two-Dimensional Design & Color

(3 credit, 2 lecture, 2 lab) [ARTS120 or CMIS161]*

This is an introductory course in which students develop a sense of design and color as it relates to graphic design and fine art. After learning the elements and principles of 2-D design, students are introduced to color theory as it applies to design. Students learn to use effective design and color knowledge in formulating a composition. Projects may be produced either by hand art working methods or by computer program, though computer process is not taught in class. This course is applicable for students interested in pursuing either fine arts or computer graphics/web design degrees.

OFFERED: spring semesters

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

ARTS150 Beginning Photography

(3 credit, 2 lecture, 2 lab)

This course introduces basic photographic techniques including camera use, developing, printing, enlarging and matting of black-and-white photographs.

OFFERED: fall and spring semesters

ARTS153 Beginning Digital Photography

(3 credit, 2 lecture, 2 lab)

This course introduces creative use of the digital camera. Darkroom techniques are not taught. Computers and Adobe Photoshop are used to process, retouch and manipulate photos. Computer image capture devices and image output options are explained. OFFERED: fall and spring semesters

ARTS155 Advanced Black & White Photography

(3 credit, 2 lecture, 2 lab) [ARTS150]* This course is a continuation of ARTS150. It expands the elementary principles and skills learned to include methods of manipulating the finished image, such as toning and techniques of retouching, and the effects of exposure and development on black-and-white films.

OFFERED: fall and spring semesters

ARTS225 Art for the Elementary Teacher

(3 credit, 2 lecture, 1 lab)

This course combines instruction in the practice and philosophy of teaching arts and crafts to children with studio work in a variety of materials and techniques suitable for their use.

OFFERED: spring semesters

ARTS227 Painting III

(3 credit, 1 lecture, 3 lab) [ARTS126]* This studio course emphasizes exploration of traditional or experimental painting techniques.

OFFERED: fall and spring semesters

ARTS228 Painting IV

(3 credit, 1 lecture, 3 lab) [ARTS227]*

This studio course emphasizes development of individual expression.

OFFERED: fall and spring semesters

ARTS230 Watercolor Painting

(2 credit, 1 lecture, 1 lab)

This course includes basic instruction in color mixing and the techniques of painting with watercolor.

OFFERED: spring semesters

ARTS232 Ceramics III

(3 credit, 1 lecture, 3 lab) [ARTS131]*

This studio course emphasizes making more complex hand-built or wheel-thrown forms and learning kiln firing procedures.

OFFERED: fall and spring semesters

ARTS233 Ceramics IV

(3 credit, 1 lecture, 3 lab) [ARTS232]*

This studio course emphasizes refining forms and develops knowledge of raw materials and glaze formulation.

OFFERED: fall and spring semesters

AUTOMOTIVE TECHNOLOGY

AUTO103 Automotive Service

(1 credit, 1 lecture, 3 lab) [Minimum COMPASS reading score of 66 or ENGL050, minimum COMPASS writing score of 38 or ENGL070 and minimum COMPASS pre-algebra score of 36 or MATH050]*

This lecture/lab course includes instruction in safety, automotive tools, measuring devices, complete maintenance procedures, service information, and automotive service job-related skills.

OFFERED: fall and spring semesters

AUTO107 Automotive Brake Systems

(4 credit, 1 lecture, 5.5 lab) [AUTO112]*

This course prepares students for State of Michigan certification and includes 104 hours of classroom/lab instruction. Students study the types of brake systems used in modern automobiles and light-duty trucks. Diagnosis and testing of various brake systems are integral parts of the course. Brake systems repair and overhaul are accomplished using industry-standard specialized tools and equipment. Precision machining for brake service is used in the process of repairing and rebuilding the brake system. Handheld scan tools are used for general anti-lock braking systems and manufacturer-specific testing. OFFERED: fall semesters

AUTO109 Automotive Suspension & Steering

(4 credit, 1 lecture, 5 lab) [AUTO112]*

This course prepares students for State of Michigan certification and includes 96 hours of classroom/lab instruction. Students study the types of steering and suspension systems used in modern automobiles and light-duty trucks. Diagnosis and testing of various steering and suspension systems are integral parts of the course. Steering and suspension systems repair, overhaul and alignment are accomplished using industry-standard specialized tools and equipment. Computerized alignment and balancing equipment are utilized.

OFFERED: spring semesters

AUTO112 Basic Automotive Electrical

(2 credit, 0.5 lecture, 2.5 lab)

[Pre- or corequisite: AUTO103]*

This course is an introduction to basic automotive electrical concepts. Topics include circuitry, specialized tools and equipment, electrical symbols and terminology, and diagnosis and repair procedures.

OFFERED: fall and spring semesters

AUTO113 Advanced Automotive Electrical

(2 credit, 0.5 lecture, 2.5 lab) [AUTO112]* This lecture/lab course prepares students for State of Michigan certification and covers automotive batteries, starting and charging systems, lighting circuits, conventional analog and digital instrumentation, and indicator lights and warning devices. OFFERED: fall and spring semesters

AUTO203 Automotive Electrical & Electronic Systems

(4 credit, 1 lecture, 5.5 lab) [AUTO113]*
This lecture/lab course prepares students for State of Michigan certification and covers the following systems as utilized in modern automobiles and small trucks: starting system, charging system, lighting system, driver information system, horn and wash/wiper system, motorized accessories, cruise control, security systems and entertainment systems. Diagnosing and testing are integral parts of the course. Adjustment, repair, overhaul and replacement are accomplished using the required/proper tools and equipment. OFFERED: spring semesters

AUTO205 Automotive Engine Performance

(4 credit, 1 lecture, 5.5 lab) [AUTO113]*

This lecture/lab course prepares students for State of Michigan certification and covers the principles of operation, diagnosis and repair of fuel injectors and turbochargers used in modern automobiles and small trucks. It allows students to service, diagnose, and repair automobiles using special analytical equipment. In addition, the principles of operation, theory of flex fuel vehicles and hybrids, servicing and troubleshooting of the several types of ignition and emission control systems are studied.

OFFERED: fall semesters

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

AUTO262 Automotive Heating & Air Conditioning Systems

(4 credit, 1 lecture, 5 lab) [AUTO112]*

This course prepares students for State of Michigan certification and includes 96 hours of classroom/lab instruction. Students study the types of heating and air conditioning systems used in modern automobiles and light-duty trucks. Diagnosis and testing of various heating and air conditioning systems are integral parts of the course. Heating and air conditioning systems repair, overhaul and replacement are accomplished using industry-standard specialized tools and equipment.

OFFERED: summer semesters

AUTO292A Automotive Service Field Experience

(4 credit, 0 lecture, 4 lab) [Pre- or corequsite: AUTO103]*

Enrolled students perform jobs related in some way to automotive service. Performance on the job is monitored and guided by the employer and college personnel. Weekly discussion group participation and reports are also required.

OFFERED: every semester

AUTO292B Automotive Brake Systems Field Experience

(4 credit, 0 lecture, 4 lab) [AUTO107]* Enrolled students perform jobs related in some way to automotive brake systems. Performance on the job is monitored and guided by the employer and college personnel. Weekly discussion group participation and reports are also required.

OFFERED: every semester

AUTO292C Automotive Suspension & Steering Field Experience

(4 credit, 0 lecture, 4 lab) [AUTO109]* Enrolled students perform jobs related in some way to automotive suspension and steering systems. Performance on the job is monitored and guided by the employer and

college personnel. Weekly discussion group participation and reports are also required. OFFERED: every semester

AUTO292D Automotive Electrical & Electronic Field Experience

(4 credit, 0 lecture, 4 lab) [AUTO203]*
Enrolled students perform jobs related in some way to automotive electrical and electronic systems. Performance on the job is monitored and guided by the employer and college personnel. Weekly discussion group participation and reports are also required. OFFERED: every semester

AUTO292E Automotive Engine Performance Field Experience

(4 credit, 0 lecture, 4 lab) [AUTO205]*
Enrolled students perform jobs related in some way to automotive engine performance. Performance on the job is monitored and guided by the employer and college personnel. Weekly discussion group participation and reports are also required.

OFFERED: every semester

AUTO292F Automotive Heating & Air Conditioning Field Experience

(4 credit, 0 lecture, 4 lab) [AUTO262]*
Enrolled students perform jobs related in some way to automotive heating and air conditioning systems. Performance on the job is monitored and guided by the employer and college personnel. Weekly discussion group participation and reports are also required. OFFERED: every semester

BIOLOGICAL SCIENCES

BIOL100 Biological Science

(4credit, 3 lecture, 2 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071; minimum math score of 36 on COMPASS Prealgebra or MATH075]*

This course provides a general education of the biological sciences (cell biology, genetics, evolution, anatomy, organismal biology, ecology) and a basis for individuals to relate to the world around them. Students apply biological concepts and the scientific method in a laboratory setting. BIOL100 presents an opportunity for students to evaluate their own interest and potential in the biological sciences while preparing students for future biology classes (including botany, zoology, microbiology and anatomy/physiology) at this and other institutions.

OFFERED: every semester

BIOL105 Introduction to Anatomy & Physiology

(4 credit, 3 lecture, 2 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071; minimum math score of 36 on COMPASS Prealgebra or MATH075]*

The overall objective of BIOL105 is to introduce the principles and processes of biology through the study of the human organism. Students gain an understanding of how the human body functions through a detailed study of each organ system that comprises the human body. This course gives students a perspective of how the human body maintains homeostasis through the interaction of organ system functions. Current topics in health sciences, nutrition, biology and medicine are discussed as they pertain to specific organ systems. Laboratory exercises include dissection and physiological experiments pertinent to the topics covered. Students have an option to observe and use a human cadaver.

OFFERED: every semester

BIOL110 Botany

(4 credit, 3 lecture, 2 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071; minimum math score of 36 on COMPASS Prealgebra or MATH075]*

This course is a survey of the Fungi and Plant Kingdoms and their natural communities. Plant structure, classification and function are studied through class and outdoor lab experiences, both on and off campus. Students build a representative botanical collection from local flora, with emphasis on the Angiosperms (flowering plants). Students observe and record the phenology (seasonal rhythm) of selected deciduous plants. Students contribute to the scientific body of botanical knowledge through maintenance of the existing MCC Herbarium and through the inventory and preservation of specimens found in an assigned Montcalm County public site. Students must be comfortable with all-weather outdoor physical activity and wear appropriate clothing for such.

OFFERED: fall semesters

BIOL115 Zoology

(4 credit, 3 lecture, 2 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071; minimum math score of 36 on COMPASS Prealgebra or MATH075]*

This course introduces students to the diversity of invertebrates and vertebrates in Kingdom Animalia. This class is intended for students planning to transfer to a fouryear college or university with a major in the natural sciences. It is recommended that all students have a minimum of two years of high school science because topics such as animal cell chemistry and structure along with genetics and evolutionary processes are briefly but thoroughly covered. Major phyla are explored with an emphasis on identification and taxonomy. Students learn about the development, anatomy and physiology of major phyla through the use of dissection in a laboratory setting. A portion of the class focuses on animals native to Michigan and completion of an invertebrate collection.

OFFERED: even-year spring semesters

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

BIOL121 College Biology I

(4 credit, 3 lecture, 2 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071; minimum math score of 36 on COMPASS Pre-algebra or MATH075]*

This course (in conjunction with BIOL122) provides students with an in-depth introduction to fundamental areas of biology. It is intended as the first part of a two-semester sequence designed for students planning to transfer to a four-year college or university with a major in the natural sciences. Students are not required to take BIOL122 before enrolling in this course. This course emphasizes the scientific method, basic chemistry concepts, cellular structure, function, and metabolism, cellular reproduction and genetics, the diversity of microorganisms, and body systems. Laboratories introduce basic biological techniques and reinforce principles learned in lecture.

OFFERED: fall semesters

BIOL122 College Biology II

(4 credit, 3 lecture, 2 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071; minimum math score of 36 on COMPASS Pre-algebra or MATH075]*

This course (in conjunction with BIOL121) provides students with an in-depth introduction to fundamental areas of biology. It is intended as the second part of a twosemester sequence designed for students planning to transfer to a four-year college or university with a major in the natural sciences. However, students are not required to take BIOL121 before enrolling in this course. BIOL122 emphasizes the scientific method, natural selection and evolutionary theory, investigation of the major eukaryotic kingdoms, basic anatomy and physiology of plants and animals, and ecological principles. Students perform and report on an experiment of their own design. Laboratories introduce basic biological techniques and reinforce principles learned in lecture. OFFERED: spring semesters

BIOL201 Microbiology

(4 credit, 3 lecture, 2 lab) [BIOL100 or BIOL105 or BIOL110 or BIOL115 or BIOL121 or BIOL122 or BIOL202 or BIOL203]*

This course is a study of the biology of various microorganisms including viruses, bacteria, fungi and protozoa and offers the opportunity to observe the roles of these organisms in health and disease as well as their impact on everyday life. Laboratory exercises provide hands-on opportunities to grow and work with a variety of living microorganisms.

OFFERED: fall and spring semesters

BIOL202 Anatomy & Physiology I

(4 credit, 3 lecture, 2 lab) [BIOL100 or BIOL105 or BIOL121]*

BIOL202 is an introduction to basic structural and functional aspects of the human body. The contribution of each body system to the total well-being of the individual is emphasized, as well as the interdependence of the body systems. Specific topics studied include anatomical terminology, chemical basis of life, cells, cellular metabolism, tissues, integumentary system, skeletal system, muscular system, nervous system and special senses. Special emphasis is placed upon homeostatic mechanisms whenever feasible. Laboratory exercises include dissection and physiological experiments pertinent to the topics covered. Students have an option to observe and use a human cadaver.

OFFERED: every semester

BIOL203 Anatomy & Physiology II

(4 credit, 3 lecture, 2 lab) [BIOL202]*

This continuation of BIOL202 covers the digestive system, the endocrine system, the respiratory system, blood, the cardiovascular system, the lymphatic system, the urinary system, water and electrolyte balance, the reproductive system and human genetics. Laboratory exercises are performed throughout the semester and related clini-

cal applications and pathophysiology are discussed when appropriate. Homeostatic mechanisms pertinent to current lecture topics are emphasized and the course offers the opportunity to observe a human cadaver. OFFERED: every semester

BIOL208 Nature Study

(4 credit, 3 lecture, 2 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071; minimum math score of 36 on COMPASS Prealgebra or MATH075]*

This course, occurring primarily in the field, is a hands-on introduction to nature study. Students learn the natural history of many species indigenous to Michigan and the United States as well as the biological processes shaping the natural world. Field trips, both on campus and around the state, focus on identification of local flora and fauna. Topics covered in lecture include taxonomy and classification, characteristics of major kingdoms and phyla, animal behavior, ecology, conservation biology, geology, and astronomy. Students prepare several specimen collections and develop a class field guide. Students should be prepared for mild physical exertion in the field, during both good and bad weather conditions. Participation in a weekend camping trip is required. Upon completion of this course students will have developed the skills necessary to understand, explore and appreciate the natural world around them.

OFFERED: odd year summer semesters

BUSINESS ADMINISTRATION

BUSN135 Introduction to Business

(3 credit, 3 lecture, 0 lab)

This course provides an overview of American free enterprise and its functions and the role of business as an institution in society

from historical and contemporary perspectives. Topics include business organization, management, marketing, finance, legal and regulatory environment and global opportunities.

OFFERED: fall and spring semesters

BUSN141 Employability Skills

(3 credit, 3 lecture, 0 lab)

This course is designed to help students recognize the important role personal qualities play in the work environment and to develop the success attitudes, interpersonal skills and values that are in demand by employers.

OFFERED: spring semesters

BUSN151 Customer Relations

(1 credit, 1 lecture, 0 lab)

This course explores the ways and means of making good first impressions, maintaining satisfaction, communicating effectively, handling complaints and avoiding mistakes which offend customers and emphasizes face-to-face and telephone contacts.

OFFERED: fall and spring semesters

BUSN160 Business Mathematics

(3 credit, 3 lecture, 0 lab) [Minimum score of 44 on COMPASS Pre-Algebra test and CMIS101 or CMIS157]*

This course deals with practical application of mathematics concepts and fundamentals in business solutions. Topics include retail, accounting, finance and statistics. Students explore how to utilize spreadsheet software to compute business math applications. Many of the problems deal with solving equations through algebraic methods, so students must have some algebra background.

OFFERED: fall semesters

BUSN180 Business Communications I

(3 credit, 3 lecture, 0 lab) [Pre- or corequisite: CMIS101]*

This course develops basic communication skills through a review of language structure with attention given to the basics of writ-

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

ing, English for business use, vocabulary, punctuation, capitalization, spelling and numbers.

OFFERED: fall semesters

BUSN185 Business Communications II

(3 credit, 3 lecture, 0 lab) [BUSN180]*

This course focuses on nonverbal, oral, and intercultural communication skills; writing with electronic technology; formatting effective sentences and paragraphs; planning techniques for writing effective correspondence in business; and collaborative writing. OFFERED: spring semesters

BUSN200 Legal Environment of Business

(3 credit, 3 lecture, 0 lab) [ENGL100]* This course is an introduction to the legal system and the common body of knowledge as it relates to the environment of business emphasizes business relations with society and government.

OFFERED: fall and spring semesters

BUSN260 International Business

(3 credit, 3 lecture, 0 lab) [ENGL100]* This course is an overview of international

business with a focus on how American firms function in the economic, social, cultural and political environments outside the United States.

OFFERED: fall and spring semesters

BUSN271 Study Abroad in Business

(3 credit, 3 lecture, 0 lab) [Pre- or corequisite: BUSN260 or Instructor Approval]*

Students experience living and studying in a foreign country, which enables them to learn about a different culture, geography, history, religion, economics and different business practices and ethics. It allows students the opportunity to become acquainted with different cities and countries and the way they are governed, and offers them the opportunity to conduct comparative studies with the

United States. Students explore differences and commonalities through participation in activities and structured observation of their surroundings while abroad, including museums, historical sites, cultural events, architecture, and centers of religion, government, business and education.

OFFERED: odd-year spring semesters

CHEMISTRY

CHEM105 Introductory Chemistry

(4 credit, 3 lecture, 2 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071; and minimum score of 34 in the COMPASS algebra placement domain or MATH100]*

This course covers the basic topics of inorganic chemistry including metrics, types of bonds, gases, chemical reactions, solutions, acids, bases and salts.

OFFERED: every semester

CHEM220 College Chemistry I

(5 credit, 4 lecture, 2 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071; and minimum score of 34 in the COMPASS algebra placement domain or MATH100]* Fundamental principles, laws and theories of general chemistry, including nomenclature, chemical reactions and solution stoichiometry, gas laws, thermochemistry, atomic structure, periodicity and chemical bonding are covered. Concurrent laboratory/workshop sessions include exercises illustrating the principles discussed in lecture. Students who anticipate enrolling in additional chemistry courses are encouraged to take this course as it is basic to all advanced chemistry courses and many professional degrees.

OFFERED: fall semesters

CHEM221 College Chemistry II

(5 credit, 4 lecture, 2 lab) [CHEM220]*

This continuation of CHEM220, includes chemical bonding, liquids and solids, acid-base chemistry, solutions, chemical kinetics, chemical equilibrium, electrochemistry, nuclear chemistry, and a brief survey of organic and biochemistry. Laboratory sessions involve experiments illustrating topics discussed in lecture. This course is a prerequisite for higher level chemistry courses. OFFERED: spring semesters

CHEM250 Survey of Organic Chemistry

(5 credit, 3 lecture, 3 lab) [CHEM105 or CHEM221]*

This survey course covers the field of organic chemistry. Concurrent laboratory includes methods of separation, analysis, synthesis, and purification of organic compounds. If fulfills the entrance requirement to some schools, such as nursing (BSN), physical therapy, physician assistant and others. OFFERED: fall and spring semesters

CHINESE

CHNS130 Elementary Mandarin Chinese I

(4 credit, 4 lecture, 0 lab)

This is a beginning-level course, emphasizing the basic skills of reading, writing, speaking, and listening in Mandarin Chinese within communicative contexts. Students will learn the elementary pronunciation and grammatical principles necessary for comprehending and expressing simple ideas in both spoken and written Mandarin Chinese. Topics of Chinese culture are also presented.

CHNS131 Elementary Mandarin Chinese II

(4 credit, 4 lecture, 0 lab) [CHNS130]

This second-semester Mandarin Chinese course is a continuation of CHNS 130 and further builds reading, writing, speaking,

and listening skills within communicative contexts. Students will continue to expand their knowledge of pronunciation and grammatical principles. Topics of Chinese culture also presented.

COMPUTER INFORMATION SYSTEMS

CMIS100 Keyboarding

(1 credit, 0 lecture, 1 lab)

Students develop a keyboarding knowledge base necessary to enroll in other computer courses.

OFFERED: every semester

CMIS101 Computer Literacy

(3 credit, 2 lecture, 1 lab) [Pre- or corequisite: CMIS100 or CMIS106]*

This course is an introduction to computers as a basic tool. Emphasis is on basic concepts of information technology, understanding operating systems and file management, word processing, spreadsheets, databases, presentations, Internet research and e-mail. Current online course management software is introduced.

OFFERED: every semester

CMIS102 Introduction to Windows

(1 credit, 0 lecture, 1 lab)

This course teaches students the fundamentals and skills necessary to adequately use Windows.

OFFERED: every semester

CMIS104 Ten-Key Numeric Entry

(1 credit, 0 lecture, 1 lab)

This open-lab course uses individualized, self-paced instruction to develop speed and accuracy with the ten-key numeric keypad. OFFERED: every semester

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

CMIS106 Document Production I

(2 credit, 0 lecture, 2 lab) [Pre- or corequisite: CMIS100]*

This open-lab course emphasizes improving keyboarding speed and accuracy and the preparation of business and personal documents such as letters, memos, tables and reports.

OFFERED: every semester

CMIS107 Web 2.0 and Cloud Environments

(3 credit, 3 lecture, 0 lab) [CMIS101]*

This course offers an introduction to working in various cloud-based environments within the World Wide Web. Various Web 2.0 saas (software as a service) tools are used to engage students in collaborative on-line learning environments. This course also investigates using cloud environments to host organizational IT services.

OFFERED: fall semesters

CMIS108 Introduction to Geographic Information Systems

(3 credit, 3 lecture, 0 lab) [CMIS101]*
This course offers an introducti

This course offers an introduction to methods of managing and processing geographic information. A multidisciplinary approach is used to investigate the nature of geographic information, data models and structures for geographic information. Students are involved with geographic data input, data manipulation and data storage and analysis and interpretation.

OFFERED: spring semesters

CMIS110 Exploring the Internet

(1 credit, 0 lecture, 1 lab)

This course provides the framework for learning how to access the Internet and World Wide Web and use them for a variety of tasks including communicating using the Internet; searching, accessing, and evaluating resources. It is designed for people who are interested in learning how to best use

the tools, services and resources currently available on the Web and the Internet.

OFFERED: every semester

CMIS114 Macromedia Dreamweaver

(3 credit, 2 lecture, 2 lab) [CMIS101]*

This course is a comprehensive introduction to the Macromedia Dreamweaver Web authoring software. Topics for this course include designing and creating Web pages with graphics, frames, forms, and layers. Students work with styles and cascading style sheets (CSS), and databases to organize and manage Web pages and publish to a web server.

OFFERED: spring semesters

CMIS115 Introduction to Computer Information Systems

(3 credit, 2 lecture, 2 lab) [CMIS101 & minimum reading score of 82 on COMPASS or ENGL051]* This course covers basic concepts, principles and functions of the computer system and applications software, history and evolution of the computer and its current role in society. Standard applications including word processing, spreadsheets, databases and presentation software are used.

OFFERED: every semester

CMIS116 Microsoft Expression Web I

(2 credit, 0 lecture, 2 lab) [CMIS101]*

This course is an introduction to the Microsoft Expression Web authoring software. Topics for this course include planning, designing and creating Web pages with graphics, links and cascading style sheets. Students explore effective Web navigation and publish sites to a server.

OFFERED: every semester

CMIS130 Introduction to Programming & Logic

(4 credit, 4 lecture, 0 lab) [CMIS101 and minimum score of 44 on COMPASS Pre-Algebra test]* This course investigates problem solving using Visual Basic.NET. Emphasis is on

basic programming structures, string manipulation, binding to external databases, functions, arrays and formatting. Planning, testing, debugging and style of developing visual interface are also examined.

OFFERED: fall semesters

CMIS131 Introduction to Programming C++

(4 credit, 4 lecture, 0 lab) [CMIS101 and minimum score of 44 on COMPASS Pre-Algebra test]*

This course investigates problem solving using the C++ programming language. Emphasis is on input/output, iteration, pointers, arrays, constants and variables, arithmetic operations and expressions. This class focuses on the development of basic program design using fundamental program structures.

OFFERED: spring semesters

CMIS132 Introduction to HTML

(3 credit, 2 lecture, 2 lab) [CMIS101 and minimum score of 44 on COMPASS Pre-Algebra test1*

This course investigates problem solving using HTML (hyper text markup language). Participants develop and publish Web pages utilizing fundamental HTML coding techniques. Emphasis includes proper Web page layout, understanding tags, linking to Internet objects, color and image integration, image mapping, frames, tables, and format. Form validation, Java, and the integration of sound and video files are also considered.

OFFERED: fall semesters

CMIS146 Input Technologies

(2 credit, 0 lecture, 2 lab)

This course is designed to expose students to a variety of emerging input mediums for the office environment. Students learn speech-to-text input using voice recognition software and handwriting input using Microsoft Office.

OFFERED: summer and fall semesters

CMIS153 Microsoft Outlook I

(1 credit, 0 lecture, 1 lab)

This open-lab course provides an introduction to Microsoft Outlook. Students work with the following features of Outlook: electronic mail, calendar and appointments, contacts, tasks, journals and notes and folders. OFFERED: every semester

CMIS156 Microsoft Word I

(1 credit, 0 lecture, 1 lab)

This open-lab course provides an introduction to Microsoft Word. Students create, edit and print documents.

OFFERED: every semester

CMIS157 Microsoft Excel I

(1 credit, 0 lecture, 1 lab)

This open lab course provides an introduction to Microsoft Excel. Students create and edit worksheets and charts.

OFFERED: every semester

CMIS158 Microsoft Access I

(1 credit, 0 lecture, 1 lab)

This open-lab course provides an introduction to Microsoft Access. Students create and manipulate databases.

OFFERED: every semester

CMIS159 Microsoft PowerPoint I

(1 credit, 0 lecture, 1 lab)

This open-lab course provides an introduction to Microsoft PowerPoint. Students create, edit and run slide show presentations. OFFERED: every semester

CMIS161 Digital Images & Editing I

(3 credit, 1 lecture, 3 lab) [CMIS101 or CMIS102]*

This course introduces imaging software, such as Adobe Photoshop, and integrated Web production applications, such as Adobe ImageReady. Students create, edit and enhance a variety of digital images.

OFFERED: fall semesters

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

CMIS162 Digital Illustration

(3 credit, 3 lecture, 0 lab)

Students use graphic design software, such as Adobe Illustrator, to produce illustrations for print, Web or other media.

OFFERED: spring semesters

CMIS163 PDF Publishing

(2 credit, 0 lecture, 2 lab)

Students are introduced to portable document format software, such as Adobe Acrobat, to exchange, review, protect and print PDF documents.

OFFERED: fall semesters

CMIS175 Microcomputer Applications

(4credit, 4lecture, 0lab) [CMIS115 or CMIS256, CMIS257, CMIS258, and CMIS259]*

This continuation of CMIS115 further develops word processing, spreadsheet, database and presentation software techniques using Microsoft Office. Intermediate skills using these applications are developed through applied projects within a business context. OFFERED: fall semesters

CMIS176 Microsoft Publisher I

(1 credit, 0 lecture, 1 lab)

This open-lab course provides an introduction to Microsoft Publisher. Students create, edit, design and print desktop publishing documents.

OFFERED: every semester

CMIS190 Records Management

(3 credit, 0 lecture, 3 lab) [CMIS115 or CMIS258]*

This course presents the principles of the alphabetic, numeric, geographic, and subject systems of records management. Records maintenance, decision-making, and career opportunities in the records management field are also covered. Students complete projects using database software on the computer.

OFFERED: fall and spring semesters

CMIS206 Document Production II

(2 credit, 0 lecture, 2 lab) [Pre- or corequisite: CMIS106]*

This open-lab course emphasizes improving keyboarding speed and accuracy and the preparation of business documents such as itineraries, agendas, minutes, manuals, formal reports and advanced tables. Document formatting for international applications is also introduced.

OFFERED: every semester

CMIS216 Microsoft Expression Web II

(2 credit, 0 lecture, 2 lab) [CMIS116]*

This continuation of CMIS116 further develops the student's ability to use Microsoft Expression Web. Topics for this course include working with tables, forms, behaviors, using advanced CSS techniques for typography and page layouts. Students explore Dynamic Web Templates.

OFFERED: every semester

CMIS220 Medical Administrative Procedures

(3 credit, 0 lecture, 3 lab) [AHEA215 and CMIS101]*

This course covers the theory and skills in administrative duties and other office management tasks performed in a medical office/clinic setting. It includes clerical, book-keeping, accounting and other operational procedures. Students develop marketable skills in the use of computer software for the medical profession. This course is identical to AHEA114.

OFFERED: fall and spring semesters

CMIS235 Voice Transcription: Medical

(2 credit, 0 lecture, 2 lab) [AHEA215 and CMIS284]*

This open-lab course develops medical transcriptionskills using a cassette tape transcriber at the computer. Typing proficiency, grammar, punctuation and proofreading

skills are emphasized while creating medical documents.

OFFERED: every semester

CMIS250 Microcomputer Spreadsheets

(3 credit, 3 lecture, 0 lab) [CMIS115]*

This comprehensive course is designed to address intermediate- to advanced-level skills using Microsoft Excel. It uses a substantial amount of hands-on development and focuses on solving business-related problems. OFFERED: spring semesters

CMIS255 Microcomputer Database Applications

(4 credit, 4 lecture, 0 lab) [CMIS115]*

This comprehensive course addresses concepts of database management and the application of a typical database system in various business applications using Microsoft Access. A strong component in database theory will be presented, as well as substantial hands-on database development. OFFERED: spring semesters

CMIS256 Microsoft Word II

(1 credit, 0 lecture, 1 lab) [Pre- or corequisite: CMIS156]*

This open-lab course provides intermediate instruction in Microsoft Word. Students create documents with multiple columns, charts, special formats and styles. Collaboration tools for working within a group environment are also introduced.

OFFERED: every semester

CMIS257 Microsoft Excel II

(1 credit, 0 lecture, 1 lab) [Pre- or corequisite: CMIS157]*

This open-lab course provides experience using intermediate features of Microsoft Excel. Students create and edit worksheets and charts.

OFFERED: every semester

CMIS258 Microsoft Access II

(1 credit, 0 lecture, 1 lab) [Pre- or corequisite: CMIS158]*

This open-lab course provides experience using intermediate features of Microsoft Access. Students create, manipulate and manage databases.

OFFERED: every semester

CMIS259 Microsoft PowerPoint II

(1 credit, 0 lecture, 1 lab) [Pre- or corequisite: CMIS159]*

This open-lab course provides intermediate instruction in Microsoft PowerPoint. Students enhance presentations with graphic elements, images, visual effects, transitions, interactivity and animation.

OFFERED: every semester

CMIS260 Advanced Microcomputer Applications

(4 credit, 4 lecture, 0 lab) [CMIS250 and CMIS255]*

The use of integrated software applications is investigated using the Microsoft Office application. More advanced functions of Word, Excel, Access and PowerPoint are investigated individually through integration techniques.

OFFERED: fall semesters

CMIS261 Digital Images & Editing II

(3 credit, 1 lecture, 3 lab) [CMIS161 or instructor approval]*

This course covers advanced design techniques using imaging software such as Adobe Photoshop. Students work with curves, levels, blending modes, special effects and painting and drawing tools to create designs and images.

OFFERED: fall and spring semesters

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

CMIS265 Systems Analysis & Design

(4 credit, 4 lecture, 0 lab) [Pre- or corequisite: CMIS260]*

This course details systems development methodology as applied to the analysis, design, and implementation of manual and computerized systems and offers the opportunity to participate in the analysis and design of a simulated business system. Course topics include the role of the system analyst; system investigators; design of systems output, files, processing and controls; project management and implementation. OFFERED: fall semesters

CMIS270 Office Administration

(3 credit, 3 lecture, 1 lab) [CMIS284]*

This course emphasizes advanced-level office administration concepts needed in business and industry. Communications, information systems, presentation software, administrative support, human relations, time management, ethics, telecommunications, and professional development are stressed.

OFFERED: spring semesters

CMIS280 Microsoft Publisher II

(2 credit, 0 lecture, 2 lab) [Pre- or corequisite: CMIS176]*

This open-lab course provides experience using intermediate features of Publisher to perform desktop publishing.

OFFERED: every semester

CMIS284 Document Production III

(2 credit, 0 lecture, 2 lab) [Pre- or corequisite: CMIS206]*

This open-lab course emphasizes improving keyboarding speed and accuracy and the preparation of documents in a medical and legal environment, and designing forms, publications and Web pages.

OFFERED: every semester

CMIS285 Microsoft Word III

(2 credit, 0 lecture, 2 lab) [Pre- or corequisite: CMIS256]*

This open-lab course provides advanced instruction in Microsoft Word. Students work with tables, graphics and objects; create styles; automate mass mailings; work with large documents; create standardized forms and documents; work collaboratively; and customize Word.

OFFERED: every semester

CMIS286 Microsoft Excel III

(2 credit, 0 lecture, 2 lab) [Pre- or corequisite: CMIS257]*

This open-lab course provides advanced instruction in Microsoft Excel. Students will create templates, validate entries, and use Excel database capabilities, as well as utilize various analysis and collaboration tools. OFFERED: every semester

CMIS287 Microsoft Access III

(2 credit, 0 lecture, 2 lab) [Pre- or corequisite: CMIS258]*

This open-lab course provides advanced instruction in Microsoft Access. Students create advanced reports and queries, use macros and switchboards, and explore integration with other programs.

OFFERED: every semester

CMIS288 Microsoft PowerPoint III

(2 credit, 0 lecture, 2 lab) [Pre- or corequisite: CMIS259]*

This open-lab course provides advanced instruction in Microsoft PowerPoint. Students create presentations for remote broadcasts, kiosks and Web publications.

OFFERED: every semester

CMIS290 Field Experience

(variable credit) [Written instructor approval]* This course consists of a carefully planned cooperative work experience in the office. Students must show evidence of satisfac-

tory progress through employer reports and instructor visits to the office site.

OFFERED: as needed

COMMUNICATION

COMM120 Orientation to Deafness

(3 credit, 3 lecture, 0 lab) [Minimum writing score of 70 on COMPASS and minimum reading score of 82 on COMPASS]*

This course is designed to introduce students to pathological and cultural perspectives of deafness and the implications those perspectives have for persons who are deaf. Elements of the communications process, nonverbal communication, group dynamics, and research and oral presentation skills are also covered, using lectures, readings and group discussions.

OFFERED: odd-year spring semesters

COMM125 American Sign Language I

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071]* This course provides a basic knowledge of American Sign Language vocabulary and grammar and its place in American society. Elements of the communication process, ASL presentation skills, and group dynamics are also covered.

OFFERED: odd-year fall semesters

COMM126 American Sign Language II

(3 credit, 3 lecture, 0 lab) [COMM125]*
This course is designed to increase students' knowledge and use of American Sign Language vocabulary and grammar, as well as focus on specific grammatical elements for more in-depth analysis and practice. It also includes an advanced knowledge of ASL's place in American culture.

OFFERED: even-year spring semesters

COMM130 Fingerspelling in ASL

(3 credit, 3 lecture, 0 lab) [Pre- or corequisite: COMM126]*

This course provides students with concentrated instruction and practice in both expressive and receptive fingerspelling and numbering skills. Aspects of sign language interpreting are discussed.

OFFERED: even-year fall semesters

COMM160 Journalism

(3 credit, 3 lecture, 0 lab)

This introductory course covers the basic techniques in writing, the principles of effective news writing, and a survey of newsroom organization and offers practical experience through laboratory sessions.

OFFERED: even-year fall semesters

COMM210 Speech

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071]* This introductory course in public speaking provides practice in speaking with interest and purpose before an audience. By presenting a series of brief talks before peers, students become familiar with the basic principles of speech organization, preparation and delivery.

OFFERED: every semester

COMM220 Interpersonal Communication

(3 credit, 2 lecture, 1 lab) [Minimum reading score of 82 on COMPASS or ENGL051]*

This course increases the student's understanding of interpersonal communication in social and professional areas. Students learn theories and ethics of interpersonal communication, evaluate message strategies used in interpersonal communication contexts, select and apply communication strategies that strengthen social and professional relationships, and solve interpersonal communication problems in a systematic and thoughtful fashion.

OFFERED: every semester

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

COSMETOLOGY

COSM120 Cosmetology 1

(12 credit, 5 lecture, 9 lab) [Minimum COM-PASS reading score of 66 or ENGL050, minimum COMPASS writing score of 38 or ENGL070 and minimum COMPASS prealgebra score of 36 or MATH050]*

This course is the first year fall class in the cosmetology sequence. This course covers the science of cosmetology and includes cosmetology laws and rules as well as sterilization and sanitation techniques and policies. Bacteriology pursuant to sterilization and sanitation will be studies. Students learn techniques for communicating with clients. Students also learn scalp and hair treatment techniques. This course runs for 18 weeks and follows the Montcalm Area Career Center's schedule.

OFFERED: fall semester only

COSM130 Cosmetology 2

(12 credit, 5 lecture, 9 lab) [COSM120]*

This is the first year spring class in the cosmetology sequence. This course covers manicuring and pedicuring techniques, chemical hair restructuring, and hair coloring. This course runs for 18 weeks and follows the Montcalm Area Career Center's schedule.

OFFERED: spring semester only

COSM135 Cosmetology 3

(6 credit, 5 lecture, 8 lab) [COSM130]*

This course is the first year summer class in the cosmetology sequence. This course allows students to gain more experience with advanced hair coloring techniques. OFFERED: summer semester only

COSM220 Cosmetology 4

(16 credit, 12 lecture, 22 lab) [COSM135 and Instructor Approval]*

This course is the second year fall class in the cosmetology sequence. This course allows students to learn facial structures, identify various health disorders, and apply facial

and nail techniques. To enroll in this course students must have previously completed 690 clock hours of COSM instruction. This course runs for 18 weeks and follows the Montcalm Area Career Center's schedule. OFFERED: fall semester only

COSM230 Cosmetology 5

(16 credit, 12 lecture, 22 lab) [COSM220]*

This course is the second year spring class in the cosmetology sequence. This course covers salon management, employability skills, and prepares students to take the State Licensing Board Examination. Upon completion of this course students should have completed the required 1,500 attendance house and 900 hours of lab work necessary to sit for the State Licensing Board Examination. This course runs for 18 weeks and follows the Montcalm Area Career Center's schedule. OFFERED: spring semester only

COSM250 Cosmetology Instructional Internship

(16 credit, 9 lecture, 22 lab) [Written instructor approval]*

This tutorial course is taught in an active school setting, giving experience in a variety of training situations. One student is enrolled at a time and is expected to devote approximately 28 hours per week throughout the 18-week course. Emphasis is on methods of presentation, record keeping, safety, regulations, and customer/student relations.

OFFERED: as needed

CRIMINAL JUSTICE/ CORRECTIONS

CRIM100 Introduction to Criminal Justice

(3 credit, 3 lecture, 0 lab)

This course provides a broad overview of the history and scope of the American criminal justice system primarily through a descriptive survey of the agencies and processes involved in the administration of criminal justice. The course emphasizes historical, constitutional (legal) and political considerations. Criminal justice is analyzed as a system, with emphasis on the problems and prospects for change.

OFFERED: fall semesters

CRIM110 Introduction to Corrections

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]* This course provides a broad overview of the American corrections system and presents an explanation of the various goals of corrections including incapacitation, retribution, deterrence, rehabilitation, and reintegration. Specific coverage of the development of correctional ideologies from early history to the modern era and how those ideologies were reflected in various types of programs is presented. Additional attention is given to the legal issues and processes which move an individual in and out of the system and how civil rights decisions have influenced the continuing development of corrections.

CRIM115 Stress Management for Correctional Officers

(1 credit, 1 lecture, 0 lab)

OFFERED: fall semesters

This course focuses on the physical and psychological effects of a criminal justice career on the practitioners and their families. A variety of stress management strategies and techniques are discussed. Students will select and demonstrate those most appropriate for their own needs.

OFFERED: spring semesters

CRIM120 Corrections Institutions/Facilities

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]*
This course provides a concentrated overview of correctional institutions and facilities. It is primarily for students intending to pursue a career in the criminal justice system and those already employed within the system. The course is also relevant to stu-

dents pursuing a social science orientation. Students explore federal, state, county, and local facilities including maximum-, close-, medium-, and minimum-custody facilities. It addresses community facilities and coeducational facilities and the safety and security requirements and considerations related to each. Constitutional and managerial issues are stressed. The course includes historical developments, philosophy, sociological concepts and definitions and their application. OFFERED: fall semesters

CRIM125 Police Administration & Operations

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]* This course is for persons pursuing careers in criminal justice or those already employed within the system. Participants explore the evolution of administrative theory with special emphasis on its impact and application at the operational and administrative levels of law enforcement agencies.

OFFERED: spring semesters

CRIM130 Criminal Investigation

(3 credit, 3 lecture, 0 lab)

This course covers the basic principles of modern criminal investigation techniques including crime scene search, collection and preservation of evidence, follow-up investigation, police criminalistics, and court preparation and testimony.

OFFERED: spring semesters

CRIM136 Communication in Criminal Justice

(3 credit, 3 lecture, 0 lab)

This course addresses the communication needs of persons working in the field of criminal justice. It approaches communication as a continuing process of receiving and transmitting information between individuals, groups, and agencies. The course focuses on the unique responsibilities of line officers to perceive, evaluate, document, and disseminate information in a variety of mediums. Students examine the relationship between

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

oral, written, and multimedia communication and their appropriate use in criminal justice environments. It is applicable for all criminal justice students: law enforcement, state corrections and local corrections.

OFFERED: fall semesters

CRIM137 Defensive Tactics

(2 credit, 1 lecture, 2 lab)

This course is designed to meet Michigan Commission On Law Enforcement Standards (MCOLES), Michigan Corrections Officer Training Council (MCOTC), and Michigan Sheriff's Coordinating and Training Council (MSA) requirements for defensive tactics to prepare law enforcement and corrections students for employment in the field of criminal justice.

OFFERED: fall semesters

CRIM138 Emergency Intervention Techniques

(2 credit, 1 lecture, 2 lab)

This course addresses the essentials of responding appropriately to a wide variety of crisis situations in a custodial environment. It balances the unique needs of custody, care and control required injail settings where the law, conflicting interests, human emotions, and discretion often collide. The course approaches various crisis situations as only one stage in a continuum of events and decisions which can be effectively managed to reduce trauma for all parties involved.

OFFERED: fall semesters

CRIM210 American Criminal Law

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071]*

This course is for students seeking employment in the criminal justice system. It covers the historical development and philosophy of criminal law including legal definitions and concepts and their application to the criminal justice system.

OFFERED: fall semesters

CRIM220 Legal Issues in Corrections

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]*

This course provides an overview of state and federal law related to corrections with emphasis on constitutional issues and remedies for violations of rights. A wide range of policy considerations behind corrections law and administrative procedures are covered. Leading cases and court decisions and their impact on corrections are explored.

OFFERED: spring semesters

CRIM230 Juvenile Delinquency

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071]* This introductory course is for students interested or already employed in the criminal justice system. It includes theories of delinquency causation, examination of the family relationship and juvenile delinquency, the juvenile justice system and delinquency prevention programs.

OFFERED: spring semesters

CRIM235 Parole, Probation & Community Corrections

(3 credit, 3 lecture, 0 lab) [CRIM100 or CRIM110]*

This course reflects the criminal justice system's recent focus on intervention and prevention strategies for people who are at high risk for criminal behavior. Students are exposed to innovative community corrections programs employing technological advances as well as more traditional community resources. Examination of the roles and capabilities of federal, state, and local agencies is central.

OFFERED: spring semesters

CRIM240 Introduction to Security Systems

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071]* This course is designed for persons employed

136 * Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

in or interested in a career within the broad field of public and private security administration. The course is designed to provide a broad overview of public and private security in its practical application, and to suggest certain theoretical approaches to some of its problems. Specific coverage includes the history and organization of security, principles of risk assessment, physical protection, systems of defense, internal security, fire prevention, emergency planning, safety and insurance protection.

OFFERED: fall semesters

CRIM250 Client Relations in Corrections

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]*
This course examines the dynamics of human interaction within correctional facilities. Human relations in general are presented to establish a basis for more specific examination of the unique and complex situation found in corrections. The meaning and impact of culture and the causes and influence of prejudice on clients and corrections staff is explored. Discussion focuses on values, ethics and professional responsiveness.

OFFERED: spring semesters

CRIM260 Client Growth and Development

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]* This course provides an understanding of and sensitivity to the motivations and behaviors of correctional clients. Students review the general factors believed to be influential in human development then analyze specific problems of prisoners. The course includes prevention theories and intervention and treatment strategies.

OFFERED: spring semesters

CRIM290 Criminal Justice Practicum

(variable credit) [Approval from Program Coordinator]*

This course is a planned program of internship, including observation, study, and work in selected criminal justice-related agencies. It supplements previous classroom study through participation in United States or foreign criminal justice systems.

OFFERED: as needed

COMPUTER SUPPORT TECHNOLOGY

CSTC100 Electronic Circuit Analysis

(3 credit, 2 lecture, 2 lab)

This course emphasizes the analysis of passive electrical circuits using Ohm's Law, Kirchoff's laws, network theorems, phasors and computer simulation. Students use appropriate test equipment in the development of troubleshooting techniques. This course is identical to ELEC110.

OFFERED: fall and spring semesters

CSTC105 Electronic Fabrication

(1 credit, 0 lecture, 2 lab) [CSTC100 or ELEC110]*

This course provides students an opportunity to develop skills of electronic soldering and interconnection technology. Competencies include practical knowledge and fundamental hand skills in the soldering and removal of terminal connections, axial lead components, integrated circuits and surface mount components.

OFFERED: spring semesters

CSTC127 Introduction to Networking

(3 credit, 2 lecture, 2 lab) [CMIS115 or CSTC171]*

This course provides a comprehensive introduction to computer network systems and the skills needed to install, configure, and

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

troubleshoot basic networking hardware peripherals and protocols. Lab time emphasizes system installation and problem solving techniques. Material is relevant to CompTIA's Network+ Certification Exam. OFFERED: spring semesters

CSTC130 Digital Logic

(3 credit, 2 lecture, 2 lab) [CSTC100 or ELEC110 or ELEC111]*

This foundation course presents digital concepts in combinational and sequential logic. Topics include number systems, logic gates, flip-flops, registers and basic trouble-shooting techniques. The course includes a survey of digital applications in computer systems and industrial control.

OFFERED: spring semesters

CSTC133 Network Management

(3 credit, 2 lecture, 1 lab) [CSTC171]*

This hands-on course introduces students to the concepts, principles and skills necessary to network managers. Students successfully completing this course are competent in the skills necessary to install, manage and troubleshoot network management systems. While a specific networking system is utilized, the skills acquired are transportable to a variety of network management systems. OFFERED: fall semesters

CSTC171 Computer Maintenance I

(3 credit, 2 lecture, 2 lab) [Pre- or corequisite: CSTC100 or ELEC110 or ELEC111]*

This is the first of two courses that introduces students to entry-level skills used in personal computer repair and maintenance. Topics include computer assembly, component specifications, installation and configuration of operating system software, memory optimization, resolution of hardware and software conflicts, and peripheral maintenance. Lab time emphasizes a "hands-on" use of computers and problem-solving techniques.

OFFERED: fall and spring semesters

CSTC172 Computer Maintenance II

(3 credit, 2 lecture, 2 lab) [CSTC171]*

This is the second course that prepares students in computer repair skills. Topics include installation and configuration of disk drives, system memory, video cards, sound cards and operating systems. Resolving hardware and software conflict, and an introduction to networking are also covered. Lab time emphasizes a "hands-on" use of computers and problem-solving.

OFFERED: spring semesters

CSTC237 Network Security

(3 credit, 2 lecture, 2 lab) [Pre- or co-requisite: CSTC127 or CSTC171]*

This course provides practical techniques for implementing security in today's computer networks. Current risks and threats to an organization's data, along with methods of safeguarding this data, are discussed. Students implement basic security services on various types of computer networks. Material is relevant to CompTIA's Security+Certification Exam.

OFFERED: fall semesters

EARLY CHILDHOOD DEVELOPMENT

ECDV110 Child Development: Infants & Toddlers

(3 credit, 3 lecture, 0 lab) [PSYC120, Pre- or corequisite ECDV120]*

This course provides students with knowledge of physical, cognitive, social, and emotional development in the prenatal, infancy and toddler periods. Basic theories, developmental principles, safety issues, nutrition and guidance techniques are presented. Students spend 16 hours observing infants and toddlers in the field.

OFFERED: spring semesters

ECDV120 Child Development: Preschoolers

(3 credit, 3 lecture, 0 lab) [Pre- or corequisite: ECDV110]*

This course provides students with knowledge of physical, cognitive, social and emotional development during the preschool years. Basic theories, developmental principles, guidance techniques, safety, health, nutrition and parent involvement strategies are presented. Students spend 30 hours observing preschoolers in the field.

OFFERED: spring semesters

ECDV125 Child Development: The School Age Child

(3 credit, 3 lecture, 0 lab) [Pre or corequisite: ECDV120]*

This course provides students with knowledge of physical, cognitive, social and emotional development of children ages six through twelve. Basic theories, developmental principles, guidance techniques, safety, health, nutrition and family involvement strategies are presented.

OFFERED: fall semesters

ECDV131 Infant/Toddler Curriculum

(3 credit, 3 lecture, 0 lab) [Pre- or corequisite: ECDV110]*

This course explores curriculum development in infant/toddler education programs. Students explore the social, emotional, creative, physical, and cognitive skill development and needs of infants and toddlers. Through this course, students gain the skills necessary to plan developmentally appropriate curriculum. Students spend 30 hours in the field developing and delivering curriculum.

OFFERED: spring semesters

ECDV135 Preschool Curriculum

(3 credit, 3 lecture, 0 lab) [ECD V120]* This course explores curriculum development in preschool education programs. Students explore the social, emotional, creative, physical and cognitive skill development and

needs of preschoolers. Through this course, students gain the skills necessary to plan developmentally appropriate curriculum, including developmentally appropriate movement activities to enhance the lives of young children. Students spend 30 hours in the field developing and delivering curriculum.

OFFERED: fall semesters

ECDV140 Michigan Child Care Futures: Basics

(1 credit, 1 lecture, 0 lab)

This course provides basic comprehensive training for family, group, center, relative and certified aide child care providers. This training meets the child development training requirements for State licensing standards for group child care homes. This training can be used toward earning a Child Development Associate (CDA) credential. OFFERED: as needed

ECDV141 Michigan Child Care Futures: Advanced

(1 credit, 1 lecture, 0 lab) [ECD V140]*

This course provides advanced training for family, group, center, relative and certified aide child care providers. This training can be used toward the child development training requirements for State licensing standards for group child care homes, and can be used toward earning a Child Development Associate (CDA) credential.

OFFERED: as needed

ECDV142 Michigan Childcare: Special Needs

(1 credit, 1 lecture, 0 lab) [ECDV140]*

This course provides special needs training to family, group, center, relative and certified aide childcare providers. The training can be used toward the child development training requirements for State licensing standards for group child care homes, as an elective for the Early Childhood Development Associate degree and to meet a portion of the related instruction leading to the Child Development Associate (CDA) credential.

OFFERED: as needed

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

ECDV143 Michigan Childcare Futures: All Children

(1 credit, 1 lecture, 0 lab) [ECDV140]*

This course provides special needs training to family, group, center, relative and certified aide childcare providers. The training can be used toward the child development training requirements for State licensing standards for group child care homes, as an elective for the Early Childhood Development Associate degree and to meet a portion of the related instruction leading to the Child Development Associate (CDA) credential. OFFERED: as needed

ECDV150 Administration of Early Childhood Programs

(3 credit, 3 lecture, 0 lab) [ECDV120]* This course provides an in-depth study of the role of the early childhood program administrator in such areas as food service, health and safety, implementation and supervision of an early childhood program, and business techniques necessary to operate a successful early childhood program. This course provides hands-on experience

in grant writing and budgeting for early childhood programs.
OFFERED: fall semesters

ECDV160 Children with Special Needs

(3 credit, 3 lecture, 0 lab) [ECDV120]*

This comprehensive review of the various issues regarding young children with special needs includes the recognition of individual likenesses and differences among children, developmental milestones and effective caregiver/teacher strategies for working with this population. Roles of teachers and parents as they relate to children with special needs are addressed. Also included are the implications of social and political policy on the process of inclusion of young children in early childhood programs.

OFFERED: fall semesters

ECDV200 CDA: The Credentialing Process

(1 credit, 1 lecture, 0 lab)

This class is intended for students planning to obtain a Child Development Credential (CDA) through the CDA National Credentialing Program. This course should be taken at the end of a student's program.

OFFERED: spring semesters

ECONOMICS

ECON215 Principles of Macroeconomics

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]*

This course provides an introductory exposure to macroeconomics. The course materials focus on the measurement of the national economy, gross national product, inflation and unemployment, and the principles for controlling the economy through taxes, spending and monetary policy.

OFFERED: fall and spring semesters

ECON216 Principles of Microeconomics

(3 credit, 3 lecture, 0 lab) [ECON215]*
This course introduces students to the basics of micro-economic analysis and international trade. The course illustrates the principles students employ in making economic decisions and the principles followed by industry. Students should be capable of further studies at another institution and be able to directly apply coursework to a business environment. OFFERED: fall and spring semesters

EDUCATION

EDUC100 Introduction to Teaching

(3 credit, 3 lecture, 0 lab)

This introductory course provides an opportunity to explore the teaching profession through classroom observation, lectures, readings and discussion. The course assists the student in the decision of whether to pursue K-12 teaching as a profession. In addition to scheduled lecture hours, students spend a minimum of 10 hours observing in a K-12 classroom during the course of the semester.

OFFERED: fall and spring semesters

For additional elementary education courses, see ARTS, MATH and MUSI.

ELECTRICITY/ ELECTRONICS

ELEC110 Electronic Circuit Analysis

(3 credit, 2 lecture, 2 lab)

This course emphasizes the analysis of passive electrical circuits using Ohm's Law, Kirchoff's laws, network theorems, phasors and computer simulation. Students use appropriate test equipment in the development of troubleshooting techniques. This course is identical to CSTC100.

OFFERED: fall and spring semesters

ELEC111 DC Electronics

(3 credit, 2 lecture, 3 lab) [Pre- or corequisite: MATH100 or MATH110]*

This is an introduction to basic electronics with emphasis on direct current. This course covers the physics of electronics, voltage, resistance, Ohm's Law, magnetism, DC motors and generators, inductance, capacitance, RC time constants and network theorems. Laboratory experiments include measuring DC current and voltage, resistance and power, using bridge circuits, capacitors and inductors.

OFFERED: fall semesters

ELEC112 AC Electronics

(3 credit, 2 lecture, 3 lab) [ELEC111; pre- or corequisite: MATH120]*

This is a continuation of the study of basic electronics with emphasis on alternating

current. The course includes AC measurements, capacitive, inductive and tuned circuits, transformers and basic DC and AC motors. Laboratory experiments include measuring AC voltage and power, use of the oscilloscope, RC, RL, and RCL circuits and transformer operation.

OFFERED: spring semesters

ELEC115 Semiconductors & Instrumentation

(3 credit, 2 lecture, 3 lab) [ELEC112]*

This is an overview of semiconductor devices and an introduction to electronic instrumentation. Starting with the basic diode and a small signal transistor, students empirically create a set of component curves and learn to extract information from them. This also includes in-depth exposure to oscilloscope use and operation. Later in the course the class revisits in more detail the theory and operation of electronic instrumentation. The lab experience in this part of the course includes the design of a working multi range volt meter, an ammeter and an ohm meter, from a single range analog panel meter and a single range digital panel meter.

OFFERED: fall semesters

ELEC210 Electronic Circuits

(3 credit, 2 lecture, 2 lab) [Pre- or corequisite: ELEC115]*

This course presents electronic component applications and covers basic power supplies, regulated power supplies and amplifiers including audio, RF, and power types and some basic digital and pulse circuitry. Construction and analysis of these circuits and proper soldering and desoldering techniques are included in the laboratory experiments.

OFFERED: spring semesters

ELEC230 Digital Electronics

(3 credit, 2 lecture, 2 lab) [CSTC130]*

This course presents techniques used in building and analyzing digital circuitry and includes numbering and coding systems, digital logic gates, Boolean algebra, combi-

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

national and sequential logic circuits and applications.

OFFERED: fall semesters

ELEC240 Microprocessors

(3 credit, 2 lecture, 2 lab) [Pre- or corequisite: ELEC115]*

This course is a continuation of ELEC230 and includes microcomputer basics and assembly language programming, interfacing memory, A/D converters and other I/O devices.

OFFERED: spring semesters

ELEC251 Industrial Electrical Maintenance I

(2 credit, 1 lecture, 1 lab) [CSTC100 or ELEC110 or ELEC111 and ELEC112]*

This course is for those who have an understanding of electrical basics and want to learn more about industrial motors and their controls. Included is a study of wiring symbols and diagrams, motors and controls, ladder logic and three-phase power.

OFFERED: fall and spring semesters

ELEC252 Industrial Electrical Maintenance II

(2 credit, 1 lecture, 1 lab) [Pre- or co-requisite: ELEC251]*

This course builds on knowledge and skills taught in ELEC251 and is for students who possess a good understanding of basic industrial motor circuits. Included is a study of timing circuits, variable frequency drives, reduced voltage starting and troubleshooting and motor protection.

OFFERED: fall and spring semesters

ELEC253 Industrial Electrical Maintenance III

(2 credit, 1 lecture, 1 lab) [ELEC252]*

This course is an introduction to Allen-Bradley programmable controllers, their use, selection, setup and servicing. Students develop an understanding of the PLC, its logic functions, its installation, troubleshooting and network communication.

OFFERED: fall and spring semesters

ELEC254 Industrial Electrical Maintenance IV

(2 credit, 1 lecture, 1 lab) [Pre- or co-requisite: ELEC253]*

This course builds on the skills taught in ELEC253 and is for students who possess a good understanding of Allen-Bradley programmable logic controllers. Students advance their skills by using the PLC's in a simulated industrial environment, including the use of remote and analog I/O. Students also study components, safety, maintenance and off-line computer programming.

OFFERED: fall and spring semesters

ELEC263 Industrial Control Systems-Siemens

(4 credit, 2 lecture, 2 lab) [ELEC252]*

This course emphasizes the use, selection, set up, and servicing of programmable logic controllers (PLCs), and provides experience in PLC logic functions, installation, programming, networking protocols, remote I/O, and troubleshooting PLC programs and installations. Extensive hands-on training is conducted using Siemens Simatic S7-300 PLC hardware and Siemens Simatic Step 7 programming software.

OFFERED: fall and spring semesters

ENGLISH

ENGL050 Introduction to College Reading

(3 credit, 3 lecture, 0 lab) [Minimum COM-PASS reading score of 49; pre- or corequisite: GNST156]*

This course develops basic reading skills and strategies necessary to successfully meet the demands of college reading. Active reading strategies introduced and practiced include previewing, annotating, making connections, and identifying key ideas and details. Reading activities emphasize development of vocabulary and improvement of comprehension and reading ability. Students who do not meet the exit criteria of C or better

for Introduction to College Reading will be required to repeat the course.

OFFERED: every semester.

ENGL051 College Reading

(3 credit, 3 lecture, 1 lab) [Minimum COMPASS reading score of 66 or ENGL050; pre- or corequisite: GNST100]*

This course develops basic reading skills and strategies necessary to successfully meet the demands of college reading. Topics of study include vocabulary skills, active reading strategies, identification of key ideas and details, patterns of organization, and analysis of argument. Emphasis is placed on critical thinking through three levels of comprehension: literal, inferential, and applied. Students who do not meet the exit criteria of C or better for College Reading will be required to repeat the course.

OFFERED: every semester

ENGL070 Introduction to Basic Writing

(3 credit, 3 lecture, 1 lab) [Minimum COM-PASS writing score of 21; pre- or corequisite: GNST156]*

This course is designed to prepare students for success in the Basic Writing course (ENGL071). This course will focus on the process of writing but specifically emphasizes elements of sentence structure, with focus on grammar and punctuation, proceeding to topic sentence analysis, paragraph development, and finally basic essay writing. Students who do not meet the exit criteria of C or better for Introduction to Basic Writing will be required to repeat the course.

OFFERED: every semester

ENGL071 Basic Writing

(3 credit, 3 lecture, 1 lab) [Minimum COMPASS writing score of 38 or ENGL070; pre- or corequisite: GNST100]*

This course, designed for students who need to improve the writing skills necessary to succeed in Freshman English I, emphasizes the composition of essays with further work on sentence and paragraph structure. Attention is also given to punctuation, grammar, and spelling. Students who do not meet the exit criteria of C or better for Basic Writing will be required to repeat the course.

OFFERED: every semester

ENGL100 Freshman English I

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071]* In this introduction to college-level writing, students learn to engage in the process of writing, produce written texts that communicate with a variety of audiences and develop critical thinking skills.

OFFERED: every semester

ENGL101 Freshman English II

(3 credit, 3 lecture, 0 lab) [ENGL100]*

This extension of ENGL100 emphasizes incorporating research into written work and oral presentations, developing skills of analysis and critical thinking, developing skills of persuasion and argumentation, and developing ability to discuss concepts encountered in reading and research of social and cultural perspectives.

OFFERED: every semester

ENGL195 Introduction to Literature

(3 credit, 3 lecture, 0 lab) [Pre- or corequisite: ENGL100]*

This course introduces students to text-based, reader-based and context-based interpretive strategies for the study of poetry, fiction, and drama. Through lecture, discussion, interpretive and research-based writing and group project work, students learn the characteristics of each genre and the vocabulary of literary interpretation.

OFFERED: odd-year spring semesters

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

ENGL200 American Thought & Literature I

(3 credit, 3 lecture, 0 lab) [ENGL100 or minimum reading score of 82 on COMPASS or ENGL051 and minimum writing score of 70 on COMPASS or ENGL071]*

This course analyzes America's social and cultural values and conflicts through its literature, beginning with the Puritan period, continuing with the ages of reason and romanticism and concluding with realism and the advent of naturalism.

OFFERED: fall semesters

ENGL201 American Thought & Literature II

(3 credit, 3 lecture, 0 lab) [ENGL100 or minimum reading score of 82 on COMPASS or ENGL051 and minimum writing score of 70 on COMPASS or ENGL071]*

This course surveys late 19th century and 20th century American literature.

OFFERED: spring semesters

ENGL212 Oral Interpretation

(3 credit, 3 lecture, 0 lab) [ENGL100 or minimum reading score of 82 on COMPASS or ENGL051 and minimum writing score of 70 on COMPASS or ENGL071]*

This course covers performance literature in prose, poetry, drama, music, humor and cinema. Through analysis and performance of works, students increase understanding and improve their ability to communicate. Interpretive readings are related to other speech communication including public address, television and radio, theater, speech improvement and teaching of literature.

OFFERED: fall semesters

ENGL220 English Literature from the Beginning to 1798

(3 credit, 3 lecture, 0 lab) [ENGL100 or minimum reading score of 82 on COMPASS or ENGL051 and minimum writing score of 70 on COMPASS or ENGL071]*

This survey course stresses the works of English literature from old English to the late 18th century.

OFFERED: odd-year fall semesters

ENGL221 English Literature from 1798 to Present

(3 credit, 3 lecture, 0 lab) [ENGL100 or minimum reading score of 82 on COMPASS or ENGL051 and minimum writing score of 70 on COMPASS or ENGL071]*

This systematic study of English literature emphasizes the principal authors of the 19th and 20th centuries. Readings and discussion include representative works and reviews of current critical attitudes.

OFFERED: even-year spring semesters

ENGL230 Short Story

(3 credit, 3 lecture, 0 lab) [ENGL100 or minimum reading score of 82 on COMPASS or ENGL051 and minimum writing score of 70 on COMPASS or ENGL071]*

This course analyzes the strengths and limitations of the short story, stressing contemporary world literature. The course emphasizes social and cultural values and humans in crisis and investigates symbolism, irony, paradox and the structure of the short story. OFFERED: spring semesters

ENGL235 Children's Literature

(3 credit, 3 lecture, 0 lab) [ENGL100 or minimum reading score of 82 on COMPASS or ENGL051 and minimum writing score of 70 on COMPASS or ENGL071]*

This course is a survey of literature for children in the elementary grades, aimed at developing techniques for using books with children, storytelling and the criteria for book selection.

OFFERED: fall and spring semesters

ENGL236 Youth Literature

(3 credit, 3 lecture, 0 lab) [Pre- or corequisite: ENGL100]*

This is a survey of literature expressly created for youth in middle and high school age groups (12-18). The study investigates methods, selection processes, criticism, applications, writing, education, publishing and illustration. A field component is required.

OFFERED: spring semesters

ENGL240 The Novel

(3 credit, 3 lecture, 0 lab) [ENGL100 or minimum reading score of 82 on COMPASS or ENGL051 and minimum writing score of 70 on COMPASS or ENGL071]*

This course examines the literary form of the novel and various critical problems with and approaches to reading novels. The reading list changes from year to year, usually focusing on a particular theme.

OFFERED: odd-year spring semesters

ENGL250 Creative Writing

(3 credit, 3 lecture, 0 lab) [ENGL100]*

This course discusses creative expression in traditional genres: short story, essay, drama and extended fiction. Students collaborate in workshops to hone their skills.

OFFERED: spring semesters

ENGL265 Introduction to Film

(4 credit, 4 lecture, 0 lab) [ENGL100 or minimum reading score of 82 on COMPASS or ENGL051 and minimum writing score of 70 on COMPASS or ENGL071]*

The course is an introduction to the language, structure, history and narrative technique of film as a distinctive art form. Coursework includes the reading of film theory and criticism, as well as viewing, discussing and critically writing about short and feature-length films by major international directors. OFFERED: even-year fall semesters

ENVIRONMENTAL SCIENCES

ENVR105 Introduction to Renewable Energy

(2 credit, 1.5 lecture, 1 lab)

This class introduces various forms of renewable and nonrenewable forms of energy used. How humans manipulate this energy. Renewable energy sources, including solar voltaic, solar collectors, wind generators, geothermal, biofuels, etc., are presented. Labs may include field trips as well as handson experiments.

OFFERED: fall and spring semesters

ENVR106 The Science of Energy

(2 credit, 1.5 lecture, 1 lab) [Minimum of 82 on COMPASS Reading test or ENGL051; minimum of 70 on COMPASS Writing test or ENGL071; minimum of 36 on COMPASS Pre-algebra or MATH075; pre- or corequisite: ENVR105]* This class discusses the various forms of energy present on earth. Scientific descriptions and measures of energy are presented. Topics include cellular, chemical, physical, solar energy, etc., including its capture, use, storage and transformation. Labs may include field trips, virtual simulations and hands-on experiments.

OFFERED: fall and spring semesters

ENVR110 Energy and the Environment

(4 credit, 3 lecture, 2 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071; minimum math score of 36 on COMPASS Prealgebra or MATH075]*

This class introduces various forms of renewable and nonrenewable energy and how humans manipulate this energy. Energy sources, including solar voltaic, solar collectors, wind generators, geothermal, and bio-fuels, are presented along with scientific descriptions and measures of energy. Topics include cellular, chemical, physical, and solar

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

energy including their capture, use, storage and transformation. Labs may include field trips, virtual simulations and hands-on lab experiments. This course is identical to a combination of ENVR105 and ENVR106. OFFERED: fall and spring semesters

ENVR271 Study Abroad in Environmental Studies

(3 credit, 3 lecture, 0 lab) [Instructor Permission]*

This course is designed as a field course for general interest in environmental/biological field studies. Terrestrial field sites abroad are studied with an emphasis placed upon their ecological impact. Students should consult the instructor for specific information. All students are required to individually participate in all field work.

OFFERED: fall semesters

FRENCH

FREN120 Elementary French I

(4 credit, 4 lecture, 0 lab)

This course includes fundamental training in basic language skills stressing oral and written expression, aural comprehension, and their cultural contexts. It is offered to students with no French background or up to one year of high school French. Students electing this class should plan to take FREN121 the second semester.

OFFERED: odd-year fall semesters

FREN121 Elementary French II

(4 credit, 4 lecture, 0 lab) [FREN120]*
This continuation of FREN120 stresses oral and written expression, aural comprehension, and their cultural contexts.
OFFERED: even-year spring semesters

GERMAN

GERM101 German I

(4 credit, 4 lecture, 0 lab)

This course is specifically designed to give students a thorough understanding of the German language and its cultural context. The course enables students to not only read and write German but also to actively listen to and understand and to speak the language. Focus of the class is on vocabulary and grammar and primarily on pronunciation and expression. It is a blend of theory and practice. Teaching strategies used are lecture with discussion, small group interaction, audio recognition and small video episodes. OFFERED: even-year fall semesters

GERM102 German II

(4 credit, 4 lecture, 0 lab) [GERM101]*

This continuation of GERM101 is designed to give students a more thorough understanding of the German language and its cultural context. The course enables students to not only read and write German but also to actively listen to, understand and speak the language. Focus of the class continues on vocabulary, grammar, pronunciation and expression. It is a blend of theory and practice. Teaching strategies used are lecture with discussion, small group interaction, audio recognition and small video episodes. OFFERED: odd-year spring semesters

GENERAL STUDIES

GNST100 College Success

(3 credit, 3 lecture, 0 lab)

This course provides students with the necessary tools, guidelines, principles, and insights for a successful educational experience. It also equips them to become lifelong learners and engage in effective preparation for career development.

OFFERED: every semester

GNST105 College Success for Health Occupations

(0.5 credit, 0.5 lecture, 0 lab) Minimum score of 82 on COMPASS reading or ENGL051, minimum score of 70 on COMPASS writing or ENGL071, and minimum score of 44 on COMPASS prealgebra or MATH075]*

This course provides students in health occupation programs with the necessary tools, guidelines, principles, and insights for a successful educational experience. It also equips them to become lifelong learners and engage in effective preparation for career development.

OFFERED: every semester

GNST110 Career Development

(1 credit, 1 lecture, 0 lab)

This course is designed to assist students in developing life-planning skills to make informed career choices. The course focuses on self-awareness, decision-making strategies, value clarification, academic planning, career exploration, and interest inventory assessments resulting in a comprehensive career plan.

OFFERED: odd-year fall semesters

GNST115 Effective Online Learning

(1 credit, 1 lecture, 0 lab)

This one credit course is graded as Satisfactory (S) or Unsatisfactory (U). This course teaches how to apply tools and strategies for effective learning in an online environment. Basic elements of online course environments are discussed, along with issues related to success in online and traditional classes. Topics covered include: personality and learning styles and how they relate to online education, time management, motivation, discussion board etiquette and building and maintaining relationships with both the instructor and fellow online students. Basic knowledge of computers, Internet and e-mail is expected of students enrolling in this class. Furthermore, it is required that students enrolling in this class have access

to a personal computer with Internet access. OFFERED: every semester

GNST120 Dealing with Stress

(1 credit, 1 lecture, 0 lab)

The key focus of this course is to identify stressors while learning psychological and physical responses to stress. Emphasis is given to strategies to reduce and manage stress through relaxation techniques, time management, personality awareness and humor. Students record personal stressors in a journal and design methods to eliminate them.

OFFERED: even-year spring semesters

GNST156 Efficient Study

(3 credit, 3 lecture, 0 lab)

This course provides instruction and practice in time and task management, setting goals, textbook reading and study, note-taking, study environment, and exam preparation. Students are required to apply study techniques taught in this course in another academic course and demonstrate their use through a course portfolio.

OFFERED: every semester

HISTORY

HIST250 United States History to 1865

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]*

This course critically examines America's past from before the European takeover and domination of the North American continent until a young but increasingly powerful United States is ripped apart by Civil War. Conflicts between individualism and collectivism and nationalism and sectionalism and conflicts between social classes and ethnic groups are examined. Attention is given to social history, which involves the effort to explore history "from the bottom-up" through the eyes and everyday experiences of common, working-class people preoccupied not with the great events of the day,

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

but with the day-to-day business of living. This course focuses on America before the European invasion; native American cultures; early settlements; the variety of colonial experience and regional differences; independence, war and nationhood; the Constitution; economic growth; an emerging American culture; territorial expansion and manifest destiny; nationalism and sectionalism; North/South Conflict; and the Civil War in an effort to contribute to the understanding of America's infancy and early youth.

OFFERED: fall semesters

HIST251 United States History Since 1865

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]* This course is a continuation of HIST250 with a similar emphasis on social history and the conflicts between individualism and collectivism, social classes and ethnic groups as well as new conflicts between liberals and conservatives, isolationists and imperialists and centralists and localists that remain today. The course focuses on racism, reconstruction and Jim Crow; involvement; social, political and economic reform in the Progressive period; the World Wars; the Depression and the reform of capitalism; the Cold War and the age of affluence; the turbulent sixties; the self-indulgent seventies and the age of scarcity in an effort to understand the factors that influence America's present behavior.

OFFERED: spring semesters

HIST252 The Civil War Era

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]* This course focuses on the immediate Antebellum period. Early 19th century background gives way to a focus on the period from the Mexican War (1845-8) through Reconstruction and the end of military rule in the South by 1877. It is a detailed, in-depth study of a generation of conflict and the central event in our nation's history.

OFFERED: even-year fall semesters

HIST253 Honors/Service Learning: Native American History

(3 credit, 3 lecture, 0 lab) (This service learning honors course is limited to 10 students with 3.0 GPAs. Prior written approval after interview with Instructor Ken DeLong is required.)

This is a unique course that explores both the history and the contemporary experience of Native America. By combining reading, classroom discussion, lecture, guest speakers, video, student research, and volunteer experience, we attempt to gain a better understanding of the rich variety of Native American cultures. The course explores history, belief and value systems, customs and traditions and issues/challenges of the present day. While an effort is made to discover as much as possible about many different tribes, there is a focus on the Lakota Sioux people. The course includes a 10-day trip living and working (volunteering with Habitat for Humanity) on an Indian Reservation South Dakota.

OFFERED: odd-year spring semesters

HIST255 Michigan History

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]*

This course presents a broad overview of the history of the Wolverine State. Several themes; including immigration, exploration, technology, mobility, abundance and exploitation are explored, especially as they relate to the broader picture of national history. Several important overlapping periods of Michigan history are examined in detail from the early French explorations and fur trade through the British occupation, the logging boom, statehood, growth of commerce and shipping, agricultural development and the Age of the Automobile with the consequent industrialization and growth of the tourist industry. The course focuses on local aspects of the state's history as they relate to these themes and periods.

OFFERED: odd-year fall semesters

HIST256 Local History & Heritage

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]*

This course investigates the history and heritage of Montcalm County in the context of Michigan state and American history. Students study Montcalm County and its residents from early settlements to the present day on site at the Heritage Village and through field trips to local museums. The course focuses on ethnic backgrounds, socioeconomic-political developments, religion, agriculture, industry, commerce, the arts, healthcare, and education in their historical contexts. The course is offered during the summer session only, and culminates with the students' participation in the Heritage Village Festival.

OFFERED: summer semesters

HIST257 20th Century World: History & Issues

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]*

This course presents a global view of the profound transformation of political, economic and international relations under the impact of the major wars and revolutions of this century. It stresses interactions between states and people, ideological and revolutionary conflicts, the evolution of the global balance of great powers and economic development and global inequality.

OFFERED: odd-year spring semesters

HUMANITIES

HUMN100 Introduction to Western Culture

(4 credit, 4 lecture, 0 lab) [ENGL100]*

This course examines the artistic, literary and philosophical development of Western culture over the past five millennia. Regular reading assignments provide a survey of political history and classroom presentations expose students to examples of literature,

music and the visual arts from each of the major periods.

OFFERED: every semester

HUMN110 World Cultures and Geography

(3 credit, 3 lecture, 0 lab) [Minimum COMPASS scores of 82 on reading test and 70 on writing test]*

This course examines the significance of geography in understanding the people and places of the world.

OFFERED: even-year fall semesters

HUMN200 Western Culture to 1600

(4 credit, 4 lecture, 0 lab) [ENGL100]*

This course examines the artistic, literary and philosophical nature of man, integrating material from pre-Renaissance art, literature, music, philosophy and religion.

OFFERED: fall and spring semesters

HUMN201 Western Culture since 1600

(4 credit, 4 lecture, 0 lab) [ENGL100]* This course emphasizes the modern (post-Renaissance) historical development of thought in art, literature, music, philosophy and religion.

OFFERED: fall and spring semesters

HUMN270 Issues In Leadership

(3 credit, 3 lecture, 0 lab) [ENGL100]*

This course introduces students to current leadership theories and techniques so they will better understand themselves and their potential to lead others. Students construct individual leadership plans and explore their own leadership philosophies.

OFFERED: even-year spring semesters

HUMN271 Study Abroad

(3 credit, 3 lecture, 0 lab) [Must have at least a 2.5 GPA and have completed 30 semester hours or instructor's permission.]*

Students experience living and studying in a foreign country, which enables them to learn about a different culture, geography, history,

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

religion, economics and different business practices and ethics. It allows students the opportunity to become acquainted with different cities and countries and the way they are governed, and offers them the opportunity to conduct comparative studies with the United States. Students explore differences and commonalities through participation in activities and structured observation of their surroundings while abroad, including museums, historical sites, cultural events, architecture, and centers of religion, government, business and education.

OFFERED: odd-year spring semesters

INDUSTRIAL TECHNOLOGY

INDS100 Machine Tool Theory

(2 credit, 2.25 lecture, 0 lab)

This lecture course consists of the definition, history, operation, modern development and application of the various tool-room machines with emphasis on specific operations such as threading, taper turning, indexing, gear cutting, electrical discharge and electrochemical machining. Cutting-tool geometry, grinder selection and methods of checking hardness are included and the machinist handbook is reviewed and used as a reference throughout the course.

OFFERED: fall semesters

INDS102 Basic CNC Operation

(2 credit, 2.25 lecture, 0 lab)

This course provides hands-on experience in programming Computer Numerical Control systems used with machine tools. Students design parts using computer aided design software. The designs are transferred to CNC for production of the parts on a CNS mill.

OFFERED: fall semesters

INDS104 Statistical Process Control

(1 credit, 1 lecture, 0 lab)

This course includes a brief history of SPC, a few of the statistical concepts which support it, and an explanation of why it works and why it is becoming more popular. Sampling methods, control charts, case studies and tips for getting SPC started in the plant environment are emphasized.

OFFERED: as needed

INDS105 Statistical Problem Solving

(1 credit, 1 lecture, 0 lab) [INDS104]*

This course includes a brief refresher on the basic statistical concepts learned in INDS104, a more in-depth explanation of the relationship between process variation and process problems, and advanced application toward a better understanding of machine and process capability in terms of improvement through reductions in the common causes of variation. Problem-solving techniques for correcting process non-conformities are emphasized.

OFFERED: as needed

INDS122 Industrial Applied Algebra

(2 credit, 2.25 lecture, 0 lab) [Minimum score of 44 in COMPASS Pre-Algebra]*

This course covers the algebra necessary for manipulating the formulas found in a shop setting, the use of calculators and some problem-solving techniques used in solving applied shop problems.

OFFERED: odd-year fall semesters

INDS124 Industrial Applied Geometry

(2 credit, 2.25 lecture, 0 lab) [INDS122]* This course in plane geometry covers propositions and axioms, definitions, circles, area, and angle formulas. Volumes from solid geometry are also covered.

OFFERED: even-year spring semesters

INDS126 Industrial Applied Right Angle Trigonometry

(2 credit, 2.25 lecture, 0 lab) [INDS124]* This is a course in right triangle trigonometry as used in the machine trades. Right triangles and solving practical shop problems are emphasized.

OFFERED: even-year fall semesters

INDS128 Industrial Applied Oblique Angle Trigonometry

(2 credit, 2.25 lecture, 0 lab) [INDS126]* This course details the use of oblique triangles and the trigonometry necessary to solve machine shop problems.

OFFERED: odd-year spring semesters

INDS130 Metallurgy & Heat Treatment

(2 credit, 2.25 lecture, 0 lab)

This course examines properties of metals and the tests to determine their use, chemical metallurgy, producing iron and steel, physical metallurgy, shaping and forming of metals, properties and nonferrous alloys, properties of steel, surface treatments, powder metallurgy and classifications of steels. Stress, strain and strength of materials are also covered.

OFFERED: spring semesters

INDS140 Technical Writing for Business & Industry

(3 credit, 3 lecture, 0 lab) [Minimum writing score of 70 on COMPASS or ENGL071]* This practical course covers technical writing style, format and techniques in order to organize, clarify, revise and prepare technical information. The course includes how to write effective memos, reports, procedures and technical documents by using proper format, grammar and sentence and paragraph structure.

OFFERED: fall semesters

INDS155A Industrial Safety

(1.5 credit, 0 lecture, 2 lab)

This course covers basic industrial safety practices, and includes samples of lessons learned the hard way. Safety topics include: fire, electrical, moving machinery, lifting, vision and hearing and overhead work. OFFERED: fall and spring semesters

INDS155B Industrial First Aid

(0.5 credit, 0 lecture, 1 lab)

This five-week (16-hour) basic first aid course is taught by a certified American Heart Association instructor and provides successful students eligibility for AHA certification.

OFFERED: as needed

INDS220 Basic Machine Operation

(3 credit, 1 lecture, 3 lab)

This course focuses on the theory and practice in the basic operations of typical machine tools such as lathes, mills, drills, and grinders and the use of precision bench tools and layout equipment. The course provides practical knowledge of machine processes and basic machine shop skills. OFFERED: fall semesters

INDS221 Advanced Machine Operations

(3 credit, 1 lecture, 3 lab) [INDS220]*

This course includes advanced machine operations for milling machine, lathe, surface grinder and drill press. Emphasis is placed on increasing speed and accuracy and gaining confidence in the operation of these machines.

OFFERED: spring semesters

INDS230 Introduction to Material Science

(3 credit, 3 lecture, 0 lab) [CHEM105 or PHYS111]*

This class is an introduction to the industrial uses of metals, polymers and ceramics. Course topics include structure and properties of materials, phase diagrams and thermodynamics of phases, testing of materials, elastic and plastic deformation, fabrication of materials and material selection.

OFFERED: spring semesters

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

INDS253 Basic Fluid Power

(3 credit, 2 lecture, 2 lab)

This course provides a background in basic fluid power and covers hydraulic principles, cylinders, pumps, valves, reservoirs and accessories, fluids and pneumatic principles. Hydraulic and pneumatic symbols and formulas are stressed and laboratory work includes demonstrations and a series of projects using specialized fluid power trainers. OFFERED: fall and spring semesters

INDS254 Advanced Hydraulics

(3 credit, 2 lecture, 2 lab) [INDS253]*

This course provides advanced hydraulics training and covers hydraulic motors, specialized hydraulic valves, servo systems accumulators, flow meters, closed loop systems, plumbing and sealing services, system design, trouble shooting, hydraulic symbols and formulas. Laboratory work includes demonstrations and a series of projects using specialized hydraulic trainers. OFFERED: as needed

INDS255 Advanced Pneumatics

(3 credit, 2 lecture, 2 lab) [INDS253]*

The purpose of this course is to provide additional background in pneumatics. Topics include pneumatic valves, compressors, manometers, flow meters, vacuum systems, pneumatic motors, quick exhaust valves, air bearings and pneumatic system design. In addition, pneumatic symbols and formulas are stressed. Laboratory includes demonstrations and a series of projects on specialized pneumatic trainers.

OFFERED: fall and spring semesters

INDS260 Manufacturing Processes

(2 credit, 0.5 lecture, 1.75 lab)

This course illustrates technological manufacturing methods currently in use. Course topics include computer-aided design and manufacturing, flexible manufacturing systems and cells, robotics in the work force, computer integrated manufactur-

ing, computer numerical control, computer management systems and various methods of manufacturing. Field trips to manufacturing sites are included and a research paper is required.

OFFERED: fall semesters

INDS270 Industrial Quality Control

(3 credit, 3 lecture, 0 lab)

This course defines the changing quality concepts of modern-day industry and further defines quality organizations, quality management systems, quality costs, data collection, process control, customer relations and product reliability. The course encompasses an in-depth view of the theory and practical application of Statistical Process Control (SPC).

OFFERED: fall and spring semesters

MANAGEMENT

MGMT235 Small Business Management

(3 credit, 3 lecture, 0 lab) [ENGL100]*

This course covers the problems of starting and managing a business venture and will include contemporary management practices used by successful businesses. Students use the knowledge they gain in this course to create a formal business plan.

OFFERED: every semester

MGMT237 Concepts of Management

(3 credit, 3 lecture, 0 lab) [Pre or corequisite: CMIS101 and BUSN180 or ENGL100]*

This course covers, in detail, the managerial process, including planning, organizing, leading and controlling. Other topics studied include the purposes of organizations and how they function, the business environment, human behavior, operations management and total quality management.

OFFERED: fall and spring semesters

MGMT245 Human Resource Management

(3 credit, 3 lecture, 0 lab) [ENGL100]*

This course focuses on the role of human resources management and its contribution to the organizational effort. Students examine human resources functions: strategic planning, recruiting and employment, compensation systems, employee training and development, labor laws, safety and health and benefits. This class uses both lecture and case study methods, with students working in groups.

OFFERED: fall semesters

MGMT250 Organizational Behavior

(3 credit, 3 lecture, 0 lab) [ENGL100]* This course provides a background in human relations and behavior of individuals within an organizational environment, with emphasis on social and group influences. OFFERED: fall and spring semesters

MGMT275 Strategic Management

(3 credit, 3 lecture, 0 lab) [ENGL100 and instructor or counselor approval]*

This course focuses on solving the problems of advanced general management. Students employ the concepts and techniques used by managers, and particularly senior managers, to make critical decisions for the future of their organizations. Techniques used include, but are not limited to, conducting external environment analyses, performing SWOT analyses and analyzing futurist information. This class uses the case study method with some lecture relative to strategic analysis. Students work in groups to analyze strategies employed by both successful and unsuccessful companies.

OFFERED: fall semesters

MARKETING

MRKT230 Marketing Research

(3 credit, 3 lecture, 0 lab) [ENGL100]*

This introduction to marketing research focuses on the completion of a marketing research project. Students demonstrate the ability to formulate problems, select research designs, collect information, analyze information and create reports.

OFFERED: fall semesters

MRKT233 Principles of Marketing

(3 credit, 3 lecture, 0 lab) [ENGL100]* This introduction to marketing (the movement of goods and services from producer to consumer) emphasizes the behavior of buyers in the marketplace and the major functions of marketing and their impact on the national and international economy. OFFERED: fall and spring semesters

MRKT234 Retailing

(3 credit, 3 lecture, 0 lab) [ENGL100]*

This introduction to retailing includes buying and promoting, pricing, stocking goods, dealing with customers and the process of setting up a retail firm.

OFFERED: summer and fall semesters

MRKT248 Advertising

(3 credit, 3 lecture, 0 lab) [ENGL100]*

This course examines the role of advertising in society, the creation and planning of advertising and effective promotional activities. OFFERED: spring and summer semesters

MRKT275 Marketing in a Virtual World

(3 credit, 3 lecture, 0 lab) [MRKT233 and ENGL100]*

This course offers an overview of online marketing strategies and techniques. Main topics include operating in a global marketplace, online marketing to individuals with personalization services, traffic building, and branding. It features development of an

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

e-commerce website. In addition, students visit, analyze, and discuss a host of websites. OFFERED: spring semesters

MATHEMATICS

MATH050 Mathematical Bridges

(3 credit, 3 lecture, 1 lab) [Pre or corequisite: GNST156]*

This course explores mathematical concepts including arithmetic, problem solving, number theory and pre-algebra using whole numbers, fractions and decimals. Students experience these concepts through real-world applications, hands-on models, and by using appropriate technology.

OFFERED: every semester

MATH075 Transition to Algebra

(3 credit, 3 lecture, 1 lab) [MATH050 or minimum score of 36 in COMPASS Pre-Algebra placement domain; Pre- or corequisite: GNST100]*

This course prepares students for elementary algebra by experiencing concepts in rational and irrational numbers, percents, integers, unit conversion, rates of change, proportions, geometry and an introduction to variables and equations. Students experience these concepts using a problem solving approach with real-world applications, hands-on models and appropriate technology.

OFFERED: every semester

MATH100 Elementary Algebra

(4 credit, 4 lecture, 1 lab) [MATH075 or minimum score of 44 in COMPASS Pre-Algebra placement domain]*

This course explores beginning algebra concepts including linear equations and inequalities, quadratic equations, and an introduction to functions through numerical, graphical and symbolic representations. Students experience these concepts using a problem solving approach with appropriate technology.

OFFERED: every semester

MATH100A Elementary Algebra, Part I

(2 credit, 2 lecture, 1 lab) [MATH075 or minimum score of 44 in COMPASS Pre-Algebra placement domain]*

This course is the first half of MATH100 Elementary Algebra. The topics covered include an introduction to algebra, integers and rational numbers, solving equations and polynomial operations, all in a problem solving setting. Students must complete both MATH100A and MATH100B to have the equivalent of MATH100. Students may not receive credit in both MATH100A and MATH100.

OFFERED: fall and spring semesters

MATH100B Elementary Algebra, Part 2

(2 credit, 2 lecture, 1 lab) [MATH100A]* This course is the second half of MATH100 Elementary Algebra. The topics covered include graphs, linear equations, systems of equations, inequalities, sets and quadratics. Students must complete both MATH100A and MATH100B to have the equivalent of MATH100. Students may not receive credit in both MATH100B and MATH100.

MATH102 Mathematical Investigations

OFFERED: fall and spring semesters

(4 credit, 4 lecture, 0 lab) [MATH100 or a score of 34 in COMPASS Algebra placement domain]* This is a terminal course in mathematics intended to satisfy the mathematics general education requirement for students pursuing bachelor's degrees. Topics covered may include set theory, logic, voting methods, probability and statistics, finance, linear programming, modeling, graph theory, number theory, and geometry.

OFFERED: fall and spring semesters

MATH104 Intermediate Algebra

(4 credit, 4 lecture, 1 lab) [MATH100 or minimum score of 34 in COMPASS Algebra placement domain]*

This course explores algebraic concepts including linear, quadratic, exponential and logarithmic functions using numerical, graphical, and symbolic representations; sequences; and systems of equations. Students experience these concepts using a problem solving approach with appropriate technology.

OFFERED: every semester

MATH104A Intermediate Algebra, Part 1

(2 credit, 2 lecture, 1 lab) [MATH100 or minimum score of 34 in COMPASS Algebra placement domain]*

This course is the first half of MATH104, Intermediate Algebra. The topics covered include linear, quadratic, and exponential functions using numerical, graphical and symbolic representations. Students must complete both MATH104A and MATH104B to have the equivalent of MATH104. Students may not receive credit in both MATH104A and MATH104.

OFFERED: odd-year fall semesters

MATH104B Intermediate Algebra, Part 2

(2 credit, 2 lecture, 1 lab) [MATH104A]* This course is the second half of MATH104, Intermediate Algebra. The topics covered include zeros of functions, factoring, graph transformations, systems of equations and logarithms. Students must complete both MATH104A and MATH104B to receive the equivalent of MATH104. Students may not receive credit in both MATH104B and MATH104.

OFFERED: even-year spring semesters

MATH120 Trigonometry

(3 credit, 3 lecture, 0 lab) [MATH104 or minimum score of 66 in COMPASS Algebra placement domain or 31 in College Algebra placement domain]*

This course explores the development of the trigonometric functions. Topics included are radian and degree measures of angles, circular motion, graphing trigonometric equations and oblique triangles. Numerous applications associated with some topics are also explored. Students experience these concepts using a problem solving approach with hands-on models and appropriate technology.

OFFERED: fall and spring semesters

MATH151 Mathematics for Elementary Teachers I

(4 credit, 3 lecture, 2 lab) [MATH100 or minimum score of 34 in COMPASS Algebra placement domain]*

This first course in a two-course sequence provides some of the necessary background to teach mathematics in the elementary school, including such subjects as problem solving, set theory, systems of whole numbers, integers, rational and reals.

OFFERED: fall semesters

MATH152 Mathematics for Elementary Teachers II

(3 credit, 3 lecture, 1 lab) [MATH151]*

This second course in a two-course sequence provides some of the necessary background to teach mathematics in the elementary school, including such subjects as problem solving and logic, real numbers, probability, statistics, plane and solid geometry, transformational geometry and computer applications.

OFFERED: spring semesters

MATH159 College Algebra

(4 credit, 4 lecture, 0 lab) [Pre- or corequisite: MATH120]*

This course explores the concept of functions as models of change. Functions studied include linear, piecewise defined, quadratic,

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

inverse, exponential, logarithmic, power, polynomial and rational. The functions are explored using symbolic, numerical, graphical and verbal representations. Other topics included are concavity, transformations of functions, compositions and combinations of functions and modeling. Numerous applications associated with some topics are also explored. Students experience these concepts using a problem solving approach with hands-on models and appropriate technology.

OFFERED: fall and spring semesters

MATH190 Elementary Statistics

(3 credit, 3 lecture, 1 lab) [MATH100 or a minimum score of 34 in COMPASS Algebra placement domain]*

This course introduces basic statistical concepts including mean, standard deviation, frequency, probability, binomial distribution, normal curve, sample means, confidence limits, hypothesis testing, and linear regression. Statistical analysis will be done using computer software.

OFFERED: spring semesters

MATH250 Calculus and Analytic Geometry I

(4 credit, 4 lecture, 0 lab) [MATH120 and MATH159]*

This course starts with a review of the functions needed in the study of calculus. The main topic of this course is differential calculus. Topics included are limits, differentiation, continuity, differentiability, optimization and modeling. In addition, definite integrals and theorems involving definite integrals will also be introduced. Numerous applications associated with some topics are also explored. Students experience these concepts using a problem solving approach with hands-on models and appropriate technology.

OFFERED: fall semesters

MATH251 Calculus and Analytic Geometry II

(4 credit, 4 lecture, 0 lab) [MATH250]*

This course focuses mainly on integral calculus. Topics included are techniques of integration, applications of the definite integral, improper integrals, sequences and series, approximating functions and differential equations. Numerous applications associated with some topics are also explored. Students experience these concepts using a problem solving approach with hands-on models and appropriate technology.

OFFERED: spring semesters

MUSIC

MUSI100 Fundamentals of Music

(3 credit, 3 lecture, 0 lab)

This course covers development of the techniques necessary to the understanding and knowledge of music fundamentals and develops basic skills in reading and writing music, sight singing, ear training, rhythmic organization and keyboard familiarity. In addition, this course makes connections between the skills of music and its historical, cultural and affective contexts.

OFFERED: fall semesters

MUSI101 Music Appreciation

(3 credit, 3 lecture, 0 lab)

This introduction to the various styles of music increases the understanding, awareness and enjoyment of music through the development of proper listening habits and includes recordings and demonstrations. It is recommended students take MUSI100 in the fall semester before taking this course, which is only offered in spring semester.

OFFERED: spring semesters

MUSI110 Music in the Elementary Classroom

(3 credit, 2 lecture, 1 lab)

This course increases awareness of music programs for the elementary grades and

emphasizes creative experiences, use of appropriate materials and methods pertinent to the elementary classroom, and the development of music fundamentals.

OFFERED: fall semesters

MUSI141 Voice Improvement I

(1 credit, 0 lecture, 1.5 lab)

This class provides instruction concentrating on the basic techniques of singing. Students learn correct posture, breathing, support and tone production and experience many different styles of music.

OFFERED: fall and spring semesters

MUSI142 Voice Improvement II

(1 credit, 0 lecture, 1.5 lab) [MUSI141]* This class is a continuation of MUSI141. OFFERED: fall and spring semesters

MUSI143 Voice Improvement III

(1 credit, 0 lecture, 1.5 lab) [MUSI142]* This class is a continuation of MUSI142 OFFERED: fall and spring semesters

MUSI144 Voice Improvement IV

(1 credit, 0 lecture, 1.5 lab) [MUSI143]* This class is a continuation of MUSI143. OFFERED: fall and spring semesters

MUSI191 Choir I

(1 credit, 0 lecture, 2 lab) [Instructor Permission]* This course offers students interested in the performing arts an opportunity to further develop musical talents. The choir performs at several campus and community events throughout the academic year with opportunities to perform in small vocal ensembles. OFFERED: fall and spring semesters

MUSI192 Choir II

(1 credit, 0 lecture, 2 lab) [MUSI191]* This course is a continuation of MUSI191 and offers students interested in the performing arts an opportunity to further develop musical talents. The choir performs at several campus and community events throughout

the academic year with opportunities to perform with small vocal ensembles. OFFERED: fall and spring semesters

MUSI293 Choir III

(1 credit, 0 lecture, 2 lab) [MUSI192]*
This continuation of MUSI192 offers students interested in the performing arts an opportunity to further develop musical talents. The choir performs at several campus and community events throughout the academic year with opportunities to perform.

OFFERED: fall and spring semesters

MUSI294 Choir IV

(1 credit, 0 lecture, 2 lab) [MUSI293]*
This continuation of MUSI293 offers students interested in the performing arts an opportunity to further develop musical talents. The choir performs at several campus and community events throughout the academic year with opportunities to perform.

OFFERED: fall and spring semesters

NURSING

NRSG110 Nutrition & Diet Therapy in Nursing

(2 credit, 2 lecture, 0 lab) [BIOL 203 and counselor/advisor permission]*

This course helps students involved with health care become more aware of the basic knowledge, understanding and application of the science of nutrition. The relationship between nutrition and the community environment, nutrition through the life cycle and diet therapy are explored within the scope of the nursing process. This course facilitates the student's ability to apply sound nutritional principles and education to promote the maintenance of optimal health.

NRSG120A Communication Concepts in Nursing

(1.5 credit,1.5 lecture, 0 lab) [BIOL 203 and counselor/advisor permission]*
This course is designed to assist students

in becoming more efficient practitioners of

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

the communication skills that are essential to nursing. Students will explore the many ways that nurses use communication to facilitate care for the client. Students practice interviewing skills; observe, discuss and begin to develop therapeutic communication skills. Reporting and recording skills are based on the nursing process.

NRSG120B Computer Concepts in Nursing

(0.5 credit, 0 lecture, 1 lab) [CMIS100]*
This course teaches students the fundamentals and introductory skills necessary to adequately use Microsoft Windows and Word programs. These applications will assist the nursing student in the navigation process of the computerized medical record.

NRSG130 Fundamentals of Nursing

(4.5 credit, 1.5 lecture, 6 lab) [Pre-Nursing Certificate and admission to the nursing program; corequisite: NRSG140]*

Fundamentals of Nursing introduces students to the basic human needs. This introduction includes the study of the biophysical and psychosocial needs. The biophysical needs addressed will be the need for safety, rest, comfort, mobility, elimination, nutrition and hygiene. The psychosocial needs addressed will be safety and security, love and belonging, self-esteem and self-actualization. The motivational tasks of aging with discussion of death, dying and grieving process will be studied. This course begins the student's socialization process into the profession of nursing. Instruction includes theory, skills lab and clinical lab. Universal precautions and basic nursing skills will be integrated with the basic human need. Directed learning provides students with the opportunity to apply course concepts in specific situations. Basic nursing skills are introduced in skills lab and the clinical lab through demonstration and practice.

NRSG140 Pharmacology in Nursing

(3 credit, 3 lecture, 0 lab) [Pre-Nursing Certificate and admission to the nursing program; corequisite: NRSG130]*

This course presents basic concepts and principles of pharmacology. The nursing process and nursing responsibilities in drug therapy are emphasized with focus on the various patient populations encountered in health care. Clear and concise methods for safe medication preparation and administration utilizing evidence-based practices are included. The content includes methods used in reading medication labels, calculating medication dosages and reading physician's orders in relation to adult and pediatric medications. Methods of converting metric, apothecary, household measurement, reconstitution of powders and computation of intravenous drip rates are practiced. Legal, ethical and cultural considerations in medication therapy are addressed and integrated throughout this course.

NRSG150 Nursing Care of the Adult Client I

(4.5 credit, 1.5 lecture, 6 lab) [Corequisites: NRSG130 and NRSG140]*

Course content is focused on the needs of patients experiencing alterations in health status or the surgical process. Students utilize and apply knowledge of anatomy and physiology, the nursing process and assessment skills. Classroom content is applied to the patient in the clinical setting. Learning experiences in the campus laboratory increase the student's knowledge and abilities with nursing procedures. These experiences provide students with skills that can be applied with supervision in the clinical setting.

NRSG160 Maternal-Child Health Nursing

(3.5 credit, 2 lecture, 1.5 lab) [NRSG130, NRSG140, and NRSG150]*

Maternal-Child Health Nursing is a course which emphasizes utilization of the nursing process to meet the human responses of childbearing families and children from infancy through adolescence with actual or potential health problems. Concepts, theories, principles, and processes basic to the delivery of safe and quality nursing care of mother and child are explored. Curriculum threads of pharmacology, communication, critical thinking, growth and development and client teaching are integrated throughout the course.

NRSG170 Nursing Care of the Adult Client II

(5 credit, 2 lecture, 6 lab) [NRSG130, NRSG140, and NRSG150]*

This course addresses more complex medical and surgical alterations as related to nursing care and responsibilities. Students will continue to utilize and apply knowledge of anatomy and physiology, the nursing process, and assessment skills. Course content is focused on the needs of patients with various alterations in health status. Classroom content will be applied to the patient in the clinical setting. Students will actively apply knowledge of pharmacology by administering medications to patients and continue to practice nursing skills in the clinical setting with supervision.

NRSG200 Role Transition

(1.5 credit, 1 lecture, 1 lab) [NRSG110, NRSG120A, NRSG120B, NRSG130, NRSG140, NRSG150, NRSG160, and NRSG170, or program director approval for advanced standing students]*

This course facilitates the student's adaptation to level two of the associate degree nurse role. The course explores how evidence-based practices are incorporated into the nursing process to enhance critical thinking strategies. The content includes discussion of transition, personal and professional growth, student expectations and stress reduction. The nurse's role in delegation of tasks and how it relates to the nurse practice act also are discussed. Advanced nursing skills are introduced with opportunities for demonstration and practice in a lab setting.

NRSG210 Community Mental Health

(4.5 credit, 2 lecture, 5 lab)) [NRSG110, NRSG120A, NRSG120B, NRSG130, NRSG140, NRSG150, NRSG160, and NRSG170, or program director approval for advanced standing students; Corequisite: NRSG200]*

This course introduces students to psychosocial adaptation to stressors in one's environment. Recent developments in treatment modalities are presented. The nursing role, using the nursing process, will be examined in a variety of treatment settings, examining clients with a wide variety of diagnoses. The nursing students will work with clients in a variety of settings. The content is focused on helping the nursing student enhance skills and understanding for care of the mental health patient during both sickness and health, and to acquire skills in interpersonal relationships and communication.

NRSG220 Advanced Nursing Care of the Childbearing Family

(3 credit, 2 lecture, 2 lab) [NRSG110, NRSG120A, NRSG120B, NRSG130, NRSG140, NRSG150, NRSG160, and NRSG170, or program director approval for advanced standing students; Corequisite: NRSG200]*

This course introduces the significant components of critical thinking and evidence-based practice necessary for use by maternal-newborn nurses in their every day practice. It includes an in-depth study of the physiological and psychological aspects of maternal-newborn nursing while preparing the student for holistic approach to care. A review of normal antepartum, intrapartum, postpartum and neonatal nursing is included; the primary focus is on the development of nursing goals and interventions for care of the high risk mother and infant through the various stages of the childbearing process.

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

NRSG230 Advanced Nursing Care of Children

(3 credit, 2 lecture, 2 lab) [NRSG110, NRSG120A, NRSG120B, NRSG130, NRSG140, NRSG150, NRSG160, and NRSG170, or program director approval for advanced standing students; Corequisite: NRSG200]*

The content of this course provides an overview of the nursing care of children from a child-centered perspective that views children as unique individuals rather than miniature adults. The focus of nursing care is on prevention of illness and promotion of health. A theoretical basis for performance of a pediatric physical and developmental assessment is included. Evidence-based practice is used in the development of nursing goals and interventions essential for the care of children and their families. These goals and interventions are discussed relational to different developmental levels, with various acute and chronic illnesses, and within a variety of settings.

NRSG240 Advanced Nursing Care of the Adult Client

(8 credit, 4 lecture, 8 lab) [NRSG200, NRSG210, NRSG220, and NRSG230]*

This course focuses on managing care of acute or chronically ill adult clients. Methods to assist the client in attaining an optimal state of wellness in a variety of health care settings are discussed. Evidence-based practice is incorporated and applied to nursing process to determine appropriate nursing interventions to assist the client and family in their holistic adaptive responses to illness and stress. The nurse's role in disease prevention, health maintenance and teaching is emphasized. Advanced assessment skills are included for the provision, management and coordination of client care. Critical thinking and decision-making skills are utilized in the delivery of client care. Course content is designed to build upon theory learned in prerequisite courses and the students are expected to apply previously learned knowledge and skills.

NRSG250 Leadership and Management

(3 credit, 1 lecture, 4 lab) [NRSG240]*

This course is designed to assist student nurses in successfully making the transition from student to practitioner and effectively managing care for groups of clients in today's complex and rapidly changing health care settings. It assists students in using evidence-based practice within the framework of the nursing process and to develop professional nursing leadership and manager skills. Special responsibilities of the leader/manager are described and practiced in various clinical settings. Decision making skills, critical thinking, conflict resolution and delegation legalities are topics examined in the role of the professional nurse. Ethical and legal responsibilities are discussed, as well as aspects of professional growth and future directions for nursing leadership and management.

PHILOSOPHY/RELIGION

PHIL220 Introduction to Philosophy

(3 credit, 3 lecture, 0 lab) [ENGL100]*

This chronological survey of Western philosophy examines the ways in which thinkers have dealt with fundamental questions over the past 2,500 years. Examples of Eastern thought serve as points of reference and contrast to contemporary European and American positions. HUMN200 is recommended as a prerequisite.

OFFERED: fall and spring semesters

PHIL221 Philosophy of World Religions

(3 credit, 3 lecture, 0 lab) [ENGL100]*

This course is a survey of world religions and related philosophies. The exploration of thought, belief and religious practices from diverse cultures provides an opportunity to appreciate the uniqueness of other traditions while drawing upon the universal experi-

ence of the inner person. In addition, this study includes an inquiry of global pursuits in understanding the purpose of life, the quest for truth, the search for reality and the experience of spirituality.

OFFERED: fall and spring semesters

PHIL222 Bioethics

(3 credit, 3 lecture, 0 lab)

This course covers some of the major ethical theories, principles and approaches that affect life in the 21st Century, with a focus on decision making processes in the biological or health care related fields.

OFFERED: fall and spring semesters

PHYSICAL EDUCATION

PHED103 Personalized Body Conditioning

(1 credit, 0 lecture, 2 lab)

This course provides the knowledge to condition the body through a supervised program consisting of the basic principles of total fitness and exercise with emphasis on heart-rate monitoring.

OFFERED: fall and spring semesters

PHED106 Volleyball

(1 credit, 0 lecture, 2 lab)

This course teaches the basic skills of volleyball, its history, an understanding of the game and its rules, terminology, offensive and defensive systems, and mental/physical readiness including warm-up exercises. OFFERED: fall and spring semesters

PHED110 Introduction to Physical Fitness

(1 credit, 1 lecture, 1 lab)

This course provides a generalized overview of physical fitness bringing together terms often seen in print separately but seldom explained in relationship to each other such as cardiovascular, aerobics, stress, cholesterol, nutrition and lifetime sports. Students assess

their own fitness level and develop individualized lifelong plans for improved health. OFFERED: fall and spring semesters

PHED117 Basketball Fundamentals

(1 credit, 0 lecture, 2 lab)

This course teaches the basic skills of basketball, terminology, offensive and defensive systems, and mental and physical readiness for the game.

OFFERED: spring semesters

PHED128 Tae Kwon Do I

(1 credit, 0 lecture, 2 lab)

This course teaches the basic kicks, blocks and punches and patterns of the Korean martial art, Tae Kwon Do.

OFFERED: spring semesters

PHED129 Tae Kwon Do II

(1 credit, 0 lecture, 2 lab) [PHED128]*

This course is the advanced instruction of Tae Kwon Do. In addition to rehearsing kicks, blocks, punches and basic patterns, students learn to combine techniques into meaningful groupings to be used as methods for self-defense and Olympic-style point fighting. OFFERED: spring semesters

PHED130 Beginning Swimming

(1 credit, 0 lecture, 2 lab)

This course includes the basic swimming strokes: front crawl, back crawl, side stroke, breast stroke and elementary backstroke. Safety, non-swimming rescues, swimming hygiene, water entries and survival swimming are also covered.

OFFERED: fall and spring semesters

PHED131 Intermediate Swimming

(1 credit, 0 lecture, 2 lab) [PHED130]*

This course improves the swimmer's skill in the basic swimming strokes including the front crawl, back crawl, breaststroke, sidestroke and elementary backstroke. Other strokes covered include the butterfly, overarm sidestroke, trudgen crawl and inverted

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

breaststroke. The course also covers diving, treading water, boating safety, turns, safety, non-swimming rescues and survival swimming.

OFFERED: fall and spring semesters

PHED133 Lifeguard Training

(1 credit, 1 lecture, 1 lab) [15 years of age minimum & PHED131]*

This course provides the necessary minimum skills training for a person to qualify as a lifeguard in situations where American Red Cross Lifeguard Training is required. OFFERED: fall and spring semesters

PHED134 Water Safety Instructors Certification

(1 credit, 1 lecture, 1 lab) [17 years of age minimum & PHED131]*

This course trains instructor candidates to teach American Red Cross water safety courses. Basic stroke evaluation, teaching techniques and water safety are covered. OFFERED: as needed

PHED136 Water Exercise

(1 credit, 0 lecture, 2 lab)

This course provides the knowledge and guidance to improve health and physical fitness through aquatics exercise. This low-impact program builds aerobic fitness, muscular endurance and strength and flexibility in every muscle group. Swimming skills are not necessary.

OFFERED: fall and spring semesters

PHED150 Pilates

(1 credit, 0 lecture, 2 lab)

This course is designed to help students utilize a mind-body exercise and become knowledgeable in muscles and their relationship to movement and to develop organizational skills to create a personal Pilates program.

OFFERED: fall and spring semesters

PHED151 Pilates II

(1 credit, 0 lecture, 2 lab) [PHED150]*

This course is designed to help students utilize a mind body exercise and become knowledgeable in muscles and their relationship to movement with the use of various light equipment such as toning balls, flex-band, fitness circle and stability ball.

OFFERED: fall and spring semesters

PHED160 Fundamentals of Climbing

(1 credit, 0.5 lecture, 1 lab) [Liability waiver]* Students receive training in climbing techniques, safety and equipment usage. Actual climbing is conducted on an indoor, artificial rock surface to develop the skills necessary to climb rock and ice.

OFFERED: spring semesters

PHED161 Climbing II

(1 credit, 0.5 lecture, 1 lab) [Liability waiver & PHED160]*

This course is a continuation of PHED160. OFFERED: spring semesters

PHED170 Wilderness & Remote First Aid

(1.5 credit, 0.5 lecture, 1 lab)

This course is designed to give students a foundation of first aid principles and skills and the confidence to use those skills in emergency situations. Students will learn essentials in providing care in delayed help situations as well as wilderness survival skills. CPR for the Professional Rescuer is also included in this course. This course is identical to AHEA170.

OFFERED: fall semesters

PHYSICAL SCIENCE

PHYS101 Physical Science

(4 credit, 3 lecture, 2 lab) [Minimum reading score of 82 on COMPASS or ENGL051; minimum writing score of 70 on COMPASS or ENGL071; minimum math score of 34 on COMPASS Algebra or MATH100]*

This course provides basic general education in physics and chemistry so students may better understand and evaluate the results of scientific and technological achievement and their impact upon society, enabling them to evaluate their own interest and potential in the physical sciences.

OFFERED: fall and spring semesters

PHYS111 Introduction to College Physics I

(3 credit, 2 lecture, 2 lab)

This class for vocational students and those that need a beginning physics class examines classical mechanics and sound.

OFFERED: fall semesters

PHYS112 Introduction to College Physics II

(3 credit, 2 lecture, 2 lab) [PHYS111]* This course covers thermodynamics, electricity and magnetism, optics and modern physics.

OFFERED: spring semesters

PHYS230 College Physics I

(4 credit, 4 lecture, 2 lab) [MATH120]* This course covers concepts of light, force, motion and energy.

OFFERED: even-year fall semesters

PHYS231 College Physics II

(4 credit, 4 lecture, 2 lab) [PHYS230]* This continuation of PHYS230 covers fluids, elasticity of matter and membranes, sound, electromagnetism, quantum theory and radioactivity.

OFFERED: odd-year spring semesters

POLITICAL SCIENCE

POLI110 Introduction to Social Science I

(4 credit, 4 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051; pre- or corequisite: ENGL100 or ENGL071]*

This is an interdisciplinary and comparative introduction to the study of human beings and their efforts to adapt and function successfully in a dynamic global environment. Emphasis is placed on American social, economic and political institutions. Historical and geographical background, as well as exploration of the methods and approaches commonly used in the social sciences will catalyze an appraisal of present day American society and how it compares with other societies around the globe. The primary focus is on government and politics, the economy, international relations and the philosophies/ideologies that underlie them.

OFFERED: every semester

POLI240 American Political System

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]*

This course introduces politics and government at the federal level. Although in many ways it is a basic traditional survey sequence in American government, the course goes beyond the traditional examinations of government institutions (the executive, the legislature and judiciary) to explore how the complex web of ideas, groups, personalities and processes interact with those institutions to arrive at public policy. Within the larger context of the evolution of our present political system and the ongoing debate between liberals and conservatives, the course attempts to discover how our political culture; federal structure; the Constitution; public opinion, political socialization, campaigns and voting; pressure groups and lobbying; political parties; civil rights and liberties; public policy, foreign/defense policy and international affairs relate to power, influence,

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

and decision-making in American politics. This course points out problem areas and inequities in development of our lives and relies on both historical and contemporary examples, stressing the present-day practice of politics to illustrate and explain the principles and processes outlined above. OFFERED: every semester

POLI246 International Relations

(3 credit, 3 lecture, 0 lab) [POLI110 or POLI240]* This course provides an introductory examination and analysis of international relations designed to prepare students to function as members of a global society. Economic, political and security issues are examined. The course includes analysis of foreign policy objectives, internal and external influences on foreign policy making and trends in the international system.

OFFERED: even-year spring semesters

POLI250 Great Decisions: Current World Events

(3 credit, 3 lecture, 0 lab) {ENGL100]*
The primary objective of this course is to examine a number of case studies or "great decisions" in U.S. foreign policy. One important dilemma in U.S. foreign policymaking will be studied each week. Weekly topics are drawn from recent history and current events, and each class will have either a regional or thematic focus. This course has been designed to coincide with the World Affairs Council Great Decisions Lecture series.

OFFERED: spring semesters

PSYCHOLOGY

PSYC120 General Psychology

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]* This course familiarizes beginning students with the basic concepts and methods used by psychologists to study human behavior. Subjects covered include research design, the biological basis of behavior, develop-

mental psychology, sensation, perception, consciousness, learning, memory, thinking, social psychology, personality and mental disorders.

OFFERED: every semester

PSYC221 Child Psychology

(3 credit, 3 lecture, 0 lab) [PSYC120]*

This course examines the field of child development and child psychology. Topics covered include prenatal and physical development, the interaction of heredity and environment, cognitive development, social influences upon development, emotional development, family and peer influences upon development and the development of morality and ethical behavior.

OFFERED: every semester

PSYC223 Psychology of Sex & Gender

(3 credit, 3 lecture, 0 lab) [PSYC120]*

This course explores historical views of gender and sexual behavior, the psychological construction of gender, gender-based cultural expectations, human sexual behaviors and biological sex differences. Emphasis is on the psycho-social, emotional and behavioral differences between men and women. In addition, the course explores the impact these differences have upon the individual and society. The dynamic interaction between the concepts of society, sexuality and gender roles are also explored.

OFFERED: spring semesters

PSYC225 Abnormal Psychology

(3 credit, 3 lecture, 0 lab) [PSYC120]*

This course covers the definition, description, measurement, diagnosis, causes, treatment and prevention of abnormal behavior. Biological, psychosocial and sociocultural perspectives are reviewed.

OFFERED: fall and spring semesters

SOCIOLOGY

SOCI111 Introduction to Social Science II

(4 credit, 4 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051; pre- or corequisite: ENGL100 or ENGL071]*

This course is a continuation of POLI110 and completion of POLI110 is recommended before enrolling. Materials focus on history, anthropology, sociology and psychology as the study of society and human nature continues, emphasizing selective aspects of culture and contemporary social problems. OFFERED: spring semesters

SOCI230 Sociology

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]* This course familiarizes beginning students with the basic concepts and methods used by sociologists to study society. It includes culture, social structure, social class, institutions, deviance and social change emphasizing the application of the sociological perspective in analyzing society and human behavior. OFFERED: fall and spring semesters

SOCI235 Social Problems

(3 credit, 3 lecture, 0 lab) [Minimum reading score of 82 on COMPASS or ENGL051]* This course focuses on the sociological approach to social problems including mental illness, crime, poverty, family and community disintegration, violence ecology, and current events.

OFFERED: every semester

SOCI271 Study Abroad

(3 credit, 0 lecture, 3 lab) [Must have at least a 2.5 GPA and have completed 30 semester hours or instructor's permission.]*

Students experience living and studying in a foreign country, which enables them to learn about a different culture, geography, history, religion, economics and different business practices and ethics. It allows students the opportunity to become acquainted with dif-

ferent cities and countries and the way they are governed, and offers them the opportunity to conduct comparative studies with the United States. Students explore differences and commonalities through participation in activities and structured observation of their surroundings while abroad, including museums, historical sites, cultural events, architecture, and centers of religion, government, business and education.

OFFERED: odd-year fall semesters

SPANISH

SPAN130 Elementary Spanish I

(4 credit, 4 lecture, 0 lab)

This course is the first half of a two-semester beginning Spanish course designed primarily around conversational approaches to the language with instruction in the basics of Spanish grammar. Lectures and written exercises supplement an emphasis on oral recitation and classroom conversation along with an examination of pertinent aspects of Hispanic culture.

OFFERED: fall and spring semesters

SPAN131 Elementary Spanish II

(4 credit, 4 lecture, 0 lab) [SPAN130]* This course in a continuation of SPAN130 Elementary Spanish I.

OFFERED: spring semesters

SPAN230 Intermediate Spanish

(4 credit, 4 lecture, 0 lab) [SPAN131]* SPAN230 is designed to help students in the acquisition of language skills necessary for verbal communication, grammar, reading, and writing at the intermediate level in Spanish. As such, this course will explore the arts, literature, and global aspects of the Hispanic culture through the Spanish language.

OFFERED: fall semesters

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

SUSTAINABILITY

SUSN107 Residential Analysis

(2 credit, 2 lecture, 0 lab) [Pre- or corequisite: ENVR105]*

This class explores domestic energy use including, but not limited to water heating, domestic heating, swimming pools, automobiles, lighting, etc. Students analyze energy use and ways to use energy efficiently. Ways to minimize energy consumption are discussed and viable alternative energy substitutions are analyzed.

OFFERED: fall semesters

SUSN108 Use of Solar Photovoltaics

(2 credit, 2 lecture, 0 lab) [Pre- or co-requisite: ENVR105]*

This class explores the use of solar panels as an alternative source of energy for domestic use. Co-generation or storage of the electrical energy produced by solar panels is demonstrated. Activities include assembling cells into solar panels and using the generated electricity as a source of alternative energy on a small scale.

OFFERED: spring semesters

SUSN109 Wind Power

(2 credit, 2 lecture, 0 lab) [Pre- or co-requisite: ENVR105]*

This course is an introduction to the practice and theory of wind electric generation. Topics include homeowner, small/business, utility, interior, offshore, grid-tied and offgrid wind systems; mechanical and electrical components; economic viability; environmental, aesthetic and safety concerns, etc. Students may participate in site visits and meet with wind energy experts as well as construct a wind turbine in class.

OFFERED: spring semesters

SUSN110 Solar Thermal Energy

(2 credit, 2 lecture, 0 lab) [Pre- or co-requisite: ENVR105]*

An examination of solar water heating for domestic hot water, house heating, swimming pool heating, process heating, etc., is discussed and demonstrated. Topics include system economics, environmental benefits, siting and sizing of systems, types of systems, equipment installation, operation and maintenance.

OFFERED: spring semesters

SUSN111 Geothermal Energy

(2 credit, 2 lecture, 0 lab) [Pre- or co-requisite: ENVR105]*

This course covers the basics of geothermal energy production and technology. Essentials on how to utilize and integrate geothermal technology as an energy source are analyzed and demonstrated. Examples of residential and commercial applications are shown and reviewed.

OFFERED: spring semesters

TECHNICAL DRAFTING & DESIGN

TDSN100 Technical Drafting

(4 credit, 2 lecture, 2 lab)

This laboratory/lecture course links the knowledge and manipulative skills needed for work with drafting instruments to create line work, lettering, geometric construction, sketching, multi-view projection, sectioning, basic dimensioning, and isometric, oblique and perspective projection.

OFFERED: fall semesters

TDSN103 Industrial Communications

(2 credit, 2 lecture, 0 lab) [Pre- or corequisite: CMIS101]*

This course incorporates the basic principles associated with industrial communications including graphical, oral and written techniques. It stresses the essentials of writing and speaking in various drafting situations.

OFFERED: fall semesters

166 * Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

TDSN105 Reading Engineering Drawings

(2 credit, 0.5 lecture, 1.75 lab)

This technical blueprint-reading course, with practical applications, is structured around a workbook approach to learning. Topics include basic projection of views, lines, reading scales, sketching, isometric and oblique projection, sections, perspectives, threads, title blocks, stock lists and interpreting blueprints. This course also contains a brief introduction to geometric dimensioning and tolerancing (GD&T).

OFFERED: fall semesters

TDSN106 Layout and Precision Measurement

(2 credit, 0.5 lecture, 1.75 lab) [TDSN105]* This technical blueprint-reading course, with practical applications, is structured around a workbook approach to learning with lecture sessions preceding workbook assignments. Topics include fits between mating parts, measuring instruments, gages, mechanical comparators, inspection of dimensions in layout, and CMM. Students are required to check manufactured parts against part prints with precision measuring devices.

TDSN110 Descriptive Geometry

(3 credit, 1 lecture, 4 lab) [TDSN100]*

OFFERED: spring semesters

This course uses a workbook approach to develop fundamental spatial and visualization skills necessary for understanding and applying information on technical drawings. Topics include projection of points, lines, and planes; revolution of objects; intersection of planes and solids; and projection of oblique and true view surfaces. Drawings are created using CAD. Prior and recent CAD knowledge would be an asset.

OFFERED: spring semesters

TDSN125 Geometric Dimensioning & Tolerancing

(2 credit, 0.5 lecture, 1.75 lab) [TDSN105]* This technical course is structured around a workbook approach to learning. The

principles of geometric dimensioning and tolerancing are applied to reading blueprints and engineering drawings. The most current industrial standards are referenced (ANSI/ ASMEY14.5M-1994). Topics of study include the following geometric tolerances: form, profile, location, orientation, and runout. The specific tolerances covered are concentricity, circularity, straightness, parallelism, flatness, cylindricity, position, perpendicularity, angularity, circular runout, total runout, profile of a surface, profile of a line, and symmetry. Other areas of study are datums, datum targets, the interpretation of fits, limits and tolerances, and tolerancing for the location of features.

OFFERED: spring semesters

TDSN135 Tool & Die Design I

(2 credit, 2.25 lecture, 0 lab) [TDSN100 or TDSN103]*

This theory course is structured primarily for tool-and-die apprentice students. Lecture topics include: dies and die types, presses and press accessories, blanking and piercing dies, die life, die blocks, die sets, die materials and material utilization, and fundamental die accessories. Emphasis is on drop-through blank dies.

OFFERED: fall semesters

TDSN136 Tool & Die Design II

(2 credit, 2.25 lecture, 0 lab) [TDSN135]* This theory course is structured primarily for tool-and-die apprentice students. This course emphasizes the theory associated with sheet metal progressive draw dies. Lecture topics include: how to select a die, conventional progressive dies, progressive transfer dies, carbide progressive dies, electrical discharge machining (EDM) and progressive dies, press selection and press accessories, grinding operations, cam slides, notch stations, draw and redraw stations, stops, sensors, and die protection. This course also investigates the components, knowledge, and review of tool-and-die standardized components and catalogs.

OFFERED: spring semesters

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

TDSN138 Tool & Die Design III

(2 credit, 0.5 lecture, 1.75 lab) [TDSN136]* This design course is structured primarily for tool-and-die apprentice students. It is the first half of the laboratory application component for TDSN135 and TDSN136 and should be taken after completing TDSN136. Lectures are followed by laboratory sessions that consist of developing sheet metal die components. Emphasis is on application of design ideas and being able to communicate design ideas graphically. Topics include basic tools, dies and punches; blanking force and standard die sets and die components with emphasis on progressive dies.

OFFERED: as needed

TDSN139 Tool & Die Design IV

(2 credit, 0.5 lecture, 1.75 lab) [TDSN138]* This design course is structured primarily for tool-and-die apprentice students and is ideal for tool-and-die journeyman with several years in the trade who wish to update their skills. It is the second half of the laboratory application component for TDSN135 and TDSN136 and should be taken after completing TDSN138. Emphasis is on application of design ideas related to sheet metal dies and being able to communicate appropriate design ideas graphically. Topics include development of a process flowchart, progression of dies, development of draw and flange stations, press cushions and air pins, horizontal cams, and knowledge of tool-and-die standardized components and catalogs.

OFFERED: as needed

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TDSN215 Product Design

(3 credit, 2 lecture, 3 lab) [TDSN100 and TDSN110]*

This course provides drafting technology students with the ability to analyze, design and develop solutions to mechanical design problems. The instructional approach encourages students to conceptualize and communicate using engineering graphics, mathematics and technical science emphasizing the manufacturability of a particular

new product design. Drawings are created using CAD. Prior and recent CAD knowledge would be an asset in this course.

OFFERED: fall semesters

TDSN230 Jig & Fixture Design

(3 credit, 1 lecture, 4 lab) [TDSN110 or TDSN250]*

This course focuses on the design of indexing jigs and milling fixtures. Use of standard components from various catalogs is also emphasized. Drawings are created using CAD. Prior and recent CAD knowledge would be an asset in this course.

OFFERED: fall semesters

TDSN250 Introduction to CAD

(4 credit, 2 lecture, 2 lab) [TDSN100 or instructor/counselor/advisor permission]*

This course is an introduction to computer aided drafting and design. CAD software is used to create three dimensional models of solid objects. Part models can then be used in assembly models. Traditional CAD drawings are also produced from the part models. There is an introduction to computer aided manufacturing where programs are produced to actually make a part.

OFFERED: spring semesters

TDSN251 Advanced CAD

(4 credit, 1 lecture, 3 lab) [TDSN250]*

This course is designed to develop technical skills in solid modeling with an introduction to parametric modeling technology. Students are taught the techniques that enable them to customize menus, screens and develop personal time-saving production routines commonly found in industry. Advanced drafting concepts are also included in this course.

OFFERED: fall semesters

THFATFR

THEA261 Drama as a Performing Art

(3 credit, 2 lecture, 2 lab)

This course provides experience in all aspects of play production. Students learn acting skills, script analysis and all other details of bringing a play "from the page to the stage." Students present performances for the public as well as area students.

OFFERED: fall and spring semesters

THEA262 Drama as a Performing Art II

(3 credit, 2 lecture, 2 lab) [THEA261]*

This course is a continuation of skills developed in THEA261. This course provides experience in all aspects of play production. Students learn acting skills, script analysis and all other details of bringing a play "from the page to the stage." Students present performances for the public as well as area students.

OFFERED: fall and spring semesters

THEA263 Drama as a Performing Art III

(3 credit, 2 lecture, 2 lab) [THEA262]*

This course is a continuation of skills developed in THEA262. This course provides experience in all aspects of play production. Students learn acting skills, script analysis and all other details of bring a play "from the page to the stage." Students present performances for the public as well as area students.

OFFERED: fall and spring semesters

THEA264 Drama as a Performing Art IV

(3 credit, 2 lecture, 2 lab) [THEA263]*

This course is a continuation of skills developed in THEA263. This course provides experience in all aspects of play production. Students learn acting skills, script analysis and all other details of bringing a play "from the page to the stage." Students present

performances for the public as well as area students.

OFFERED: fall and spring semesters

WELDING

WELD101 Fundamentals of Welding

(3 credit, 0 lecture, 3 lab)

This course is the cornerstone for all subsequent welding courses offered at MCC. Students are introduced to various welding and cutting processes and theory as well as basic metallurgy, electrical theory and the safe handling and use of compressed gases. The main goal of the course is to establish a solid base of understanding of welding and cutting and to familiarize students with our lab and its equipment. Safety is strongly emphasized. Expect to evenly divide your time between the classroom and the lab.

OFFERED: fall and spring semesters

WELD111 Welding Processes I

(3 credit, 0 lecture, 3 lab) [Pre- or corequisite: WELD101]*

In Welding Processes I, the main emphasis is increasing a student's understanding and welding skill level in the area of Shielded Metal Arc Welding (stick) and Gas Tungsten Arc Welding (TIG). Students expand their understanding of the theory as well as the application of both processes. Lab weldments include, but are not limited to, ferrous and nonferrous metals, various thicknesses and some out of position welding. Understanding the processes and the consumables will be strongly emphasized. Students can expect to spend 60 to 90 minutes a week in the classroom in lecture/discussion.

OFFERED: fall semesters

WELD113 Welding Processes II

(3 credit, 0 lecture, 3 lab) [Pre- or corequisite: WELD101]*

In Welding Processes II, Gas Metal Arc Welding (MIG) and Fluxed Cored Arc Welding are the focus processes. A strong emphasis

^{*} Prerequisite courses must be completed with a C or better grade unless otherwise noted on specific program pages.

is placed on understanding the processes, power sources, filler materials, gases used and material being welded on. Students can expect to weld on a variety of thicknesses in various positions. Students can expect to spend 60 to 90 minutes a week in the classroom in lecture/discussion.

OFFERED: fall semesters

WELD131 Welding Processes III

(3 credit, 0 lecture, 3 lab) [WELD111]*

Welding Processes III is our advanced Shielded Metal Arc Welding/Gas Tungsten Arc Welding course. It is expected that students signing up for this course have a solid understanding in the process theory and basic application of the SMAW and GTAW processes. Metallurgy, filler metals, gases, square wave and pulse technology as well as other process/career pertinent information will be discussed. Students can expect to weld on various thicknesses of plain carbon steels, tool steels and various nonferrous metals in the flat, vertical, horizontal and overhead positions. Students should expect to spend 60 to 90 minutes per week in the classroom.

OFFERED: spring semesters

WELD133 Welding Processes IV

(3 credit, 0 lecture, 3 lab) [WELD113]*

Welding Processes IV is our advanced Gas Metal Arc Welding/Fluxed Cored Arc Welding course. It is expected that students signing up for this course have a solid understanding in the process theory and basic application of GMAW/FCAW. Metallurgy, filler metals, shielding gases as well as other process/career pertinent information will be covered. Lab assignments consist of a variety of weldments done in a variety of position both single and multi pass. Students should expect to spend 60 to 90 minutes per week in the classroom.

OFFERED: spring semesters

WOMEN'S STUDIES

WMST100 Introduction to Women's Studies

(3 credit, 0 lecture, 3 lab)

This course familiarizes beginning students with the basic concepts and theories of feminist thought central to the growing field of Women's Studies. Students examine how traditional gender roles have affected women's lives throughout history both publicly (discussing issues such as women in the workplace, women and the law, and women and medicine) and privately (discussing issues such as women and gender stereotypes, women and their bodies, women and religion and race and gender).

OFFERED: odd-year spring semesters

DIRECTORY OF PERSONNEL

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Hinrichs, Patricia	Trustee
Marston, Robert	Vice Chairperson
	Treasurer
_	Trustee

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Butler, Jody; B.A.	
Christensen, Melissa; B.S.	
Cook, Lori; B.S.	Lab Supervisor Computer Information Systems
DeVries, Linda; B.S.	Financial Aid Coordinator
Eady, Amy; M. S.	
Ferrentino, Robert; J.D.	President
Gardner, Lisa; B.B.A.	Student Development Director/PT Advisor
Germain, George; B.S	Director of Facilities
Gilbertson, Jessica; B.A	Student Success Director
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Herrick, Jessica; B.A.	Assistant Director of Financial Aid
Imhoff, Ginger; B.S	Natural Science Lab Supervisor
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Lund, Lisa; M.S.	Director of Institutional Effectiveness
Middleton, Rodney; A.A.A.S	Director of Information Technology Services
Nichols, Traci; B.S.B.A.	Director of Financial Aid
Reinsmith, Douglas; B.S.N.	
Rosier, Lisa; A.A.A.S	Food Service/Subway Manager
Smith, Therese; M.A.	Vice President for Institutional Advancement
Spohr, Robert; M.A.	Vice President for Student & Academic Affairs
Stewart, Connie; B.A	Director of Human Resources
Strautz-Springborn, Shelly; B.S.	
Thompson, Dolores; B.S.	Staff Accountant
Wierda, Kire; B.S.	Director of Accounting
Wilson, Ryan; B.A.	Recruitment Specialist

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Full-time Faculty

Adkison, Donald; M.S.	Physical Science/Math
Bishop, Bill; M.A.	,
Brouwer, Joel; Ph.D	8
Brown, James; Ed.D.	
Bunting, Brandy; M.A.	Counselor
Clise, Charles; M.A.	Industrial Technology
DeLong, Kenric; M.A.	
Diehl, Kristen; M.A.	CIS Lab Coordinator
Fatka, Jim; M.A	Language Arts
Gibson, Michelle; Ph.D.	Biology
Haverdink, Lisa; M.S.N.	Nursing
Holt, Kim; B.S.N.	Nursing
Hopkins, Jamie; M.A.	Language Arts
Johnson, Carolyn; B.A.	
Lincoln, Karen; M.S.N.	Nursing
Lodholtz, Brianne; M.A.	Mathematics
Long, Daniel; M.A.	Mathematics
Markham, Beth; M.S.N.	Nursing
Mowatt, Bertha; M.S.N.	Health Occupations/Nursing
Palmer, Alec; M.A.	Electronics
Roy, Janice; M.A.	Mathematics
Seaman, Michael; M.A	
Skogseth, Greta; M.A.	Language Arts/Humanities
Skogseth, Tore; M.A.	
Smith, Scott; M.A	
Snyder, Jessica; M.S.	Psychology
Vander Mark, Valerie; M.A.	Performing Arts
Wesp, Heather; M.A.	Biology

GLOSSARY OF TERMS

ACADEMIC FREEDOM refers to the right of the student to learn and the right of the teacher to employ teaching methods that are effective in pursuing course objectives.

ACCREDITATION is recognition by an approving organization such as the Higher Learning Commission of the North Central Association of Colleges and Schools which accredits Montcalm Community College.

ADD period is the time after initial registration when students may add an additional courses(s) or change sections. Students may add courses only up to the time of the first class meeting for the course.

ADMISSION is the acceptance of a student by a college or university entitling him or her to take classes and participate in campus activities.

ADVISOR is the person responsible for advising students regarding financial aid, class scheduling or program choice.

APPRENTICE is a person following a planned program of occupational skills that is provided by an employer and related instructional training that is provided through a community college or high school.

ARTICULATION refers to a written agreement providing approval for college credit to be awarded for coursework previously completed at another institution such as a high school, career center or college.

ASSOCIATE DEGREE is a planned degree program of at least 60 credit hours conferred by an accredited college.

AUDIT generally means students pay regular tuition and fees for a class, but need not complete assignments or take examinations. Arrangements to audit an MCC course must be made prior to registration. The option to switch to audit status is not available after the end of the drop/add period.

BACHELOR'S DEGREE is a degree, from an accredited college or university, that is awarded upon successful completion of a prescribed major course of study of at least 120 credit hours.

CAMPUS is the entire physical content of a college or university including all buildings and grounds.

CATALOG is the college or university publication which lists general information, college programs and course descriptions.

COMMUNITY COLLEGE is a post-secondary institution authorized to award associate degrees and certificates and offer a variety of non-degree learning experiences. Programs include liberal arts, occupational studies, business and industry training and personal enrichment opportunities.

COUNSELOR is a professional who helps students with academic, career and life planning.

CONTACT HOURS are the total hours of lecture and laboratory instruction for each class.

COREQUISITE is a required course which, if not taken ahead of time, must be taken during the same semester as another class.

CREDIT BY EXAM is available for some courses. Students must sign up for and pay full tuition for the course and then take the exam. A grade of S is issued if the exam is passed satisfactorily.

CREDIT HOURS give value to an amount of work represented in intended learning outcomes and are verified by evidence of student achievement of those outcomes. Whether delivered face-to-face or online, a credit hour approximates not less than one hour of classroom or direct faculty instruction, and a minimum of two hours of out-of-class student work each week for approximately fifteen weeks.

CURRICULUM is the collective term for various courses of study offered.

DROP period is a designated time when students may drop a course(s) and receive a full refund. Dropping results in the course(s) not being included on the student's transcript and will not appear as an attempted course.

ELECTIVE is a class not specifically required in a course of study.

ENROLL is to sign-up for classes for inclusion on the official class list or roster.

ESSAY TEST is an examination where answers to questions are written in paragraph form.

EXTRACURRICULAR ACTIVITIES are campus events, other than classes, in which students participate.

FEES are charges in addition to tuition.

FINAL EXAM, the last test given in a class, may include all or part of the course work covered.

FINANCIAL AID is money received from various sources to help students with college costs.

FULL-TIMESTUDENTS take 12 or more credit hours of study.

GRADE POINT AVERAGE (GPA) is the cumulative numerical value of grades earned by a student determined by dividing total points by the number of credit hours.

INCOMPLETE (I) GRADES may be requested by students when they cannot complete required course work by the close of a semester for reasons beyond their control. The grade indicates the instructor's belief that the student will receive a passing grade when the requirements have been fulfilled.

INTRAMURAL is a term used in connection with athletic teams which usually consist of students from a single institution who compete against each other.

LABORATORIES are science, computer, secretarial, art or other hands-on experiences related to classroom instruction.

LABORATORY ASSISTANT is a college employee who provides assistance to students in a lab setting.

LABORATORY SUPERVISOR is a staff person with teaching qualifications who supervises a lab and provides assistance similar to that available from an instructor.

LIBERAL ARTS are academic disciplines such as language, history or humanities that develop general intellectual ability and provide information of general cultural concern.

LIBRARY includes traditional library services, automated information services and access to materials from off-campus sources.

MATRICULATION is the act of enrolling at a college or university.

OFFICE HOURS are scheduled times instructors are in their offices to meet with students.

OPEN LABORATORY is a classroom setting where self-teaching materials are used.

ORIENTATION is a scheduled time for students to become familiar with places, processes and expectations.

PART-TIME STUDENTS carry fewer than 12 credit hours.

PREREQUISITE is a course required to have been successfully completed prior to enrollment in another course.

REGISTRAR is the administrator responsible for student records, transcripts and registration procedures.

REGISTRATION is the process of enrolling in classes.

SEMESTERS are the time periods in which classes run. At MCC, semesters begin in August and January. A shorter summer session begins in June.

SEMESTER HOUR is a measurement of time spent in class.

SENIOR CITIZEN is a person who is 60 years of age or older.

SEQUENTIAL CLASSES are courses offered consecutively with each serving as the prerequisite for the next.

STUDENT RIGHTS include procedures for appealing grades and offering input on college or university policy-making.

SUBSTITUTION of a course required for a degree or certificate must be done in writing, signed by the appropriate instructor and instructional administrator. Forms are available in the Enrollment Services Office.

TECHNICAL STUDIES are occupationally oriented programs of learning which provide job skills for students who wish to enter the career of their choice upon the completion of their training.

TEXTBOOK is a written manual used for reference or study in a class.

TRANSCRIPT is the official record of grades from an educational institution that shows a cumulative record of course work.

TRANSFER is the process by which a student enters a college or university after having been enrolled at another institution.

TUITION is the amount of money charged for classes.

TUTOR is a person competent in a specific subject who helps students with that subject. Students either needing a tutor or wishing to be a tutor should contact the Special Populations Counselor.

WAIVING a class is sometimes possible through a competency exam. To waive a required course, a student must pass the exam and pay \$5 per credit hour. Credit hours must be made up by taking other courses.

WITHDRAWAL is the act of voluntarily dropping out of a specific class within a prescribed time. Students must initiate the request to withdraw and, if approval is granted, the instructor will assign a W to the transcript.

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Calendar

2013 Fall Semester

Classes begin August 24
Classes end December 14

2014 Spring Semester

Classes begin January 13
Classes end May 2
Commencement May 2

2014 Summer Session

Classes begin June 2 Classes end July 25

Some classes may not follow the regular semester schedule. Check the schedule booklet or visit my.montcalm.edu each semester for exceptions.

For information call: (989) 328-2111, toll-free: 1-877-328-2111 or e-mail: admissions@montcalm.edu.

It is the policy of Montcalm Community College that no person; on the basis of race, sex, color, religion, national origin or ancestry, age, marital status, height, weight, disability or Vietnam-era veteran status; shall be discriminated against in employment, educational programs, activities, or admissions. In addition, arrangements can be made to ensure that the lack of English-language skills is not a barrier to admission or participation.



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