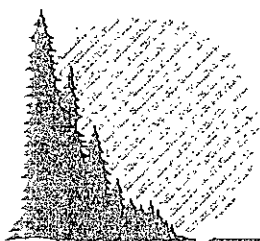


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Montcalm Community College

1989-90 Catalog

CALENDAR

Fall Semester 1989

Registration August 22 and 23
New students August 23
Late registration..... August 24 - September 5
Classes begin August 24
No classes/College closed .. September 4 (Labor Day)
No classes/College closed November 23 and 24
(Thanksgiving)
Classes end December 18

Spring Semester 1990

Registration January 10 and 11
Classes begin January 12
Spring Break..... March 24 - April 1
No Classes/College closed April 13 (Good Friday)
Classes end May 11

Summer Semester 1990 (Tentative)

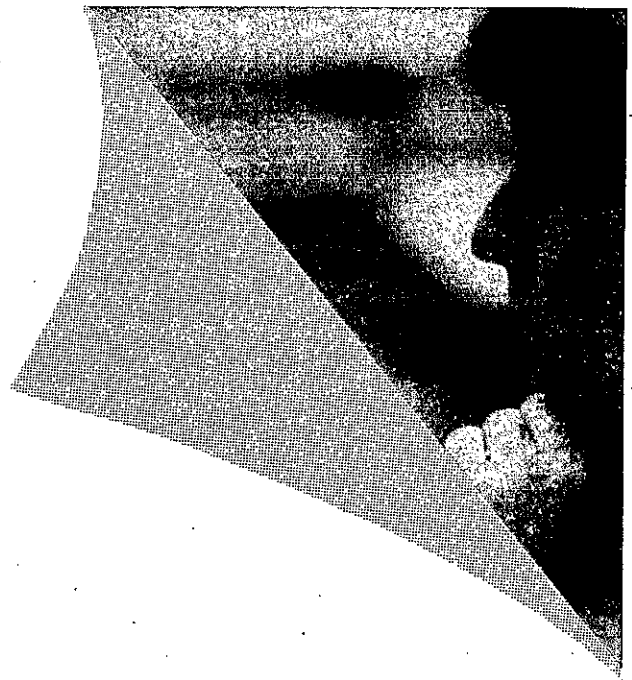
Registration June 6
Classes begin June 11
Classes end August 3

Fall Semester 1990 (Tentative)

Registration August 21 and 22
Classes begin August 23
Classes end December 17

Spring Semester 1991 (Tentative)

Registration January 10 and 11
Classes begin January 14
Classes end May 10



Montcalm Community College

Helping you prepare for life

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NOTICE: The material in this catalog applies to the 1989-90 academic year and reflects information available on its publication date, June 1989. Montcalm Community College reserves the right to revise all announcements contained in this publication and make reasonable changes in requirements to improve or upgrade academic and non-academic programs. These changes will not affect the credits already earned by current students.

WELCOME TO 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 work force were combining to form a mandate for local post-high school education.

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

The first president and business manager began work on August 1, 1965. In September, the completion of a joint site survey resulted in the purchase of 158 acres on Sidney Road for the campus. This was expanded in August 1966 by the purchase of 80 additional acres contiguous to the original 158 acres. A two-acre parcel at the corner of the original campus was acquired in November 1968, completing the college's 240 acres. MCC's campus is near both the geographical and population centers of the district, accessible from all directions by surfaced county and state highways.

Construction bids for the first buildings were opened in September 1966 and building activity for the Library/Administration Building, Instruction East (a two-story academic building) and the Power Plant began October 3, 1966. Official ground-breaking ceremonies were held September 26, 1966 with speaker Gov. George Romney.

MCC liberal arts instruction began in fall 1966 at Central Montcalm High School. On August 1, 1966, the learning resources director began assembling materials for MCC's comprehensive study center.

On April 18, 1967, contracts were awarded for construction of a Vocational/Technical Building designed to house automotive mechanics, machine tooling and welding programs. Utility services, initial landscaping and parking areas were also being developed on the campus.

Formal counseling, admissions and registration programs began on July 1, 1967. The student newspaper, student government, choir and interscholastic athletics began in fall 1967.

Occupation of Instruction East took place September 5, 1967 and the college's transfer and general education programs were housed on campus. Lt. Gov. William G. Milliken delivered an address at the dedication of the first buildings September 26, 1967. The first classes were held in the Vocational/Technical Building November 15, 1967.

The Community Services division officially opened on February 1, 1969. Community Services was responsible for adult education, in-service training, conferences, cultural events and other educational activities.

The Activities Building -- which houses a pool, gym, cafeteria, bookstore, conference room and music room -- was completed in 1976.

Four presidents have served MCC -- Dr. Donald Fink, 1965-1971; Dr. Clifford Bedore, 1971-1978; Dr. Herbert Stoutenburg, 1978-1984; and Dr. Donald C. Burns, 1984-present.

MCC has enjoyed a long history of accreditation by the North Central Association of Colleges and Secondary Schools. MCC was awarded status as a candidate for accreditation in April 1969, in the minimum time possible. MCC was awarded full accreditation in 1974. Following its second self-study period in 1979, the college received full accreditation for seven years. In June 1986, MCC was reaccruited by the association for 10 years -- the maximum accreditation period allowed.

Since its approval by area voters in 1965, MCC has progressed steadily. In March 1982, voters approved a 3/4-mill increase for the college. MCC continues to experience significant growth. Community Services and Student Services are continually expanding and offer upgrading and retraining courses, a wide variety of non-credit and recreation courses, placement services, counseling, financial aid assistance, career planning services and tutoring. MCC currently employs 27 full-time faculty in a total full-time staff of 76. 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 AND GOALS

Mission Statement

The main purpose of Montcalm Community College is to meet educational needs of people in the College service area.

Montcalm Community College subscribes to the following institutional goals:

1. To provide opportunity for vocational and technical study leading to occupational competence for the new learner and for the person desiring retraining or upgrading skills.
2. To provide opportunity for liberal arts, sciences and technical study at the freshman and sophomore levels transferable to other colleges and universities and acceptable toward a baccalaureate degree.
3. To provide opportunity for general education and developmental course work for those who study primarily to become more knowledgeable or skilled in an area of interest.
4. To provide assistance for all students through educational counseling, guidance and placement services.
5. To provide a center and resources for community services (educational, health and well-being, recreational, cultural and economic development).
6. To provide an opportunity for organized activities to promote social skills and responsible citizenship.
7. To provide educational leadership through the promotion of cooperation between area organizations, institutions, businesses and industries.

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 academic students, a two-year college education of high quality will be provided offering a firm grasp of the basic areas of knowledge: communication skills, social science, natural science, mathematics and the

humanities. In addition to this basic core of learning, a series of electives will permit students to explore areas of special interest. It is believed that sophomore graduates will be considered fully educated when prescribed work has been completed in the entire general educational program. It is expected that students who complete two years of academic study will have an understanding of how knowledge is gained in each academic discipline and will possess the skill to become a lifetime learner.

2. For vocational/technical students, a high degree of occupational competence at the skilled or semi-professional level should be achieved. It is expected that graduates will be able to demonstrate a high degree of job performance as well as the ability to accept new, related responsibility. For technical students who seek the associate degree as well as occupational competence, successful completion of portions of the general education core will also be required. Because associate degree technicians frequently assist professional workers such as physicians, engineers, dentists, etc., graduates are expected to have competence in the realm of ideas and theories as a necessary complement to skill training. For vocational students, any academic training will be related specifically to the job skill which they are learning. For example, mathematics will be of a technical nature and directly connected with the skill being taught.

3. For all students, an opportunity to explore both the academic and vocational/technical 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.

4. 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, Montcalm Community College students will be 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 task with an attitude of optimum achievement. A high quality of performance is a consistent demand of all in this community of learning.



Student Services

STUDENT SERVICES

The Montcalm Community College Student Services Office is located in the lower level of the Library/Administration Building and offers a variety of services to complement the learning process. The Student Services Office can be contacted by calling 517/328-2111, extension 224 from 8 a.m. to 7 p.m. Monday through Thursday, from 8 a.m. to 4:30 p.m. Friday, and from 8 a.m. to 1 p.m. Saturday during the fall, spring and summer semesters.

Admissions/Orientation

See Admissions on page 6.

Registration

The registration process begins in the Student Services Office. Contact the Student Services Office, extension 230, for specific times and dates.

Testing Policy

MCC requires entrance testing (ASSET) in mathematics, reading and writing BEFORE students may enroll in certain courses to insure that students are adequately prepared for classes. Such courses are identified with a "TM" in the semester class schedules. Some courses require a minimum test score as a prerequisite for enrollment, while others use the scores for purposes of advisement. Students may also take one of the ASSET advanced mathematics tests in order to waive certain prerequisite courses in mathematics. Students receive their scores and written recommendations of which classes they are prepared to take upon completion of the testing. The results from these tests will assist students in planning a successful college career. Testing will require approximately 90 minutes to complete.

Who must test?

1. A student wishing to enroll in a course identified with a "TM" in the semester class schedules who has not previously taken the ASSET tests.
2. A student who wishes to use an ASSET Test score in place of a course prerequisite.

Who is exempt from testing?

1. Senior citizens (60 years of age or older)
2. Students who have previously tested

3. Students who enroll only in courses that do not require testing

4. Students who audit a class which requires testing

5. Students who obtain a waiver from the instructor of the class

Special note to students enrolling in Criminal Justice courses: If you have previously passed a CJ course with a 2.0 grade or better, you are not required to test, although testing is recommended for all students.

All students should become acquainted with retesting procedures and the schedule of testing sessions as no exceptions will be made. To avoid unnecessary delays at registration, take the test during one of the scheduled times. Those enrolling in off-campus courses will also be required to satisfy the testing requirement.

Retesting Guidelines

Students wishing to retest may do so after an eight-week waiting period. There will be a charge for each retest, payable at the Business Office prior to the retest. There is no limit to the number of times a student may retest. To schedule a retest, call the Skills Development Lab at 517/328-2111, ext. 282 for an appointment.

Counseling

All students are encouraged to participate in program advisement. Personal and academic concerns may also be discussed privately with a counselor. Appointments may be made by calling the Counseling Office, extension 231.

General Information

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

ACT/GED Testing

The ACT (American College Test), GED (High School Equivalency), and career-oriented interest surveys can be scheduled by contacting the Counseling and Placement Office, extension 231.

Records

Accurate enrollment records, grade reports and transcripts are maintained in the Registrar's Office, extension 309. Grade reports are mailed to students each semester.

Veteran's Affairs

See Veteran's Information on page 17.

Financial Aid

See Financial Aid Information on page 14.

Career Library

Career information and employment research materials are located in the Student Services Office. Reference books and college catalogs are kept current for students considering transfer to other colleges or universities.

Career Planning Services

Personal career counseling, career inventory testing and "Discover," a computer-assisted career planning program are available in the Counseling and Placement Office, extension 231.

Job Placement Service

Information regarding full-time and part-time employment for students and alumni is available through the Placement Office (extension 231).

Skills Development

The Skills Development Lab, located in the Instruction West Building, provides individualized instruction in basic mathematics, writing and reading skills. The one-credit-hour courses allow students to progress at their own learning pace while following an instructional program tailored to their individual needs and desires. In addition, throughout the year, the lab sponsors periodic mini-lessons and provides diagnostic testing upon request.

Tutorial Assistance

MCC offers free peer tutorial assistance to qualifying students experiencing academic difficulty in any class. Students having academic difficulty are matched with a student who is experiencing or has experienced success in that course. Tutors receive compensation for providing assistance. Information on eligibility and application for tutors and tutees is available from the Special Needs Program Supervisor, extension 264.

Special Needs Assistance

The Special Needs Program helps students be successful in their vocational courses or programs. Free assistance is available for academically disadvantaged and handicapped qualifying students.

For academically disadvantaged students, tutoring is the primary service. For handicapped students, specific services include note-taking, reading, interpreting, writing and scribing. Specialized counseling and career guidance, learning modification and mobility assistance are also available.

Students who believe they may qualify for assistance should contact the Special Needs Program Supervisor, extension 264, for more information.

ADMISSIONS

The Admissions Office is located in the Student Services Office and can be contacted by calling 517/328-2111, extension 224. Admissions staff can answer questions about the admissions process, orientations and campus tours.

All applicants for admission to Montcalm Community College shall possess a high school diploma or submit to an educational equivalency examination (GED). Exceptions may be made at the discretion of the Dean of Student Services.

How to Apply for Admission

1. Complete an Application for Admission to Montcalm Community College form. The forms are available in the MCC Admissions Office and local high school counseling offices.
2. Submit the completed Application for Admission form and the non-refundable \$5 application fee to:

**Admissions Office
Montcalm Community College
2800 College Drive, S.W.
Sidney, MI 48885-9746**

3. Submit an official copy of complete high school transcripts or GED results to the Admissions Office. Students who have attended other post-secondary educational institutions must also submit official transcripts from these institutions.

Guest Application

A guest applicant is a student currently enrolled in a program at another college or university who wishes to complete a course at MCC as part of that program. A student may not attend as a guest for two consecutive semesters. Guest applicants may complete the regular application procedure or a Guest Application Form to attend MCC. Guest Application Forms are usually available at the Records Office of the student's home college or university. MCC students may use the Guest Application Form to attend a college other than MCC for one semester.

Former Students

MCC extends a continuous matriculation to all students in good academic standing. Former students should contact Student Services to update their personal file and reactivate their registration status. Dismissed students must make arrangements for future registration through the Dean of Student Services.

Policy Against Discrimination

It is the policy of MCC that no person shall -- on the basis of sex, race, religion, color, national origin, age, or handicap -- be excluded from participation in, be denied the benefits of, or be subjected to discrimination in any of its programs or activities.

MCC Director of Business & Finance James Lantz is MCC's EEO Officer/Title IX - Section 504 Coordinator. His office is located in the Library/Administration Building and he can be reached by telephone at 517/328-2111, extension 220.

TUITION AND FEES

MCC District Residents

Tuition.....\$30 per credit hour
Fees.....\$1 per credit hour
to a maximum of \$12 per semester

(A resident of the MCC district lives within one of the public school districts of Carson City, Central Montcalm, Greenville, Lakeview, Montabella, Tri-County or Vestaburg.)

Michigan Non-District Residents

Tuition.....\$45 per credit hour
Fees.....\$1 per credit hour
to a maximum of \$12 per semester

Out-Of-State Residents

Tuition.....\$55 per credit hour
Fees.....\$1 per credit hour
to a maximum of \$12 per semester

Other Fees

Application for Admission (paid only once).....\$5
Late Registration Fee.....\$5
Laboratory Fee.....\$5 (per contact hour)*

*A course with a required laboratory will cost an additional \$5 per student contact hour over and above the assessed credit hours charged for the course. For example: students taking NUR102, with 7 credits and a total of 14 contact hours, will be charged for 7 credit hours and 7 additional contact hours. For in-district students, the charge will be \$245 -- 7 credit hours x \$30 + 7 additional contact hours x \$5.

Refund Policy

1. Fees are not refundable.
2. Tuition is 100% refundable during the enrollment period. No refunds of tuition shall be made for withdrawals after the end of the enrollment period.

Payment of Tuition and Fees

1. Tuition and fees are due and payable at the time of registration.
2. The college will accept Visa and Mastercard credit cards.
3. Students who will receive financial aid through the college shall present a form from the Financial Aid Office to the cashier to complete enrollment. Any difference in aid and total tuition will be subject to the credit terms described below. If financial aid is not forthcoming, the balance will be due at the time of notification. No refunds will be granted after the drop and add deadline.
4. New students applying for Veteran's benefits will be allowed to register with no down payment. The entire balance is due within 60 days. A 30-day extension may be approved by the Registrar when notification of benefits has been received from the Veteran's Administration.
5. Short-term credit will be available upon application. Credit references may be requested.

Credit Terms

\$1 - \$150 -	Paid in full
\$151 - \$200 -	50% down - balance 30 days plus \$5 handling fee
\$201 - \$500 -	60% down - 50% of balance 30 days Total 60 days plus \$10 handling fee

*Financial aid will count towards down payment.

6. Failure to pay as scheduled will result in the withholding of grades, certificates, and degrees. Graduating students will not be allowed to participate in graduation ceremonies.
7. Collection processes will be initiated for failure to pay.

ACADEMIC REGULATIONS

Semester System

Montcalm Community College operates on the basis of two semesters per year. The first semester begins during the last week of August and is completed prior to Christmas. The second semester opens in January and ends in mid-May. MCC also offers an accelerated summer session which runs from mid-June to early August.

Classification System

Freshman - A student who has completed less than 25 semester hours of study

Sophomore - A student who has successfully completed at least 25 semester hours of study, but who has not yet qualified for an associate degree or a certificate

Full-Time - By legal definition, one who carries 12 or more semester hours of study. However, the student must bear in mind the number of credit hours required for an associate degree and his or her desire to graduate after four semesters of study (an average of 15 hours per semester to complete 60 hours total).

Part-Time - A student carrying fewer than 12 semester hours

Selection of Program of Study

Selection of a student's program of study takes place prior to registration. During the counseling interview, students are advised of specific course requirements necessary for completion of their program. Exceptions to specific program requirements will be made only by the dean of the appropriate instructional division of the college and must be authorized in writing.

Program Planning

In planning course work, students should make use of the counseling services, the catalog and projected semester class schedules. Some courses are offered every semester while others are only offered once per year. To determine the exact sequence of a course, check the projected semester schedule in the Student Services Office.

Honors

Each semester an Honors List includes students who complete at least 12 semester hours and attain a grade point average from 3.3 through 3.69. The President's Honors List includes students who fulfill the above requirement with a GPA of 3.7 or higher.

Class Attendance

Students are encouraged to attend all classes in which they are registered. Absence from classes shall in no way relieve students from completion of assigned work. The matter of regular class attendance shall be resolved between each student and the instructor.

Grading System

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

GRADE	HONOR POINT VALUE
A	4.0
A-	3.7
B+	3.3
B	3.0
B-	2.7
C+	2.3
C	2.0
C-	1.7
D+	1.3
D	1.0
D-	.7
E	Failure
WP	Withdrew while passing
WF	Withdrew while failing
I	Incomplete (see note below)
V	Audit (see note below)
S	Satisfactory completion
U	Unsatisfactory

Incomplete Grades - The I grade is employed sparingly and is awarded when students could not complete required course work by the close of a semester for reasons beyond their control. An I grade is an indication by the instructor of his/her belief that the student will receive a passing grade when the requirements have been fulfilled.

Incomplete forms are available in the Registrar's Office. These must be filled out and signed by the student and the instructor. The following procedure is observed:

1. An I mark is entered on the student's record when a course is incomplete at the termination of a scheduled semester.
2. An I mark remains without alteration until the course requirements are satisfied and warranted in writing by the instructor to the registrar or until the deadline for completion has passed.
3. An I mark is not averaged with other grades to establish a grade point average.
4. Students receiving veteran's benefits who receive an I in a course have one year to complete the course without repaying the VA for the class.

Audit applies when a student pays tuition for a course but is not required to complete assignments or examinations.

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

S (satisfactory completion) and U (unsatisfactory completion) grades are used only for the following courses: SD150, SD151, SD152, SD153, SD156, SD160, SD161, SD162, SD163, SD170, SD175, NUR102, NUR104 and NUR117 and when a student tests out of a course for credit.

Dropping/Adding Classes

After registration, students may drop or add classes during a specified period of time designated in the schedule of classes.

To officially drop or add classes:

1. Students must get a Drop/Add Form from the Registrar's Office. The form is available beginning the first day of classes.
2. After properly completing the Drop/Add Form, the student takes the form to the Business Office if tuition adjustment is necessary.

3. It is important to officially drop or add in order to receive proper course credit.

4. After the end of the drop/add period, only classes which have a later start date may be added or dropped. To discontinue a class after drop/add, students must follow the withdrawal procedure outlined. Refunds will not be given after the drop/add period.

Withdrawal Procedures

To discontinue a class after the drop/add period:

1. Students must obtain a Withdrawal Form from the Registrar's Office, fill in the required information and present the form to the instructor to initiate withdrawal from a class.
2. The instructor will sign, date, and return a copy to the student, indicate the grade by a WP or WF and present the completed form to the Registrar's Office prior to the final day of class. (Some instructors have a date beyond which they will not give WP for withdrawal.)
3. No refund of tuition and fees is granted for withdrawal.

Transfer Credit Information

1. Only official transcripts will be evaluated.
2. Most courses are accepted in transfer for a corresponding MCC course. If a course has no equivalent at MCC, it might be used as an elective.
3. Credits, not grades, are accepted for courses in which a grade of C or better was earned.
4. When a student has received a two- or four-year degree from another institution, an evaluation is done following a student's request.
5. MCC is based on a semester system. Two-thirds credit is granted for courses earned at an institution which is on terms or quarters.
6. It is the student's responsibility to follow-up with evaluation of credits. If a transcript is received and there

is no record of that person applying to MCC, it is not possible to notify the student of credits granted.

7. The student will receive a copy of the evaluation and a copy will be placed in the student's file with the transcript.

8. A student may request a review of his/her evaluation.

9. Any questions regarding the evaluation should be directed to the Registrar in the Student Services Office, extension 309.

Graduation Requirements

All students who plan to graduate from MCC must file an application to graduate. To receive an associate degree or a certificate, a student must have an overall GPA of 2.00 (C average) and must complete all established requirements as listed. All course work completed at MCC is included in the overall average. Nursing students should check the Nursing Handbook for GPA requirements. All students graduating with an associate degree must have proof of high school graduation or GED on file at MCC.

Transfer students may request that credits earned at another institution of higher education be applied toward an associate degree at MCC. However, 24 credits of the total presented for graduation must be earned at MCC and students must be enrolled at MCC during the final semester before receiving their degree.

Academic Probation and Dismissal

1. The minimum grade point average for making satisfactory progress is 2.00.

2. Students who attain less than a .7 GPA (D- average) for their first 15 hours at MCC will be dismissed.

3. Students who attain less than a 1.7 GPA (C- average) at the end of their first enrollment period will be placed on academic probation.

4. Returning students who maintain less than a 2.00 cumulative GPA (C average) will be placed on academic probation.

5. Students on probation who achieve less than a 2.00 semester GPA will be dismissed.

6. Students who have been dismissed may accept the dismissal or appeal to the Dean of Student Services for special consideration.

7. Students dismissed for academic reasons from MCC or another college may be required to wait a full semester before being readmitted.

8. Students placed on academic probation for two consecutive semesters or dismissed for unsatisfactory progress will not be eligible to receive financial aid or veteran's benefits until an accumulated grade point average of at least a 2.00 (C) has been achieved at the student's expense. Students who feel they have special circumstances may appeal to the financial aid officer, or the registrar if they're receiving VA benefits, for consideration for continued aid or benefits.

9. The Veteran's Administration will be notified when a student receiving VA benefits remains on academic probation for two consecutive semesters or is dismissed for unsatisfactory progress.

10. Students transferring to MCC shall be subject to all regulations stated above from the beginning of their enrollment.

11. Students will be advised, by letter, when they are placed on academic probation or dismissed.

Inclement Weather

It is the policy of MCC to remain open whenever possible. If classes are cancelled, the following radio and television stations will be notified:

WOOD Grand Rapids (1300 AM and 105.7 FM),
WPLB Greenville (1380 AM and 107.3 FM),
WCEN Mt. Pleasant (1150 AM and 94.5 FM),
WCFX Mt. Pleasant (95 FM),
WCUZ Grand Rapids (1230 AM and 101.3 FM),
WBRN Big Rapids (1460 AM and 100.9 FM),
WION Ionia (1430 AM),
WOTV Grand Rapids (Channel 8),
WZZM Grand Rapids (Channel 13), and
WLNS Lansing (Channel 6).

CREDIT ACCEPTANCE GUIDELINES

Students who have taken courses at another college or university may wish to have course work evaluated for credit toward a degree or certificate at Montcalm Community College.

Students must earn a minimum of 24 credits at MCC to receive an associate degree. For a certificate, at least 50 percent of the required credits must be earned at MCC.

Students who intend to graduate from MCC must be enrolled at MCC during their final semester prior to receiving a degree or certificate.

Guidelines for the acceptance of credit from other colleges or universities and for earning credit in nontraditional ways follow. Students must make formal application to the college and enroll to qualify. More information is available from the Admissions Office or from the appropriate instructional administrator.

1. Transfer Credit from Accredited Institutions of Higher Learning: Courses taken at other colleges or universities in which a student has earned a C grade or better may be transferred to MCC.

2. Credit for Correspondence Courses: Generally, credit will not be granted by MCC for correspondence course work. Exceptions are limited to United States Armed Forces instruction courses and courses from regionally accredited institutions of higher learning.

To qualify for correspondence credit, students must forward official transcripts to the Registrar's Office. Transcripts will be evaluated by the appropriate instructional administrator and a \$5 fee will be charged for each credit granted.

3. Credit or Waiver by Examination: Practical experience is often equivalent to knowledge that would be gained through course work. Taking a course in that field may be needless repetition. Students wishing to receive a waiver or credit for courses in which they feel competent and for which an exam is offered may opt for credit or waiver by examination.

a. **Credit by examination:** After enrolling in a course and successfully completing the exam, students are awarded an S grade and full credit for the course.

b. **Waiver by examination:** Upon successful completion of the exam, the requirement for taking that course will be waived and a \$5 per credit hour examination fee will be charged. This option is only available for a specific course once and is not available for a course in which a student has already received a grade.

4. CLEP (College Level Examination Program) Credit: Students enrolled at MCC who have taken part in the College Level Examination Program and ranked in the 50th percentile or higher on a subject area test may request a waiver of specific course requirements or have course credit granted. If the waiver is approved, students will not have to take the corresponding MCC course but will be required to take the equivalent credit hours in other MCC course work. For students who wish to have specific course credits granted for the CLEP exams a \$5 per credit hour fee will be charged for each credit granted.

To qualify for CLEP credit, students must submit an official transcript of the test results to the Registrar's Office. The appropriate instructional administrator evaluates the examination results and CLEP credit is noted on the transcript.

5. Advanced Placement Credit: Students enrolled at MCC who have taken part in the College Board Advanced Placement Program (AP) and earned AP examination scores of three or above may receive MCC credit with the following stipulations:

a. Students must present a certificate indicating a test score of three or above to the registrar.

b. The appropriate instructional administrator will evaluate the test results and determine suitable credit to be given.

c. Students will pay \$5 per credit hour assigned to their transcripts.

d. Credits designated as Advanced Placement Credit will be assigned an S grade and will not be calculated as part of the overall grade point average.

6. Articulation Credits: MCC recognizes that some course work completed in high school may be equivalent to basic courses offered at the college. Written agreements to grant college credit for high school courses have been reached with several school districts in respect to specific programs.

To receive credit the student must maintain a B average in the articulated program and receive a written recommendation from the appropriate high school instructor.

A maximum of sixteen hours can be earned in this way. Credit will be granted when students complete six hours of MCC course work with a C average in the discipline for which college credit is being granted. There is no charge for the credit hours granted. Students must enroll at MCC, take the appropriate courses no later than the beginning of the third year following high school graduation, and formally request credit. Credit is awarded through notation (no grade will be given) upon completion of the requirements. Articulation agreements with individual high schools may vary. For further information, contact the instructional office at 517/328-2111, ext. 236.

Students must submit the required forms to the Registrar's Office and when the MCC course work has been completed, they must notify the registrar.

7. Credit for Training Program

A. Armed Services Basic Training

Students who have successfully completed Military Basic Training will be granted up to four credit hours of physical education credit provided they formally request credit for Physical Education and submit Form DD214 indicating the successful completion of Basic Training to the registrar.

B. Other Training Programs

Students who have successfully completed military course work may receive transfer credit upon application according to the appropriate ACE guide. The MOS number is, by itself, not recognized for transfer credit. A \$5 fee is charged for each credit granted.

Students who have successfully completed courses outlined in The National Guide (ACE) may receive transfer credit. A \$5 fee will be charged for each credit granted.

To earn credit for training or military course work, students must forward official transcripts to the Registrar's Office. The transcripts will be evaluated for credit by the appropriate instructional administrator.

It is the policy of Montcalm Community College that no person shall, on the basis of sex, race, religion, color, national origin, age, or solely by reason of handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination in any of its programs, activities, or in employment.

TRANSFER STUDENTS

Statewide College and University Articulation Agreement

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. Montcalm Community College is a participant in this agreement with the following four-year institutions:

Adrian College
Albion College
Alma College
Aquinas College
Baker College
Calvin College
Central Michigan University
Cleary College
Davenport College
Detroit College of Business
Eastern Michigan University
Ferris State University
General Motors Institute
Grand Valley State University
Hope College
Kalamazoo College
Lake Superior State University
Lawrence Institute of Technology
Madonna College
Michigan State University
Michigan Technological University
Muskegon Business College
Nazareth College
Northern Michigan University
Northwood Institute
Oakland University
Olivet College
Sienna Heights College
Spring Arbor College
St. Mary's College
Western Michigan University

of that four-year college. The specific requirements of the MACRAO agreement are:

1. English Composition -
6 semester hours or 9 quarter hours
2. Humanities -
8 semester hours or 12 quarter hours
3. Social Sciences -
8 semester hours or 12 quarter hours
4. Natural Sciences -
8 semester hours or 12 quarter hours

SEE AN MCC COUNSELOR for more details about this IMPORTANT PLANNING. The information provided will change as four-year institutions change their degree requirements. You **SHOULD CONTACT** the admissions office at the four-year college or university which you expect to attend as soon as possible after beginning at MCC.

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

This agreement provides that students who complete the MCC Associate Degree in Arts and Sciences and are accepted as transfer students by one of these schools will have satisfied the basic general education requirements

FINANCIAL AID

The Financial Aid Office is located in the Student Services Office and can be reached by calling 517/328-2111, extension 269. Financial Aid staff can answer questions about grants, loans, the work study program, and scholarships.

How to Apply for Aid

To be considered for financial aid, students must file a Financial Aid Form (FAF) which will be processed by the College Scholarship Service. Students may apply for aid after January 1, and after students or their parents have completed an income tax return for the past calendar year.

By completing the FAF, students will be considered for several types of financial aid. However, students may apply for a Pell Grant only by submitting a Pell Grant application.

The Pell Grant application and the Financial Aid Form are available in the MCC Financial Aid Office or high school guidance offices.

MCC Scholarships

Montcalm Community College offers several scholarships each year to area high school students. Additional information about the following scholarships is available from high school counselors or the MCC Financial Aid Office.

1. Board of Trustees (in-district): Two scholarships per area high school are available and are awarded to students who have attained a B average in high school. Recipients could receive up to full tuition and fees.

2. Board of Trustees (out-district): Seven scholarships are available and are awarded to students who have attained a B average in high school. Recipients could receive up to full tuition and fees.

3. Area High School Grants: Two grants per area high school are available. Students who are recommended must apply for a Pell Grant. If ineligible for a Pell Grant, recipients could receive up to full tuition and fees from MCC.

4. Performing Arts/Music Stipend: Fifteen stipends are available to students who perform in choir and band. Recipients could receive up to full tuition and fees.

5. Adult High School Completion: Two scholarships are available to each high school completion program. Scholarships cover seven credit hours of tuition and fees at the in-district rate.

6. Outstanding Achievement Awards: Five awards are available to students who excelled in a specific area in high school. Recipients could receive up to full tuition and fees.

7. MCC Adult Scholarships: Five scholarships of \$200 per semester are available to new students over the age of 21.

8. Scholarships for High School Seniors: Scholarships for three tuition-and-fee-free MCC classes limited to the in-district rate, are available to students who have completed their junior year of high school with at least a B average. The courses must be taken during their senior year.

9. Scholarships for Adult High School Seniors: Scholarships for three tuition-and-fee-free MCC classes, limited to the in-district rate, are available to students who have achieved senior status with at least a B average and who are currently enrolled in the last quarter of their adult high school completion program. The courses must be taken during their senior year.

10. Over-60 Scholarships: Tuition scholarships are available to persons age 60 or older.

11. MCC Foundation Scholarship (in-district): One \$1,000 scholarship is available annually to students entering directly from high school with a grade point average of 3.00 (B) or better.

12. James Crosby Memorial Scholarship: One \$1,000 scholarship is available annually to a sophomore student with a grade point average of 3.00 (B) or better who has a letter of support from the 4-H Leaders' Council.

Some scholarships offered each college year do not require a Financial Aid Form to be on file. Contact the individual group or the MCC Financial Aid Office for more information.

These local groups include:

Alyce Ann Beckmeyer Scholarship
Bernard Gould Memorial Scholarship
Buescher Foundation
Burger King
Elks Foundation
Mildred Farmer-Angwin Scholarship
Ferris Township Scholarship
Fife Scholarship
General Telephone Company
MCC Foundation Scholarship
McDonald's
Ore-Ida Foods, Inc.
Edward Reddig Scholarship
Stan Ash Scholarship
Stan and Marion Kemp Scholarship
Stanton American Legion
United Memorial Hospital Guild
VFW Lester J. Sitts Post 5065 &
Auxiliary Academic Scholarship

State Aid Programs

STAFFORD STUDENT LOAN

Under this program, students may borrow up to \$2,625 per academic grade level. The loan bears an 8% interest rate and applications for the loan are available at many local banks and credit unions.

STATE DIRECT STUDENT LOAN

Students unable to obtain a Guaranteed Student Loan from a private lender may be eligible for a State Direct Loan. Students may borrow up to \$2,625 per academic level and may obtain a direct loan application kit from the MCC Financial Aid Office.

MICHIGAN COMPETITIVE SCHOLARSHIP

The State Scholarship program measures academic potential on the basis of the National ACT Exam. Eligible applicants may receive up to the amount of demon-

strated need or the amount of tuition, whichever is less. Recipients must be Michigan residents. For more information contact a high school counselor or the MCC Financial Aid Office.

SINGLE PARENT/HOMEMAKER AND SEX EQUITY PROGRAM

The Carl D. Perkins Single Parent/Homemaker and Sex Equity Program was made possible through a grant administered through the Community College Services Unit in the Michigan Department of Education. This program is designed to assist students who are enrolled in an occupational program and who are single parent/homemakers or non-traditional job trainees.

Students applying must meet several eligibility criteria. Currently, MCC is able to provide assistance for tuition, fees, books, transportation, and child care to eligible students. Applications may be obtained from the Financial Aid Office.

MICHIGAN ADULT PART-TIME GRANT PROGRAM

This program provides grant assistance for needy adults who enroll part-time at approved public or private degree-granting Michigan colleges. Grants of up to \$600 per year are available for not more than two years.

MICHIGAN EDUCATIONAL OPPORTUNITY GRANT PROGRAM

This program provides grant assistance for needy undergraduates who are enrolled at least half-time at public Michigan colleges and universities. Grants of up to \$1,000 per year are available.

TUITION INCENTIVE PROGRAM (TIP)

This Michigan Department of Social Services program pays community college tuition and fees. Students under age 20 who graduate from high school or obtain a GED after April 1988 and who are from lower-income families are eligible. Applications are available in the MCC Financial Aid Office or from local Department of Social Services Offices.

MICHIGAN WORK-STUDY PROGRAM

This program provides work opportunities for needy, undergraduate students who enroll at approved public or private degree-granting Michigan colleges on a full- or part-time basis. Both non-profit and profit-based employers may sign agreements with Michigan colleges to participate.

MICHIGAN AUXILIARY LOAN (PLUS) PROGRAM

Parents may borrow for dependent children and independent undergraduate and graduate students may borrow for themselves for study at eligible schools. Requests for application forms may be made through participating Michigan lenders (banks, savings and loan associations, and credit unions).

SUPPLEMENTAL LOANS FOR STUDENTS (SLS)

Independent students who attend an eligible college at least half time may borrow up to \$4,000 per academic year. These loans are normally sought by students who have exhausted eligibility for other financial aid programs. Interest rates are set annually at a variable rate and applications are available from participating banks, credit unions, or savings and loan associations.

Federal Aid Programs

PELL GRANT

This grant is available on the basis of demonstrated financial need to undergraduate students who are attending eligible vocational schools or colleges at least half time. The grants are based on the cost of attendance at the institution and do not exceed 50% of the cost of education. To be considered, students must file a Pell Grant application or a Financial Aid Form (FAF).

SUPPLEMENTAL EDUCATIONAL OPPORTUNITY GRANT

These limited funds are available to students who demonstrate financial need. The grants can be up to \$2,000 per academic year. To be considered, students must file a Financial Aid Form (FAF).

PERKINS LOAN PROGRAM (Formerly known as the National Direct Student Loan Program)

These loans are available to students who demonstrate financial need, bear a 5% interest rate, and allow the student a nine-month grace period before repayment begins. Students can borrow up to \$3,000 for two years of undergraduate work. To be considered, students must file a Financial Aid Form (FAF).

COLLEGE WORK-STUDY PROGRAM

This financial aid is a part-time job on the college campus and is available to students enrolled at least half time who demonstrate financial need. Preference is given to students with the greatest financial need. To be considered, students must file a Financial Aid Form (FAF).

VETERAN'S INFORMATION

For information about VA eligibility, benefits and processing, contact the Registrar's Office, located in the Student Services Office, by calling 517/328-2111, extension 309.

Student's requesting veteran's benefits while attending MCC must submit: an application for VA benefits, a certified copy or an original DD214 and a copy of their marriage license and children's birth certificates, if applicable, to the Registrar's Office.

The Registrar will submit these forms with an enrollment certification to the Veteran's Administration Office in Detroit. Processing of benefits normally takes from six to eight weeks.

Veterans who have enrolled must notify the Registrar of any changes in their training program or credit hour class load, an extended class absence of more than one week, or a cease in attendance (withdrawal from college).

Veterans may be held liable for any overpayment of benefits as the result of failure to report any changes. Satisfactory pursuit of study or training toward completion of an educational or vocational goal must be maintained.

VA Benefits

1. Payments are issued on the first day of the month for the previous month. The inclusive payment period is shown on all regular checks. The amount of payment depends on the class load and number of dependents. Each period of time for which students are paid reduces the amount of remaining benefits available. Payments cannot be made for any enrollment beyond 10 years from service separation for veterans or age 26 for dependents.

2. Withdrawal from classes affects the class load and may affect the rate of payment. VA regulations require that any reduction in rate due to withdrawal is effective retroactive to the beginning of the semester unless mitigating circumstances are documented. Mitigating circumstances are those which are normally, but not necessarily, beyond the student's control.

3. Unsatisfactory progress can stop VA benefits. MCC's standard of progress follows:

a. Refer to the MCC academic dismissal policy in the catalog.

b. 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 an accumulated grade point average of at least a 2.00 (C) has been achieved using their own funds. An appeal may be made to the Registrar for special circumstances.

c. The Veteran's Administration will be notified when students remain on academic probation for two consecutive semesters or are dismissed for unsatisfactory progress.

4. Students receiving VA benefits must be taking classes which apply to their declared program of study. A counselor should be seen prior to registration for each semester to assure correct course selection and to check progress toward completion of program.

5. Veterans who receive I or U grades in classes while receiving VA benefits have one year from the end of the semester to complete the course and receive a grade. The VA will be notified of these. If they are not completed in the year allowed veterans will be asked by the VA to repay the money that was received for that course.

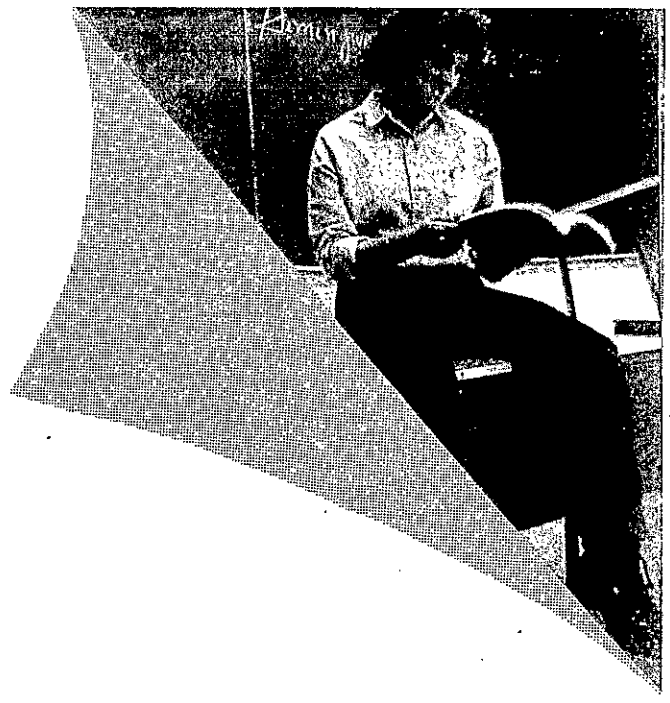
6. VA education benefits contain a subsistence allowance as compensation for class time spent pursuing an education. Since independent study courses do not involve class time, the VA has a separate payment schedule for independent study enrollments. Independent study courses can only be used to supplement regular class time courses if a veteran wishes to receive monthly rates. Students should check with the Registrar at registration to see if they have enrolled in any independent study courses. VA education loans are available if the student qualifies. Veterans, dependents, etc. must be receiving full-time benefits and still be able to show financial need. Half-time students may also qualify. Loans may also be available for veterans who have reached their 10-year cut-off date. For more information, contact a VA office.

Veteran's Information

Changing an address with the VA takes at least 17 days after a regional office receives notice of the change. Correct VA claim numbers should be included in the change of address notice. The post office should be notified of a forwarding address.

A change in dependents is most easily made by forwarding a certified copy of the official document proving the new dependent status to the Detroit Regional Office. Include the VA claim number and allow 30-40 days.

VETERANS MUST FILL OUT AN ATTENDANCE VERIFICATION FORM AT THE END OF EACH MONTH.



Academic Programs

DEGREES & CERTIFICATES

MCC offers students a variety of degree programs:

- Associate Degree in Arts and Sciences
(MACRAO Transfer)
- Associate Degree in Applied Arts and Sciences
- Associate Degree in General Studies

Associate Degrees in Arts and Sciences

Associate degrees in Arts and Sciences are recommended
in but not limited to:

Art
Biological Sciences
Language Arts
Physical Education
Physical Sciences
Social Sciences

GUIDELINES FOR A DEGREE IN ARTS AND SCIENCES

(This degree outline meets MACRAO transfer guidelines.)

COURSE TITLES	COURSE NUMBER	CREDIT HOURS
LA Freshman English I	LA100	3
Freshman English II*	LA101	3
HU Humanities I	HU200	4
Humanities II	HU201	4
NS Biological Science**	NS100	4
Physical Science**	NS101	4
SS Intro to Social Science I	SS 110	4
Intro to Social Science II***	SS 111	4

TOTAL REQUIRED HOURS 30

TOTAL ELECTIVE HOURS 30

TOTAL HOURS REQUIRED FOR DEGREE 60

LIBERAL ARTS REQUIRED HOURS 13 or 14
PROGRAM REQUIREMENTS(See specific program description)

* OR (having earned B+ or better in LA100) any other language arts
courses except speech or drama

** OR (with sufficient science background) any other TWO science
laboratory courses

*** OR any other TWO social science courses

ELECTIVE HOURS SHOULD REFLECT A MAJOR OR MINOR
FIELD OF STUDY

Associate Degrees in Applied Arts and Sciences

Accounting
Automotive Technology
Business Administration
Business Data Processing
Cosmetology Management
Criminal Justice - Corrections
Drafting Technology
Electronics - Industrial
Executive Secretary
Food Service Technology
Industrial Technology
Information Processing
Legal Secretary
Medical Secretary
Nursing
Paralegal Studies
Radiological Technology (1+1 Agreement)
Small Business Development/Management

GUIDELINES FOR A DEGREE IN APPLIED ARTS AND SCIENCES

COURSE TITLES	COURSE NUMBER	CREDIT HOURS
LA Freshman English I	LA100	3
Freshman English II*	LA101	3
SS Intro to Social Science I	SS 110	4
Intro to Social Science II	SS 111	4 or 3
or Biological Science or Physical Science	NS100 or NS101	
or Humanities I or Humanities II	HU200 or HU201 or any other social science course	

LIBERAL ARTS REQUIRED HOURS 13 or 14
PROGRAM REQUIREMENTS (See specific program description)
TOTAL CREDITS REQUIRED FOR DEGREE 60+

Nursing students should see page 44 for degree requirements.

* OR (having earned B+ or better in LA100) any other language arts
courses except speech or drama

** OR (with sufficient science background) any other TWO science
laboratory courses

*** OR any other TWO social science courses

ELECTIVE HOURS SHOULD REFLECT A MAJOR OR MINOR
FIELD OF STUDY

Information for Applied Arts and Sciences Degrees

These degree programs are designed for students who wish to complete a specialized training education before entering the job market. Students planning to transfer to a four-year college or university should consult with a counselor to determine whether it is best to select courses other than those listed to maximize transferability of credits.

This document was prepared in June 1989 and is subject to change without prior notice and therefore cannot be considered as an agreement or contract between the individual student and Montcalm Community College or its staff.

Associate Degrees in General Studies

GUIDELINES FOR A DEGREE IN GENERAL STUDIES

COURSE TITLES	COURSE NUMBER	CREDIT HOURS
SS Intro to Social Science I OR	SS110	4
SS Political Science	SS240	3

Other academic courses must include courses from at least three of the academic areas: humanities, language arts, mathematics, natural science, and social science.

TOTAL REQUIRED HOURS	15
TOTAL ELECTIVE HOURS	45
TOTAL HOURS REQUIRED FOR A DEGREE	60+

Multiple Degree Procedure

Students may earn all three MCC degrees if they meet the requirements. Students who have received or are receiving an AAS or an AAAS degree may not apply for an Associate Degree in General Studies.

To receive an applied arts and sciences degree, students must complete the degree requirements for that pro-

gram. The completion of a certificate program coupled with general education courses is not sufficient to qualify for an AAAS degree.

Students may receive more than one AAAS degree if they fulfill the requirements specified by the department. However, students may earn only one AAAS degree within a department (e.g. business studies, including business data processing, and office education). Students may complete more than one area of concentration within a department. Each area of concentration will be noted on the degree. While a second degree will not be granted, an area of concentration completed after the AAAS degree is issued will be noted on the transcript.

Certificate Programs

Automotive Servicing
Clerk-Typist
Cosmetology
Drafting
Food Service Technology
Information Processing
Legal Office Assistant
Machine Tool Operation
Medical Office Assistant
Nursing
Small Business Development/Management
Stenographer
Welding

Training Programs

Training programs include the following and may lead to certificates by outside agencies.

Allied Health
Apprenticeship
Child Development
Criminal Justice/Corrections

SPECIFIC PROGRAM OUTLINES ARE FOUND ON PAGES 22 THROUGH 56.

ART

This liberal arts program leads to an associate degree in arts and sciences with an emphasis in art and provides the background and skills necessary to continue study in the field of the visual arts. With the course load indicated below, students can complete this 60-credit-hour degree in two years.

Course Name

Course # Cr.

FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Intro to Social Science I	SS 110	4
Intro to Art	HU120	2
Drawing I or Sketching	HU122	3
Painting I	HU125	3

SPRING SEMESTER

Freshman English II*	LA 101	3
Intro to Social Science II*	SS 111	4
Drawing II	HU123	3
Painting II	HU126	3
Elective		3-4

SECOND YEAR

FALL SEMESTER

Humanities I	HU200	4
Biological Science	NS 100	4
Ceramics I	HU130	3
Painting III	HU227	3
Art - teaching courses		1-3
Elective		

SPRING SEMESTER

Humanities II	HU201	4
Physical Science	NS 101	4
Ceramics II	HU131	3
Painting IV	HU228	3
Art - teaching courses		1-3
Elective		

SUGGESTED ELECTIVES:

History
Philosophy
Literature

*See the alternatives listed under the requirements for the associate degree in arts and sciences on page 20.



BIOLOGICAL SCIENCES

This liberal arts program leads to an associate degree in arts and sciences with an emphasis in biology and provides the background and skills necessary to continue study in the field of biological science. With the course load indicated below, students can complete this 60-credit-hour degree in two years.

Course Name

Course # Cr.

FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
College Chemistry I	NS 220	5
Botany	NS 110	4
Math Elective		3

SPRING SEMESTER

Freshman English II*	LA 101	3
College Chemistry II	NS 221	5
Zoology	NS 115	4
Math Elective		3

SECOND YEAR

FALL SEMESTER

Humanities I	HU200	4
Intro to Social Science I	SS 110	4
Anatomy and Physiology I	NS 103	5
Science Elective		4

SPRING SEMESTER

Humanities II	HU201	4
Intro to Social Science II*	SS 111	4
Anatomy and Physiology II	NS 203	4
Science Elective		4

SCIENCE ELECTIVES :

Microbiology	NS 201
Intro to Physics I & II	NS 230/231
Earth Science	NS 102
Environmental Geography	NS 120

MATH ELECTIVES:

Intermediate Algebra	MA104
Trigonometry	MA120
College Algebra	MA159
Analytic Geometry	MA160

*See the alternatives listed under the requirements for the associate degree in arts and sciences on page 20.



LANGUAGE ARTS

This liberal arts program leads to an associate degree in arts and sciences with an emphasis in the language arts and provides the background and skills necessary to continue study in the field of language arts (literature, speech and communications). With the course load indicated below, students can complete this 60-credit-hour degree in two years.

Course Name *Course #* *Cr.*

FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Intro to Social Science I	SS 110	4
American Thought & Lit I	LA 200	3
Speech	LA 210	3
Elective		3

SPRING SEMESTER

Freshman English II*	LA 101	3
Intro to Social Science II*	SS 111	4
American Thought & Lit II	LA 201	3
Elective		3
Elective		3

SECOND YEAR

FALL SEMESTER

Humanities I	HU200	4
English Literature I	LA 220	3
Biological Science	NS 100	4
Elective		3

SPRING SEMESTER

Humanities II	HU201	4
English Literature II	LA 221	3
Physical Science	NS 101	4
Elective		3

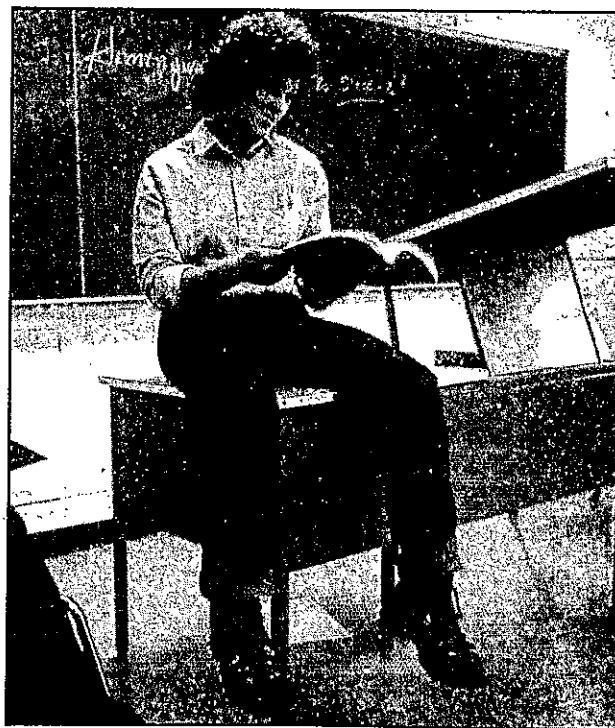
LITERATURE ELECTIVES:

Short Story	LA 230
Children's Literature	LA 235
The Novel	LA 240
Drama as Literature	LA 260
Drama as a Performing Art	LA 261
Poetry	LA 270

OTHER ELECTIVES:

Intro to Philosophy	HU220
Economics	SS 215
General Psychology	SS 220
U.S. History to 1865	SS 250
U.S. History since 1865	SS 251
Michigan History	SS 255

*See the alternatives listed under the requirements for the associate degree in arts and sciences on page 20.



PHYSICAL EDUCATION

This liberal arts program leads to an associate degree in arts and sciences with an emphasis in physical education and provides the background and skills necessary to continue study toward possible majors in secondary education with a minor in coaching, physical education and sports curriculums leading to employment in general recreation areas or therapeutic recreation, business, TV production, or health services management. With the course load indicated below, students can complete this 60-credit-hour degree in two years.

All students taking physical education courses must submit evidence of physical fitness from a doctor to Montcalm Community College. The form will be placed in the student's file and kept on record for one year.

CMU's PED-designated courses are subject to a limitation of six hours toward curriculum requirements for graduation.

SUGGESTED ELECTIVES:

Course Name

Course # Cr.

FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Intro to Social Science I	SS 110	4
Biological Science	NS 100	4
Intermediate Algebra	MA104	4
Personalized Body Cond.	PE 103	1
or Intro to Physical Fitness	PE 110	1

SPRING SEMESTER

Freshman English II*	LA 101	3
Intro to Social Science II*	SS 111	4
Speech	LA 210	3
Sports Fundamentals	PE 105	1
Electives		3-4

SECOND YEAR

FALL SEMESTER

College Chemistry	NS 220	5
Anatomy & Physiology I	NS 103	5
Humanities I	HU200	4
Sports Officiating	PE 121	1
Beginning Swimming	PE 130	1
Elective		

SPRING SEMESTER

General Psychology	SS 220	3
Anatomy & Physiology II	NS 203	4
Humanities II	HU201	4
Emergency Health Care	PE 205	2
Elective		3-4

Introduction to Business	BA 135
Principles of Marketing	BA 233
Small Business Management	BA 235
Management	BA 237
Intro to Data Processing	DP 110

*See the alternatives listed under the requirements for the associate degree in arts and sciences on page 20.

PHYSICAL SCIENCES

This liberal arts program leads to an associate degree in arts and sciences with an emphasis in the physical sciences and provides the background and skills necessary to continue study in the field of physical science (physics and chemistry). With the course load indicated below, students can complete this 60-credit-hour degree in two years.

Course Name

Course # Cr.

FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
College Chemistry I	NS 220	5
Introductory Physics I	NS 230	4
College Algebra	MA159	4

SPRING SEMESTER

Freshman English II*	LA 101	3
College Chemistry II	NS 221	5
Introductory Physics II	NS 231	4

SECOND YEAR

FALL SEMESTER

Humanities I	HU200	4
Intro to Social Science I	SS 110	4
Calculus I	MA250	5
Elective		3-4

SPRING SEMESTER

Humanities II	HU201	4
Intro to Social Science II*	SS 111	4
Calculus II	MA251	5
Elective		3-4

SCIENCE ELECTIVES:

Biological Science	NS 100
Earth Science	NS 102
Botany	NS 110
Zoology	NS 115
Environmental Geography	NS 120
Nature Study	NS 208

*See the alternatives listed under the requirements for the associate degree in arts and sciences on page 20.



SOCIAL SCIENCE

This liberal arts program leads to an associate degree in arts and sciences with an emphasis in the social sciences and provides the background and skills necessary to continue study in the field of social science. With the course load indicated below, students can complete this 60-credit-hour degree in two years.

<i>Course Name</i>	<i>Course #</i>	<i>Cr.</i>
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FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Intro to Social Science I	SS 110	4
U.S. History to 1865	SS 250	3
Sociology	SS 230	3

SPRING SEMESTER

Freshman English II*	LA 101	3
Intro to Social Science II*	SS 111	4
U.S. History since 1865	SS 251	3
Social Problems	SS 235	3

SECOND YEAR

FALL SEMESTER

Humanities I	HU200	4
General Psychology	SS 220	3
Cultural Anthropology	SS 260	3
Biological Science	NS 100	4

SPRING SEMESTER

Humanities II	HU201	4
Child Psychology	SS 221	3
Principles of Economics	SS 215	3
Physical Science	NS 101	4

SUGGESTED ELECTIVES:

Foreign Language	FL
Intro to Philosophy	HU220
American Literature	LA 200/201
Speech	LA 210
Algebra	MA100/104
Michigan History	SS 255

*See the alternatives listed under the requirements for the associate degree in arts and sciences on page 20.



ACCOUNTING

This program leads to an associate degree in applied arts and sciences with an emphasis in accounting and provides the background and skills necessary for an entrance job in the accounting field. Sixty credit hours are required to obtain a degree. With the course load indicated below, a student can complete the degree in two years.

<i>Course Name</i>	<i>Course #</i>	<i>Cr.</i>
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FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Principles of Accounting I	BA 115	4
Introduction to Business	BA 135	3
Intro to Data Processing	DP 110	3
Intro to the IBM PC and Compatible PCs**	DP 113	1

SPRING SEMESTER

Freshman English II*	LA 101	3
Principles of Accounting II	BA 116	4
Speech	LA 210	3
Intermediate Algebra	MA104	3

SECOND YEAR

FALL SEMESTER

Intro to Social Science I	SS 110	4
Cost Accounting I	BA 215	3
Legal Environment of Business	BA 200	3
Principles of Economics	SS 215	3
Elective		3-4

SPRING SEMESTER

Intro to Social Science II*	SS 111	4
Cost Accounting II	BA 216	3
Human Relations	BA 250	3
Management	BA 237	3
Elective		3-4

SUGGESTED ELECTIVES:

Computerized Accounting	BA 214
Cooperative Work/School Experience	BA 292
Microcomputers: Operating Systems and Applications	DP 116
Managerial Mathematics	MA116
Keyboarding	SD 145

*See the alternatives listed under the requirements for the associates degree in applied arts and sciences on page 20.

**Or taken concurrently with BA116

AUTOMOTIVE TECHNOLOGY

This program gives students basic preparation in several automotive subjects of their choice and allows them to select certain support courses which best fill their needs for transfer or work applications. Instructor or counselor help is recommended in making selections. Graduates may seek higher degrees in business, engineering, marketing or teaching and seek employment in automotive maintenance, manufacturing, field service or sales. A minimum of 60 credit hours is required.

REQUIRED COURSES: (24 CREDITS)

Course Name	Course #	Cr.
Freshman English I	LA 100	3
Freshman English II*	LA 101	3
Intro to Social Science I	SS 110	4
Intro to Social Science II*	SS 111	4
Elementary Algebra	MA100	4
Concepts of Electricity	EL 100	3
Basic Fluid Power	IT 253	3

AUTOMOTIVE REQUIREMENTS:

(29 CREDITS--NO MORE THAN 31 CREDITS WILL APPLY TO THE DEGREE)

With the exception of AM114, AM118, AM160 and AM164, students may select from any of the AM courses available including AM292 Cooperative Work/School Experience. Prerequisites must be satisfied. Instructor assistance is recommended.

ELECTIVES:

Students must select from the groups listed below, provided all prerequisites are satisfied. Instructor or counselor assistance is recommended.

BA - Business Administration
DP - Data Processing
EL - Electricity/Electronics
FL - Foreign Language
HU - Humanities
IT - Industrial Technology
LA - Language Arts
MA - Mathematics
NS - Natural Science
OE - Office Education
SS - Social Science
TD - Technical Drafting
WE - Welding

*See the alternatives listed under the requirements for the associate degree in applied arts and sciences on page 20.

A CERTIFICATE PROGRAM IN THE AUTOMOTIVE AREA IS ALSO AVAILABLE. SEE PAGE 48.

LICENSES & CERTIFICATION

Professional auto service technicians are required to hold a state license with certifications appropriate to their work. There are eight certification areas and each has its own test. National ASE tests and certificates are also available in these same subjects and are accepted by most states. Many employers prefer to hire ASE-licensed technicians. MCC offers theoretical and practical course work which prepares students to pass tests in either series.

The eight state and national testing areas and the recommended MCC courses needed to fully prepare for each are listed below. Students with previous training or experience or those who have not completed high school should check with an automotive instructor for individual recommendations.

Course Name	Course #	Cr.
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BRAKES

Shop Procedures	AM104	1
Automotive Brakes & Servicing	AM108	3
Basic Fluid Power	IT 253	3

FRONT-END SUSPENSION, STEERING

Shop Procedures	AM104	1
Basic Fluid Power	IT 253	3
Auto Steering & Suspension Theory	AM130	2
Auto Steering & Suspension Lab	AM131	2

ENGINE REPAIR

Shop Procedures	AM104	1
Engine Servicing I	AM106	2
Engine Servicing Theory II	AM124	2
Engine Servicing Lab II	AM125	3

continued on next page

Automotive Technology (Continued)

Course Name *Course #* *Cr.*

ENGINE TUNE-UP AND PERFORMANCE

Concepts of Electricity	EL 100	3
Shop Procedures	AM104	1
Engine Servicing I	AM106	2
Auto Engine Performance Theory I	AM210	2
Auto Engine Performance Lab I	AM211	2
Auto Engine Performance Theory II	AM212	2
Auto Engine Performance Lab II	AM213	3

MANUAL TRANSMISSIONS, DIFFERENTIALS AND DRIVE TRAINS

Shop Procedures	AM104	1
Manual Transmission Theory	AM132	2
Manual Transmission Lab	AM133	2

HEATING, VENTILATING AND AIR CONDITIONING

Shop Procedures	AM104	1
Auto Heating & Air Conditioning Theory	AM260	2
Auto Heating & Air Conditioning Lab	AM261	2

AUTOMATIC TRANSMISSIONS

Basic Fluid Power	IT 253	3
Shop Procedures	AM104	1
Automatic Transmission Theory	AM230	2
Automatic Transmission Lab	AM231	2

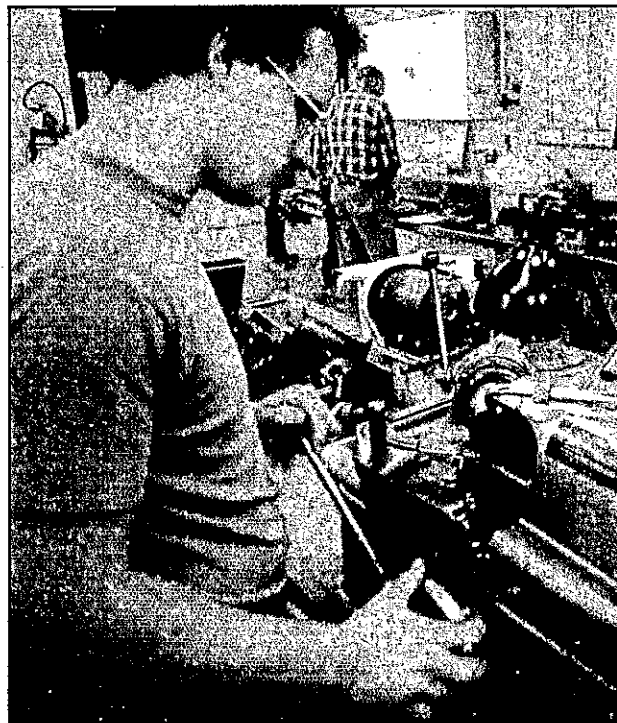
Course Name

Course # *Cr.*

ELECTRICAL SYSTEMS

Concepts of Electricity	EL 100	3
Shop Procedures	AM104	1
Auto Electrical Systems Theory I	AM140	2
Auto Electrical Systems Lab I	AM141	3
Auto Electrical Systems Theory II	AM142	2
Auto Electrical Systems Lab II	AM143	3

ADDITIONAL AM COURSES ARE LISTED ON PAGES 59 THROUGH 62.



BUSINESS ADMINISTRATION

This program leads to an associate degree in applied arts and sciences with an emphasis in business administration and provides the background skills necessary for an entrance job in the business field. Sixty credit hours are required and can be completed in two years with the course load indicated below.

Course Name *Course # Cr.*

FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Principles of Accounting I	BA 115	4
Introduction to Business	BA 135	3
Intro to Data Processing	DP 110	3
Intro to the IBM PC and Compatible PCs**	DP 113	1

SPRING SEMESTER

Freshman English II*	LA 101	3
Principles of Accounting II	BA 116	4
Human Relations	BA 250	3
Speech	LA 210	3
Elective		3-4

SECOND YEAR

FALL SEMESTER

Intro to Social Science I	SS 110	4
Legal Environment of Business	BA 200	3
Marketing	BA 233	3
Management	BA 237	3
Principles of Economics	SS 215	3

SPRING SEMESTER

Intro to Social Science II*	SS 111	4
Advertising	BA 248	3
General Psychology	SS 220	3
Elective		
Elective		

SUGGESTED ELECTIVES:

Accounting for Small Business	BA 105
Entrepreneurship	BA 136
Computerized Accounting	BA 214
Retailing	BA 234
Small Business Management	BA 235
Customer Relations	BA 251
Cooperative Work/School Experience	BA 292
Microcomputers: Operating Systems and Applications	DP 116
College Algebra	MA159

*See the alternatives listed under the requirements for the associate degree in applied arts and sciences on page 20.

**Or taken concurrently with BA116

BUSINESS DATA PROCESSING

This program leads to an associate degree in applied arts and sciences with a specialty in business data processing and provides the background and skills necessary for an entrance job in the business data processing field. It is designed with two tracks: one for students seeking careers with larger companies having centralized computer departments* and the other for students seeking careers with smaller companies using microcomputers and commercially available software packages**. Sixty credit hours are required. The following outline indicates the order in which courses should be taken. With the course load indicated below, students can complete the degree in two years.

Course Name	Course #	Cr.
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FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Principles of Accounting I	BA 115	4
Introduction to Business	BA 135	3
Intro to Data Processing	DP 110	3

SPRING SEMESTER

Freshman English II***	LA 101	3
Principles of Accounting II	BA 116	4
Human Relations	BA 250	3
Intro to Pascal*	DP 122	3
or Microcomputers: Operating Systems & Applications**	DP 116	3
Elective		

SECOND YEAR

FALL SEMESTER

Intro to Social Science I	SS 110	4
Legal Environment of Business	BA 200	3
Management	BA 237	3
Systems Concepts/Design	DP 240	3
Cobol Programming*	DP 220	3
or Microcomputer Spreadsheets**	DP 230	3

Course Name	Course #	Cr.
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SPRING SEMESTER

Intro to Social Science II***	SS 111	4
RPGII Programming*	DP 225	3
or Microcomputer Data Base Applications**	DP 235	3
Programming Project	DP 290	3
Speech	LA 210	3

SUGGESTED ELECTIVES:

Advanced Programming in Pascal	DP 222
Cooperative Work/School Experience	DP 292
Beginning Typing	OE 100
or Keyboarding	SD 145
Elementary Algebra	MA100

STUDENTS PLANNING TO TRANSFER TO FOUR-YEAR COLLEGES ARE STRONGLY ADVISED TO CONSULT WITH A COUNSELOR DURING THEIR FIRST SEMESTER.

*For students pursuing a programming career in high-level languages.

**For students pursuing a career in microcomputer applications.

***See the alternatives listed under the requirements for the associate degree in applied arts and sciences on page 20.

COSMETOLOGY MANAGEMENT

Graduates of the cosmetology management program will possess skills and knowledge to operate in today's business setting as a shop manager in addition to being able to work directly on customers. Some may wish to emphasize entrepreneurial skills with plans to open their own shops in the future. In addition to the 60 credits required for degree completion, students must be eligible for state cosmetology licensure testing.

General requirements for the AAAS degree:

- LA 100 Freshman English I
- LA 101 Freshman English II*
- SS 110 Introduction to Social Science I
- SS 111 Introduction to Social Science II*

All cosmetology 200-level required courses or equated hours/credits** (as determined by pre-board testing).

Additional requirements:

A. Select one: BA105 Accounting for Small Business or
BA115 Principles of Accounting I

B. Select one: BA136 Entrepreneurship or
BA235 Small Business Management

C. Electives (Choose at least three)

- BA 135 Introduction to Business
- BA 200 Legal Environment of Business
- BA 233 Principles of Marketing
- BA 234 Retailing
- BA 250 Human Relations
- BA 251 Customer Relations
- DP 110 Intro to Data Processing
- DP 116 Microcomputers: Operating Systems & Applications
- LA 210 Speech
- OE 120 Business Mathematics
- OE 129 Business Communications I
- SS 215 Principles of Economics
- SS 220 General Psychology

*See the alternatives listed under the requirements of the associate degree in applied arts and sciences on page 22.

**Students transferring to Montcalm Community College who hold a valid State of Michigan Cosmetology

License issued within the last 24 months may be granted up to 36 credits (a maximum of 32 general cosmetology credits) toward this degree. If licensed more than two years ago, applicants must document six months work experience out of the last 30 months to be eligible for the transfer credit. Unlicensed transfer applicants must take state pre-board exams to determine transfer credits in cosmetology. Please contact the instructor.

A CERTIFICATE PROGRAM IN COSMETOLOGY IS ALSO AVAILABLE. SEE PAGE 49.



CRIMINAL JUSTICE - CORRECTIONS

This associate degree program prepares successful graduates for careers in corrections. It includes the 15 credit hours needed for certification plus normal degree requirements and other career-related courses. The program is also designed to provide maximum transferability to four-year colleges and universities which offer a bachelor's degree in criminal justice or related fields. The following outline indicates the order in which courses should be taken. With the course load shown below, students can complete the degree in two years.

Course Name

Course # Cr.

FIRST YEAR

FALL SEMESTER

Intro to Corrections	CJ 110	3
Freshman English I	LA 100	3
Intro to Social Science I	SS 110	4
Intro to Criminal Justice	CJ 100	3
Elective		3-4

SPRING SEMESTER

Corrections Institutions/Facilities	CJ 120	3
Freshman English II*	LA 101	3
Intro to Social Science II*	SS 111	4
Personal Self-Defense	PE 114	1
Elective		3-4

SECOND YEAR

FALL SEMESTER

Humanities I	HU200	4
Speech	LA 210	3
Legal Issues in Corrections	CJ 220	3
Emergency Health Care	PE 205	2
Client Relations in Corrections	CJ 250	3
Stress Management for Correctional Officers	CJ 115	1

Course Name

Course # Cr.

SPRING SEMESTER

Humanities II	HU201	4
American Criminal Law	CJ 210	3
Client Growth & Development	CJ 260	3
Criminal Justice Practicum+	CJ 290	5
Report Writing for Line Officers	CJ 135	1

+Additional 290s will be added for police, fire, public safety, etc. as the need arises.

*See the alternatives listed under the requirements of the associate degree in applied arts and sciences on page 20.

A TRAINING PROGRAM IN CRIMINAL JUSTICE IS ALSO AVAILABLE. SEE PAGE 56.

DRAFTING TECHNOLOGY

Almost without exception any manufactured item, however large or small, requires a series of drawings to bring it from design conception to manufactured reality. A drafter is responsible for sketches, design layouts, detail and assembly drawings, and tool drawings, all necessary graphic communications for manufacturing. The employment outlook for drafters has been good. Advancement opportunities for associate degree personnel, with experience, are readily available. The sequence of courses shown below allows students to earn an associate degree in applied arts and sciences in two years of school as a full-time student. Students who wish to attend school part time need not necessarily adhere to this exact sequence. Please check with your counselor. Sixty-one credit hours are required.

Course Name

Course # Cr.

FIRST YEAR

FALL SEMESTER

Metallurgy & Heat Treatment	IT 130	2
Basic Machine Operation	IT 220	3
Freshman English I	LA 100	3
Intermediate Algebra	MA104	4
Technical Drafting I	TD 100	3

SPRING SEMESTER

Sketching	HU121	2
Manufacturing Processes	IT 260	2
Freshman English II*	LA 101	3
Trigonometry	MA120	3
Descriptive Geometry	TD 110	3
Technical Drafting II	TD 130	3

SECOND YEAR

FALL SEMESTER

Concepts of Electricity	EL 100	3
Product Design	TD 215	3
Intro to Social Science I	SS 110	4
Jig & Fixture Design	TD 230	3
Intro to Data Processing	DP 110	3

SPRING SEMESTER

Customer Relations	BA 251	2
Basic Fluid Power	IT 253	3
Intro to Social Science II*	SS 111	4
Tool & Die Design I**	TD 135	2
Computer Aided Drafting	TD 250	3

*See the alternatives listed under the requirements for the associate degree in applied arts and sciences on page 20.

**Students may substitute Plastic Mold Design I (TD140)

A CERTIFICATE PROGRAM IN DRAFTING IS ALSO AVAILABLE. SEE PAGE 49.



ELECTRONICS - INDUSTRIAL

This program prepares students for diagnosis and repair of complex electronic devices and may be transferable as a package to a four-year university. Through proper selection of electives, emphasis may be placed upon communications, computers or industrial electronics. A counselor or instructor can help select courses for these areas. Sixty credit hours are required for the degree and at least 26 must be EL courses. DP110 is required. The following outline indicates the order in which courses should be taken. With the course load shown below, students can complete the degree in two years.

Course Name

Course # Cr.

FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Intermediate Algebra	MA104	4
Concepts of Electricity	EL 100	3
Intro to Social Science I	SS 110	4
Intro to Data Processing	DP 110	3

SPRING SEMESTER

Freshman English II*	LA 101	3
Trigonometry	MA120	3
Electrical Circuit Analysis	EL 110	3
Digital Electronics	EL 230	3
Intro to Social Science II*	SS 111	4

SECOND YEAR

FALL SEMESTER

Basic Electronics	EL 120	3
Intro to College Physics I	NS 111	3
Industrial Electrical Maintenance I	EL 251	2
Industrial Electrical Maintenance II	EL 252	2
Microprocessors	EL 240	3
Customer Relations	BA 251	2

SPRING SEMESTER

Advanced Electronics	EL 210	3
Intro to College Physics II	NS 112	3
Industrial Electrical Maintenance III	EL 253	2
Industrial Electrical Maintenance IV	EL 254	2
Elective		3

SUGGESTED ELECTIVES:

Microcomputers: Operating Systems &

Applications

DP 116

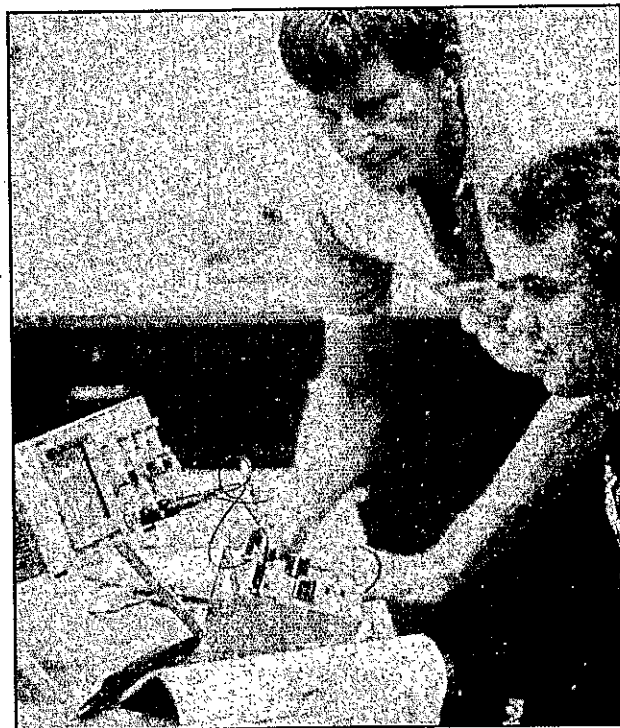
Basic Fluid Power

IT 253

College Algebra

MA159

*See the alternatives listed under the requirements for the associate degree in applied arts and sciences on page 20.



EXECUTIVE SECRETARY

Graduates of the executive secretarial science curriculum will have a knowledge of business technology and skill in dictation and accurate transcription of business letters and reports. Graduates are prepared for employment as stenographers or secretaries. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda, or reports. In addition to taking dictation, secretaries are responsible for meeting office callers, screening telephone calls, and assisting the executive. An associate degree in applied arts and sciences is awarded upon successful completion of at least 60 credit hours, including the course work outlined. By following this sequence, the program can be completed in two years.

Course Name Course # Cr.

FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Intermediate Typing	OE 101	3
Business Mathematics	OE 120	3
Business Communications I	OE 129	3
Elective		3

SPRING SEMESTER

Freshman English II*	LA 101	3
Business Communications II	OE 130	3
Advanced Typing	OE 202	3
Business Calculators	OE 240	3
Information Processing I	OE 225	4

SECOND YEAR

FALL SEMESTER

Intro to Social Science I	SS 110	4
Shorthand I	OE 103	4
Accounting for Small Business	BA 105	3
Voice Transcription	OE 220	3
Elective		3

Course Name

Course # Cr.

SPRING SEMESTER

Intro to Social Science II*	SS 111	4
Records Management	OE 175	3
Shorthand II	OE 104	4
Office Procedures	OE 230	3
Elective		3

SUGGESTED ELECTIVES:

Introduction to Business	BA 135
Human Relations	BA 250
Intro to Data Processing	DP 110
Shorthand III	OE 203
Information Processing II	OE 226
Information Processing III	OE 227
Field Experience	OE 290

*See the alternatives listed under the requirements for the associate degree in applied arts and sciences on page 20.



FOOD SERVICE TECHNOLOGY

This program provides the skills and technical knowledge necessary to prepare for entry-level employment in the food service/restaurant industry. Students completing this program will have basic skills in food preparation, nutrition and menu planning, hotel and restaurant management, and small business operation as it relates to the food service industry. In addition, they will fulfill the requirements for an applied arts and sciences degree. The following outline indicates the order in which courses should be taken. With the course load indicated below, students can complete the degree in two years.

Course Name

Course # Cr.

FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Business Mathematics	OE 120	3
Intro to Food Service	FST100	3
Food Service Safety and Sanitation	FST101	2
Food Production Skills - General	FST110	4

SPRING SEMESTER

Freshman English II*	LA 101	3
Intro to Business	BA 135	3
Food Production Skills - Entree	FST120	4
Meat and Portion Control	FST130	2
Nutrition and Menu Planning	FST140	3

SECOND YEAR

FALL SEMESTER

Intro to Social Science I	SS 110	4
Equipment Design, Layout and Selection	FST200	2
Food Service Management	FST201	3
Food Production Skills - Bakery	FST210	4

Course Name

Course # Cr.

SPRING SEMESTER

Intro to Social Science II*	SS 111	4
Small Business Management	BA 235	3
Humanities I	HU200	4
Food Production Skills - Catering	FST220	4
Food Purchasing	FST230	3

*See the alternatives listed under the requirements for the associate degree in applied arts and sciences on page 20.

A CERTIFICATE PROGRAM IN FOOD SERVICE TECHNOLOGY IS ALSO AVAILABLE. SEE PAGE 50.

INDUSTRIAL TECHNOLOGY

Graduates of this program will have a well-rounded background preparing them for work in manufacturing and process industries as planners, buyers or technicians. Transfer to a four-year bachelor's degree program is also possible. The training offers many hours of practical, hands-on experience to complement the theory. A minimum of 60 credit hours is required. The following outline indicates the order in which courses should be taken. With the course load shown below, students can complete the degree program in two years.

STUDENTS ARE URGED TO LEARN TYPING IN HIGH SCHOOL OR EARLY IN THIS PROGRAM.

*See the alternatives listed under the requirements for the associate degree in applied arts and sciences on page 20.

Course Name Course # Cr.

FIRST YEAR

FALL SEMESTER

Basic Machine Operation	IT 220	3
Freshman English I	LA 100	3
Elementary Algebra	MA100	4
Technical Drafting I	TD 100	3
Intro to Data Processing	DP 110	3

SPRING SEMESTER

Sketching	HU121	2
Basic Fluid Power	IT 253	3
Manufacturing Processes	IT 260	2
Freshman English II*	LA 101	3
Intermediate Algebra	MA104	4
Layout & Precision Measure	TD 106	2

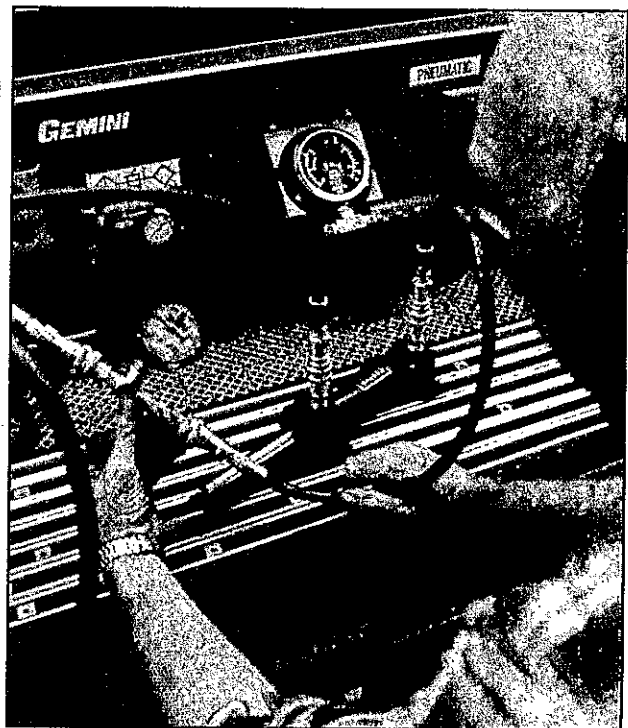
SECOND YEAR

FALL SEMESTER

Concepts of Electricity	EL 100	3
Basic CNC Operation	IT 102	2
Metallurgy & Heat Treatment	IT 130	2
Intro to College Physics I	NS 111	3
Intro to Social Science I	SS 110	4

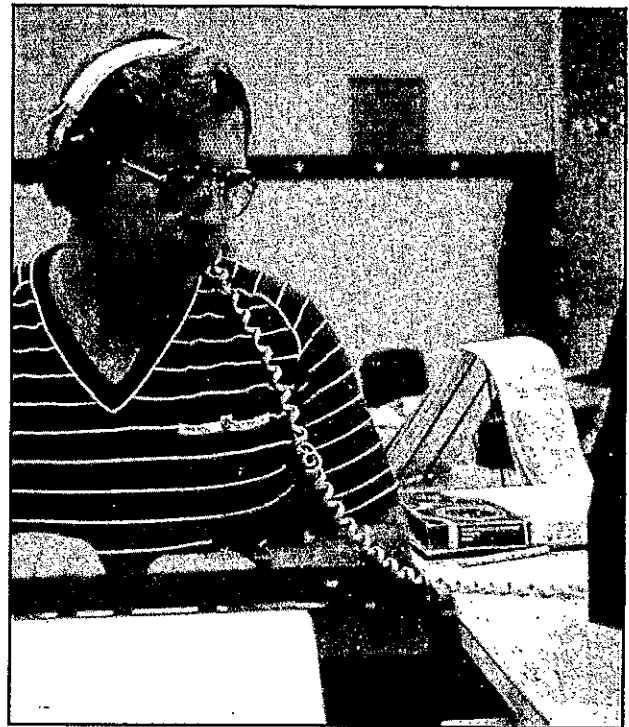
SPRING SEMESTER

Industrial Quality Control	IT 270	2
Customer Relations	BA 251	2
Trigonometry	MA120	3
Intro to College Physics II	NS 112	3
Intro to Social Science II*	SS 111	4
Welding Elective		



Course Name . *Course #* *Cr.*

Intro to Social Science II*	SS 111	4
Records Management	OE 175	3
Information Processing III	OE 227	3
Office Procedures	OE 230	3
Elective		3-4



LEGAL SECRETARY

This program prepares students who wish to specialize in legal shorthand and transcription and legal office procedures for employment or advancement. An associate degree in applied arts and sciences is awarded upon successful completion of at least 60 credit hours including the course work below.

<i>Course Name</i>	<i>Course #</i>	<i>Cr.</i>
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FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Intermediate Typing	OE 101	3
Business Mathematics	OE 120	3
Business Communications I	OE 129	3
Elective		3

SPRING SEMESTER

Freshman English II*	LA 101	3
Accounting for Small Business	BA 105	3
Advanced Typing	OE 202	3
Information Processing I	OE 225	4
Business Calculators	OE 240	3

SECOND YEAR

FALL SEMESTER

Intro to Social Science I	SS 110	4
Legal Environment of Business	BA 200	3
Shorthand I	OE 103	4
Voice Transcription	OE 220	3
Legal Term & Transcription	OE 205	3

SPRING SEMESTER

Intro to Social Science II*	SS 111	4
Shorthand II	OE 104	4
Legal Office Procedures	OE 206	3
Office Procedures	OE 230	3
Records Management	OE 175	3

SUGGESTED ELECTIVES:

Introduction to Business	BA 135
Human Relations	BA 250
Intro to Data Processing	DP 110
Business Communications II	OE 130
Shorthand III	OE 203
Information Processing II	OE 226
Information Processing III	OE 227
Field Experience	OE 290

*See the alternatives listed under the requirements for the associate degree in applied arts and sciences on page 20.

A CERTIFICATE PROGRAM FOR LEGAL OFFICE ASSISTANT IS ALSO AVAILABLE. SEE PAGE 51.

MEDICAL SECRETARY

This program prepares students for employment or advancement in a physician's office; hospital; medical supply house; local, state, or federal health agency; voluntary health agency; medical college; health insurance firm or related area. An associate degree in applied arts and sciences is awarded upon successful completion of at least 60 credit hours including the course work below. By following this sequence, the program can be completed in two years.

Course Name

Course # Cr.

FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Intermediate Typing	OE 101	3
Business Mathematics	OE 120	3
Business Communications I	OE 129	3
Elective		3

SPRING SEMESTER

Freshman English II*	LA 101	3
Accounting for Small Business	BA 105	3
Advanced Typing	OE 202	3
Information Processing I	OE 225	4
Business Calculators	OE 240	3

SECOND YEAR

FALL SEMESTER

Intro to Social Science I	SS 110	4
Shorthand I	OE 103	4
Medical Terminology	OE 207	3
Voice Transcription	OE 220	3
Records Management	OE 175	3

SPRING SEMESTER

Intro to Social Science II*	SS 111	4
Emergency Health Care	PE 205	2
Shorthand II	OE 104	4
Medical Office Procedures	OE 208	3
Office Procedures	OE 230	3

SUGGESTED ELECTIVES:

Introduction to Business	BA 135
Human Relations	BA 250
Intro to Data Processing	DP 110
Business Communications II	OE 130
Shorthand III	OE 203
Information Processing II	OE 226
Information Processing III	OE 227
Field Experience	OE 290

*See the alternatives listed under the requirements for the associate degree in applied arts and sciences on page 20.

A CERTIFICATE PROGRAM FOR MEDICAL OFFICE ASSISTANT IS ALSO AVAILABLE. SEE PAGE 52.

NURSING: LEVEL I & II

Students without prior nursing education may complete Level I & II and be awarded an applied arts & sciences degree. Students may then become eligible to write the National Council Licensing Examination (NCLEX-RN) and practice as a Registered Nurse (RN). In addition to Level I admission criteria (see page 54), students must complete a general chemistry course with a lab and an algebra course with C or better grades not more than 10 years ago in one year of high school or one semester of college, earn a satisfactory score on the Applied Weights and Measures Test and receive recommendation by the faculty. Admission into and progression through the nursing programs depend upon the attainment of a C or better grade in each required science (NS) and nursing (NUR) course.

<i>Course Name</i>	<i>Course #</i>	<i>Cr.</i>
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FALL SEMESTER - 16 WEEKS

Anatomy & Physiology I*	NS 103	5
Intro to Physical Fitness**	PE 110	1
Freshman English I**	LA 100	3
Social Science I** or	SS 110	4
Political Science	SS 240	3

SPRING SEMESTER - 16 WEEKS

Anatomy & Physiology II*	NS 200	4
Freshman English II**	LA 101	3
General Psychology*	SS 220	3

*These science courses are required prior to beginning the associate degree nursing program.

**These liberal arts courses are required prior to graduation.

ALL NURSING (NUR) COURSES MUST BE TAKEN IN THE SEMESTER SHOWN.

LEVEL I & II

<i>Course Name</i>	<i>Course #</i>	<i>Cr.</i>
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FALL SEMESTER - 16 WEEKS

Basic Nursing Skills I	NUR102	7
Food in Health & Disease	NUR110	2
Concepts of Interpersonal Relationships	NUR120	2
Med-Surg Nursing I	NUR150	2
Pharmacology I	NUR161	1

SPRING SEMESTER - 16 WEEKS

Basic Nursing Skills II	NUR104	12
Maternal-Child Nursing I	NUR145	3
Med-Surg Nursing II	NUR151	3
Pharmacology II	NUR162	1

SUMMER SEMESTER - 8 WEEKS

Clinical Practicum	NUR117	6
Nursing Seminar	NUR125	1
Med-Surg Nursing III	NUR152	1
Role Transition	NUR200	2

FALL SEMESTER - 16 WEEKS

Advanced Med-Surg Nursing	NUR251	10
Microbiology***	NS 201	4

SPRING SEMESTER - 16 WEEKS

Maternal-Child Nursing II	NUR245	7
Community Mental Health	NUR255	6

***May be taken prior to or during the semester shown.

SUMMER SEMESTER - 4 WEEKS

Leadership Role in Nursing	NUR225	3
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A CERTIFICATE PROGRAM IN LICENSED PRACTICAL NURSING IS ALSO AVAILABLE. SEE PAGES 52 & 53.

NURSING: LEVEL II - Advanced Standing LPN

A student with prior nursing education or a Licensed Practical Nurse (LPN) may complete Level II and become eligible to write the National Council Licensing Examination (NCLEX-RN) and practice as a Registered Nurse (RN). To be placed on the waiting list, students must submit official transcripts of all previous nursing courses; attain satisfactory scores on the ASSET Reading test, the ASSET Numerical Skills test, and the Applied Weights and Measures test; complete a chemistry course and lab with a C or better grade not more than 10 years ago and a pharmacology course in the Practical Nurse Program; and have six months of current acute-care work experience.

Admission into Level II is dependent upon available space. Students are placed on the waiting list when admission criteria are met. Students must meet with the director of nursing to discuss specific admission criteria.

Admission into and progression through the nursing programs depend upon the attainment of a C or better grade in each required science (NS) and nursing (NUR) course.

Course Name	Course #	Cr.
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FALL SEMESTER - 16 WEEKS

Anatomy & Physiology I*	NS 100	5
Intro to Physical Fitness**	PE 110	1
Freshman English I**	LA 100	3
Social Science I** or	SS 110	4
Political Science	SS 240	3

SPRING SEMESTER - 16 WEEKS

Anatomy & Physiology II*	NS 203	4
Freshman English II**	LA 101	3
General Psychology*	SS 220	3

*These science courses are required prior to beginning the associate degree nursing program.

**These liberal arts courses are required prior to graduation.

ALL NURSING (NUR) COURSES MUST BE TAKEN IN THE SEMESTER SHOWN.

Course Name	Course #	Cr.
SUMMER SEMESTER - 8 WEEKS		
Role Transition	NUR200	2
FALL SEMESTER - 16 WEEKS		
Advanced Med-Surg Nursing	NUR251	10
Microbiology***	NS 201	4
SPRING SEMESTER - 16 WEEKS		
Maternal-Child Nursing II	NUR245	7
Community Mental Health	NUR255	6

***May be taken prior to or during the semester shown.

SUMMER SEMESTER - 4 WEEKS		
Leadership Role in Nursing	NUR225	3

A CERTIFICATE PROGRAM IN LICENSED PRACTICAL NURSING IS ALSO AVAILABLE. SEE PAGES 52 & 53.



PARALEGAL STUDIES

This curriculum prepares students for a paralegal career. Students completing this course work fulfill all the requirements for the applied arts and sciences degree. A minimum of 60 credits is required.

Course Name

Course # Cr.

FIRST YEAR

Freshman English I	LA 100	3
Freshman English II*	LA 101	3
Social Science I	SS 110	4
Social Science II*	SS 111	4
Intro to Paralegal Studies	PL 100	3
Beginning Typing	OE 100	3
Legal Research and Writing	PL 110	3
Principles of Accounting I	BA 115	4
Intro to Data Processing	DP 110	3

SECOND YEAR

American Criminal Law	CJ 210	3
General Psychology	SS 220	3
Speech	LA 210	3
Legal Environment of Business	BA 200	3
Estates, Wills, & Trusts	PL 200	3
Litigation I	PL 215	3
Litigation II	PL 216	3
Tax Law**	PL 210	3
Electives		6

Electives in business, data processing, humanities, language arts or social science are recommended.

*See the alternatives listed under the requirements for the associate degree in applied arts and sciences on page 20.

**Under development

RADIOLOGIC TECHNOLOGY

This program is offered in cooperation with Mid-Michigan Community College in a one-plus-one approach and is for students who live in the Montcalm Community College service area. All radiological technology courses (22 credit hours) are taught at Mid-Michigan Community College while the clinical courses (26 credit hours) are arranged locally. The liberal arts, science, and prerequisite courses (31 credit hours) are available at Montcalm Community College.

Course Name *Course # Cr.*

FIRST YEAR

FALL SEMESTER (MONTCALM)

Medical Terminology*	OE 207	3
Anatomy and Physiology I*	NS 103	5
Introductory Chemistry*	NS 105	4
General Psychology	SS 220	3
Freshman English I	LA 100	3
Physical Education Elective		

SPRING SEMESTER (MONTCALM)

Anatomy and Physiology II	NS 203	4
Political Science	SS 240	3
Intro to Data Processing	DP 110	3
Speech	LA 210	3
Elective		

***Prerequisite Courses**

All documents, testing, and prerequisites should be completed and submitted to Mid-Michigan Community College by May 1 to be eligible to begin radiologic technology classes by fall at Mid-Michigan Community College.

SECOND YEAR

FALL SEMESTER (MID-MICHIGAN)

Intro. to Radiologic Technology	RAD100	3
Radiologic Positioning I	RAD105	2

Course Name *Course # Cr.*

SPRING SEMESTER (MID-MICHIGAN)

Radiation Physics	RAD110	3
Principles of Radiation Exposure	RAD115	3
Radiologic Positioning II	RAD125	2

SUMMER SEMESTER (MID-MICHIGAN)

Radiologic Positioning III	RAD175	2
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THIRD YEAR

THIS BEGINS THE 50-WEEK CLINICAL COMPONENT TO BE ARRANGED LOCALLY.

FALL SEMESTER

Clinical Education I	RAD200	10
Radiologic Techniques I	RAD215	3

SPRING SEMESTER

Clinical Education II	RAD220	10
Radiologic Techniques II	RAD217	3

SUMMER SEMESTER

Clinical Education III	RAD225	6
Radiographic Quality Assurance	RAD230	1

Upon completion of the course work, an associate in applied science degree is awarded by Mid-Michigan Community College with a major in radiologic technology. Graduates are eligible to apply for the certification examination offered by the American Registry of Radiologic Technologists.

SMALL BUSINESS Development/Management

This program prepares students to start up a new business venture, determine vendors, price merchandise, use a microcomputer for accounting purposes, recruit and select employees and handle public relations. An associate degree in applied arts and sciences is awarded upon successful completion of at least 60 credit hours including the course work described below.

Course Name

Course # Cr.

FIRST YEAR

FALL SEMESTER

Freshman English I	LA 100	3
Principles of Accounting I	BA 115	4
Entrepreneurship	BA 136	3
Intro to Data Processing	DP 110	3
Marketing	BA 233	3

SPRING SEMESTER

Freshman English II*	LA 101	3
Advertising	BA 248	3
Speech	BA 210	3
Small Business Management	BA 225	3
Elective		

SECOND YEAR

FALL SEMESTER

Intro to Social Science I	SS 110	4
Legal Environment of Business	BA 200	3
Business Mathematics	OE 120	3
Principles of Economics	SS 215	3
Microcomputers - Operating Systems and Applications	DP 116	3

SPRING SEMESTER

Intro to Social Science II*	SS 111	4
Retailing	BA 234	3
Customer Relations	BA 251	2
General Psychology	SS 220	3
Elective		

SUGGESTED ELECTIVES:

Accounting for Small Business	BA 105
Principles of Accounting II	BA 116
Introduction to Business	BA 135
Computerized Accounting	BA 214
Management	BA 237
Cooperative Work/School Experience	BA 292
COBOL Programming	DP 220

*See the alternatives listed under the requirements for the associate degree in applied arts and sciences on page 20.

A CERTIFICATE PROGRAM FOR SMALL BUSINESS DEVELOPMENT/MANAGEMENT IS ALSO AVAILABLE. SEE PAGE 53.

Certificate Programs

AUTOMOTIVE SERVICING

This program prepares students for their first job in Automotive Servicing. Selection of electives and additional courses will determine which state certificates can be earned. Request instructor help. Personal hand tools are required.

Course Name	Course #	Cr.
FALL SEMESTER		
Shop Procedures	AM104	1
Engine Servicing I	AM106	2
Auto Brakes & Servicing	AM108	3
Concepts of Electricity	EL 100	3
Applied Algebra	MA110	2
or Elementary Algebra	MA100	4
Improving Reading & Writing	SD 175	3
Approved Automotive Elective		2
SPRING SEMESTER		
Auto Electrical Systems Theory I	AM140	2
Auto Electrical Systems Lab I	AM141	3
Customer Relations	BA 251	2
Basic Fluid Power	IT 253	3
Automotive Welding	WE110	2
Approved Automotive Elective		2

AN ASSOCIATE DEGREE IN AUTOMOTIVE TECHNOLOGY IS ALSO AVAILABLE. SEE PAGE 31.

CLERK - TYPIST

This curriculum prepares students for employment in a variety of office occupations which include the development of skills in the use of all office machinery and the knowledge needed to carry out routine office functions. Previous typing training is desirable. A certificate is awarded upon successful completion of the 31 credit hours listed below. The program can be completed in one year by following this sequence. Students wishing to continue training may apply credits earned toward the secretarial or management programs.

Course Name	Course #	Cr.
FALL SEMESTER		
Intermediate Typing	OE 101	3
Business Mathematics	OE 120	3
Business Communications I	OE 129	3
Information Processing I	OE 225	4
SPRING SEMESTER		
Accounting for Small Business	BA 105	3
Business Communications II	OE 130	3
Advanced Typing	OE 202	3
Office Procedures	OE 230	3
Business Calculators	OE 240	3
SUMMER SEMESTER		
Voice Transcription	OE 220	3

COSMETOLOGY

This Michigan Department of Licensing and Regulations approved program prepares students to take the State Licensing Board Examination. Instruction is scheduled for five days per week, four and one-half hours per day. Over 900 hours are spent in lab work. Thirty-two credit hours and 1,500 attendance hours are required for a certificate. FALL ADMISSION ONLY.

Course Name	Course #	Cr.
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FIRST YEAR

FALL SEMESTER*

Intro to Cosmetology	CS100	3
Intro to Cosmetology Lab	CS110	4
Beginning Hairstyling	CS101	3
Beginning Hairstyling Lab	CS111	4

SPRING SEMESTER*

Beginning Hair Cutting & Permanent Waving	CS102	3
Beginning Hair Cutting & Permanent Waving Lab	CS112	4
Beginning Hair Coloring & Professional Development	CS103	3
Beginning Hair Coloring & Professional Development Lab	CS113	4

SECOND YEAR

FALL SEMESTER*

Advanced Hairstyling	CS200	3
Advanced Hairstyling Lab	CS210	5
Advanced Hair Coloring & Permanent Waving	CS201	3
Advanced Hair Coloring & Permanent Waving Lab	CS211	5

SPRING SEMESTER*

Advanced Hairstyling II	CS202	3
Advanced Hairstyling II Lab	CS212	5
Salon Management & Board Review	CS203	3
Salon Management & Board Review Lab	CS213	5

*18-week semester program. All courses are 9 weeks.
COST FOR UNIFORMS, SHOES AND LOCKER RENTAL IS EXTRA. AN ASSOCIATE DEGREE IN COSMETOLOGY MANAGEMENT IS ALSO AVAILABLE. SEE PAGE 33.

DRAFTING

This certificate helps students prepare for their first job as a detailer or a drawing changer and is considered a first step toward an associate degree. Thirty credit hours are required.

Course Name	Course #	Cr.
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Basic Machine Operation	IT 220	3
Applied Algebra	MA110	2
or Elementary Algebra	MA100	4
Improving Reading & Writing	SD 175	3
Technical Drafting I	TD 100	3
Blueprint Reading	TD 105	2
Intro to Data Processing	DP 110	3
Customer Relations	BA 251	2
Sketching	HU121	2
Basic Fluid Power	IT 253	3
Manufacturing Processes	IT 260	2
Applied Geometry	MA111	2
or Intermediate Algebra	MA104	4
Technical Drafting II	TD 130	3

The alternate math courses are recommended for those with adequate background who are considering the associate degree.

AN ASSOCIATE DEGREE IN DRAFTING TECHNOLOGY IS ALSO AVAILABLE. SEE PAGE 35.

FOOD SERVICE TECHNOLOGY

This program provides the skills and technical knowledge necessary for entry-level employment in the food service/restaurant industry and teaches basic skills in food preparation, nutrition, and menu planning. A minimum of 30 credit hours is required.

<i>Course Name</i>	<i>Course #</i>	<i>Cr.</i>
Intro to Food Service	FST100	3
Food Service Safety & Sanitation	FST101	2
Food Production Skills - General	FST110	4
Food Production Skills - Entree	FST120	4
Meat and Portion Control	FST130	3
Nutrition and Menu Planning	FST140	3
FST Electives		11

AN ASSOCIATE DEGREE IN FOOD SERVICE TECHNOLOGY IS ALSO AVAILABLE. SEE PAGE 38.

INFORMATION PROCESSING

This program leads to a certificate in information processing and provides a background and understanding of different types of electronic office equipment. This program is designed to prepare students for initial employment in the information processing field. The 31 required credit hours can be completed in one year by following the sequence below.

<i>Course Name</i>	<i>Course #</i>	<i>Cr.</i>
FALL SEMESTER		
Intermediate Typing	OE 101	3
Business Mathematics	OE 120	3
Business Communications	OE 129	3
Information Processing I	OE 225	4

SPRING SEMESTER		
Intro to Data Processing	DP 110	3
Business Communications II	OE 130	3
Advanced Typing	OE 202	3
Office Procedures	OE 230	3
Information Processing II	OE 226	3

SUMMER SEMESTER		
Voice Transcription	OE 220	3

AN ASSOCIATE DEGREE IN INFORMATION PROCESSING IS ALSO AVAILABLE. SEE PAGE 40.

LEGAL OFFICE ASSISTANT

This program leads to a certificate and provides an understanding of legal office assisting practices and procedures. The 32 required credit hours can be completed in one year by following the sequence below.

<i>Course Name</i>	<i>Course #</i>	<i>Cr.</i>
FALL SEMESTER		
Legal Environment of Business	BA 200	3
Intermediate Typing	OE 101	3
Business Communications I	OE 129	3
Legal Term & Transcription	OE 205	3
SPRING SEMESTER		
Accounting for Small Business	BA 105	3
Advanced Typing	OE 202	3
Legal Office Procedures	OE 206	3
Information Processing I	OE 225	4
Business Calculators	OE 140	3
SUMMER SEMESTER		
Voice Transcription	OE 220	3

AN ASSOCIATE DEGREE IN LEGAL SECRETARY IS ALSO AVAILABLE. SEE PAGE 41.

MACHINE TOOL OPERATION

Students who successfully complete this program are eligible to obtain entry-level jobs in metal-working industries as machinist helpers. Many of the following courses are also applicable toward an associate degree or an apprenticeship certificate. At least 30 credit hours are required.

<i>Course Name</i>	<i>Course #</i>	<i>Cr.</i>
FALL SEMESTER		
Basic Machine Operation	IT 220	3
Basic Writing Skills		
or Freshman English I (LA100)	SD 170	2
Basic CNC Operation	IT 102	2
Metallurgy & Heat Treatment	IT 130	2
Applied Algebra		
or Elementary Algebra (MA100)	MA110	2
Blueprint Reading	TD 105	2
Welding Tech & Joint Prep	WE107	3
SPRING SEMESTER		
Advanced Machine Operation	IT 221	3
Layout & Precision Measure	TD 106	2
Manufacturing Processes	IT 260	2
Basic Fluid Power	IT 253	3
Applied Geometry	MA111	2
or Intermediate Algebra	MA104	4
Industrial Quality Control	IT 270	2

Certificate Programs

MEDICAL OFFICE ASSISTANT

This program leads to a certificate and provides an understanding of assisting and practice in medical office procedures. The 30 required credit hours can be completed in one year by following the sequence below.

<i>Course Name</i>	<i>Course #</i>	<i>Cr.</i>
FALL SEMESTER		
Intermediate Typing	OE 101	3
Business Communications I	OE 129	3
Medical Terminology	OE 207	3
Information Processing I	OE 225	4
SPRING SEMESTER		
Accounting for Small Business	BA 105	3
Emergency Health Care	PE 205	2
Advanced Typing	OE 202	3
Medical Office Procedures	OE 208	3
Business Calculators	OE 240	3
SUMMER SEMESTER		
Voice Transcription	OE 220	3

AN ASSOCIATE DEGREE IN MEDICAL SECRETARY IS ALSO AVAILABLE. SEE PAGE 42.

NURSING

The nursing curriculum promotes career mobility for students. The curriculum consists of two nursing programs, Level I and Level II. Students may complete Level I, the Practical Nurse Program, and be eligible to write the National Council Licensing Examination (NCLEX-PN) for licensure and practice as an LPN. Students may also complete Level I and Level II and be eligible to write the National Council Licensing Examination (NCLEX-RN) for licensure and practice as an RN. A practicing LPN wishing to become an RN may complete Level II only and write the NCLEX-RN for licensure and practice as an RN.

Interested students must meet with the nursing counselor to discuss the specific admission requirements of both levels.

Admission into and progression through the nursing programs depend upon the attainment of a C or better grade in each required science (NS) and nursing (NUR) course.

LEVEL I CERTIFICATE

Level I admission criteria includes a high school diploma or GED and a general biology course with a C or better grade taken not more than 10 years ago and completed in one year of high school or one semester of college. Satisfactory scores on the ASSET Reading and the ASSET Numerical Skills tests must also be met prior to being admitted.

continued on next page

SMALL BUSINESS

Development/Management

ALL NURSING (NUR) COURSES MUST BE TAKEN IN THE SEMESTER INDICATED.

Course Name	Course #	Cr.
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FALL SEMESTER - 16 WEEKS

Basic Nursing Skills I	NUR102	7
Food in Health & Disease	NUR110	2
Concepts of Interpersonal Relationships	NUR120	2
Medical-Surgical I	NUR150	2
Pharmacology I	NUR161	1
Anatomy & Physiology I*	NS 103	5
Physical Fitness*	PE 110	1

SPRING SEMESTER - 16 WEEKS

Basic Nursing Skills II	NUR104	12
Maternal-Child Nursing I	NUR145	3
Medical-Surgical II	NUR151	3
Pharmacology II	NUR162	1
Anatomy & Physiology II*	NS 203	4

SUMMER SEMESTER - 8 WEEKS

Clinical Practicum	NUR117	6
Nursing Seminar	NUR135	1
Medical-Surgical III	NUR152	1

*It is recommended these courses be taken prior to the semester in which they appear.

AN ASSOCIATE DEGREE IN NURSING IS ALSO AVAILABLE. SEE PAGE 43.

This one-year certificate prepares students to handle bookkeeping, determine prices, deal with customers, employ some computer applications and assist in new business development. Twenty-nine credit hours are required.

Course Name	Course #	Cr.
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FALL SEMESTER

Entrepreneurship	BA 136	3
Intro to Data Processing	DP 110	3
Business Mathematics	OE 120	3
Legal Environment of Business	BA 200	3
Marketing	BA 233	3

SPRING SEMESTER

Small Business Management	BA 235	3
Customer Relations	BA 251	2
Accounting for Small Business	BA 105	3
Microcomputers - Operating Systems and Applications	DP 116	3
Retailing	BA 234	3
Keyboarding	SD 145	1

AN ASSOCIATE DEGREE IN SMALL BUSINESS/DEVELOPMENT MANAGEMENT IS ALSO AVAILABLE. SEE PAGE 47.

Certificate Programs

STENOGRAPHER

This program is for high school graduates who have majored in business and desire advanced studies. Students with no previous business training may also follow this curriculum. Upon completion of this 32-credit-hour program, a certificate of achievement is awarded. By following the sequence below, this program can be completed in one year.

Course Name	Course #	Cr.
FALL SEMESTER		
Intermediate Typing	OE 101	3
Shorthand I	OE 103	4
Business Mathematics	OE 120	3
Business Communications I	OE 129	3
SPRING SEMESTER		
Accounting for Small Business	BA 105	3
Advanced Typing	OE 202	3
Shorthand II	OE 104	4
Office Procedures	OE 230	3
Business Calculators	OE 240	3
SUMMER SEMESTER		
Voice Transcription	OE 220	3

WELDING TECHNOLOGY

This 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*. Thirty-two credit hours are required. Additional welding courses are available to develop further skills.

Course Name	Course #	Cr.
FALL SEMESTER		
Basic Machine Operations	IT 220	3
Welding Tech & Joint Prep	WE107	3
Welding & Fabrication I	WE108	3
Applied Algebra	MA110	2
Blueprint Reading	TD 105	2
Metallurgy & Heat Treatment	IT 130	2
Basic Writing Skills	SD 170	2
SPRING SEMESTER		
Welding & Fabrication II	WE120	3
Related Welding Skills	WE122	3
Layout & Precision Measurement	TD 106	2
Sketching	HU121	2
Customer Relations	BA 251	2
Basic Fluid Power	IT 253	3

*THE COLLEGE DOES NOT ATTEMPT TO CERTIFY WELDERS.

ALLIED HEALTH

EMERGENCY MEDICAL TECHNICIAN

This one-semester course grants a certificate of completion and allows the successful students eligibility to take the Michigan Department of Public Health State Examination and become licensed as an EMT. The course requires six hours of lecture per week for 16 weeks and six hours of clinical practice in one of several local cooperating hospitals starting in the sixth week of the semester. It is recommended that students enroll in Emergency Health Care, PE205, prior to the EMT course. Nine credit hours are required.

RECOMMENDED SCHEDULE

Course Name	Course #	Cr.
SPRING SEMESTER		
Emergency Health Care	PE 205	2

FALL SEMESTER		
Emergency Medical Technician	AH 200	9

A CERTIFICATE OF COMPLETION BY AN OUTSIDE AGENCY MAY BE AWARDED TO STUDENTS FINISHING THIS PROGRAM.

APPRENTICESHIP TRAINING

Students in this program 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. MCC coordinates the training plan and provides the related instruction. Each 16-week semester of apprenticeship-related instruction usually includes two courses. A competency examination or official transcripts may result in a waiver of a required course. Entrance requirements are established by the employer in accordance with Bureau of Apprenticeship and Training standards. Continuation in the training program depends on employment status and achievement levels. The sample schedule of related instruction shown below is for apprentice tool-and-die designers. Programs for machinists, electricians, plastic mold designers, mold and die makers and welders are also available.

Course Name	Course #	Cr.
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FIRST LEVEL COURSES

Applied Algebra	MA110	2
Shop Drawing	TD 120	2
Blueprint Reading	TD 105	2
Applied Geometry	MA111	2

SECOND LEVEL COURSES

Sketching	HU121	2
Layout & Precision Measure	TD 106	2
Applied Right Angle Trigonometry	MA112	2
Industrial Safety & First Aid	IT 155	2

THIRD LEVEL COURSES

Machine Tool Theory	IT 100	2
Industrial Quality Control	IT 270	2
TIG Welding	WE125	2
Tool & Die Design I	TD 135	2

FOURTH LEVEL COURSES

Tool & Die Design II	TD 136	2
Metallurgy & Heat Treatment	IT 130	2
Tool & Die Design III	TD 137	2
Basic CNC Operation	IT 102	2

THESE COURSES ARE NOT LIMITED TO APPRENTICESHIP STUDENTS.

Training Programs

CHILD DEVELOPMENT

This 12-credit-hour program prepares students to administer or be employed in child care centers or as a teacher's aide in public school preschool programs. The following four courses may also be used to apply for the Associate Credential in Child Development granted by the National Credentialing Program.

<i>Course Name</i>	<i>Course #</i>	<i>Cr.</i>
Introduction to CDA Child Development:	CDA100	3
Preschool Years	CDA110	3
Preschool Curriculum	CDA120	3
Administration of Early Childhood Programs	CDA130	3

THESE COURSES ARE NOT LIMITED TO STUDENTS DESIRING CERTIFICATION.

A CERTIFICATE OF COMPLETION IS GRANTED BY THE NATIONAL CREDENTIALING PROGRAM UPON APPLICATION AND COMPLETION OF THESE FOUR COURSES.

CRIMINAL JUSTICE - CORRECTIONS

This 15-credit-hour, five-course program qualifies students to apply for corrections officer positions with the Michigan Department of Corrections. Students must achieve a 2.0 or better grade in each course and pass a written Civil Service exam, a physical fitness exam, personal interview and have earned a high school diploma or GED to be hired. Background investigations are also done.

<i>Course Name</i>	<i>Course #</i>	<i>Cr.</i>
Intro to Corrections	CJ 110	3
Legal Issues in Corrections	CJ 220	3
Client Relations in Corrections	CJ 250	3
Corrections Institutions/Facilities	CJ 120	3
Client Growth & Development	CJ 260	3

A CERTIFICATE OF COMPLETION BY AN OUTSIDE AGENCY MAY BE AWARDED TO STUDENTS WHO SUCCESSFULLY COMPLETE THIS PROGRAM.

AN ASSOCIATE DEGREE IN CRIMINAL JUSTICE IS ALSO AVAILABLE. SEE PAGE 34.



Course Descriptions

Course Code Index

Accounting/BA	Government/SS	Shop Drawing/TD
Acting/LA	Heat Treatment Metals Apprentice/IT	Shorthand/OE
Advertising/BA	History/SS	Sketching/HU
Algebra/MA	Humanities/HU	Small Business/BA
Allied Health/AH	Human Relations/BA	Social Science/SS
Analytic Geometry/MA	Hydraulics/IT	Sociology/SS
Anatomy/NS	Industrial Electronics/EL	Spanish/FL
Anthropology/SS	Industrial Supervision/BA	Speech/LA
Art/HU	Information Processing/OE	Sports/PE
Art Appreciation/HU	Journalism/LA	Statistics/MA
Automotive Mechanics/AM	Law-Business/BA	Supervision and Management/BA
Biology/NS	Law Enforcement/CJ	Taxation-Business/BA
Blueprint Reading/TD	Legal Secretary/OE	Technical Drafting/TD
Botany/NS	Literature/LA	Theater/LA
Business Communications/OE	Machine Lab Apprentice/IT	Tool Drafting Apprentice/TD
Business Correspondence/OE	Machine Shop/IT	Transcription/OE
Business Law/BA	Management/BA	Trigonometry/MA
Business Mathematics/OE	Marketing/BA	Typewriting/OE
Calculus/MA	Mathematics/MA	Welding Trades Apprentice/WE
Ceramics/HU	Mathematics Apprentice/MA	Welding Technology/WE
Chemistry/NS	Mathematics-Business/OE	Word Processing/OE
Child Development/CDA	Medical Shorthand/OE	Writing/LA,SD
Communications/LA	Medical Terminology/OE	Zoology/NS
Composition/LA	Metallurgy Theory Apprentice/IT	
Computer Programming/DP	Mold & Die Design Apprentice/TD	
Computers/DP	Music/HU	
Corrections/CJ	Natural Science/NS	
Correspondence/OE	Nursing-Practical/NUR	
Cosmetology/CS	Nursing-ADN/NUR	
Criminal Justice/CJ	Office Practice/OE	
Data Processing/DP	Oral Interpretation/LA	
Die Drafting Apprentice/TD	Painting/HU	
Diesel Engine/AM	Paralegal/PL	
Directed Studies/XY	Philosophy/HU	
Drafting Technology/TD	Photography/HU	
Drafting & Design Apprentice/TD	Physical Education/PE	
Drama/LA	Physical Science/NS	
Drawing/HU	Physics/NS	
Economics/SS	Physiology/NS	
Electronics-Industrial/EL	Plastics-IT/TD	
Emergency Health Care/AH	Political Science/SS	
English/LA	Psychology/SS	
Entrepreneurship/BA	Reading/SD	
Executive Secretary Studies/OE	Religion/HU	
Fitness/PE	Safety and First Aid/IT	
Food Service/FST	Salesmanship/BA	
French/FL	Science/NS	
General Business/BA	Sculpture/HU	
Geography/NS	Secretarial Studies/OE	

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

Course Descriptions

The information in the parentheses indicates the number of credit, lecture and laboratory hours for that class. The lecture and laboratory hours equal the total classroom/laboratory contact hours. Example: There are 12 contact hours for the course AH200 Emergency Medical Technician; 6 lecture and 6 lab.

ALLIED HEALTH

AH200 Emergency Medical Technician

(9 credit, 6 lecture, 6 lab) Prerequisites: None

This course includes orientation to EMT legal responsibilities, anatomy, physiology, diagnostic signs, triage, basic cardiac life support, injuries to the body, illnesses of the body, childbirth, mental health, environmental injuries, communications and emergency vehicles including extrication. Upon successful completion, students are eligible to take the Michigan Department of Public Health State Exam.

AH202 Emergency Medical Technician Specialist

(7 credit, 5 lecture, 4 lab) Prerequisites: Basic Emergency Medical Technician license by the Michigan Department of Public Health

This course includes orientation to EMT specialist legal responsibilities, anatomy, physiology, a review of emergency medical technician aspects of care, acid base balance, body chemistry, intravenous therapy, fluid therapy, advanced airway management including endotracheal intubation, esophageal obturator airway, esophageal gastric tube airway, tracheal suctioning and Magill forcep usage. Communications, cardiac monitor interpretation and recognition of cardiac dysrhythmias are also covered.

AUTOMOTIVE MECHANICS TECHNOLOGY

AM104 Shop Procedures

(1 credit, 1 lecture, 0 lab) Prerequisites: None

This course gives students a background in automotive shop equipment and procedures. Course topics include career opportunity, safety, hand tools, power tools, precision measuring tools, test equipment, fasteners, gaskets and sealers, and use of reference manuals and catalogs.

AM106 Engine Servicing I

(2 credit, 1 lecture, 2 lab) Prerequisites: None

This course covers general engine principles and service with an emphasis on engine diagnosis, basic ignition, fuel, and cooling system service, and chassis inspection procedures.

AM108 Auto Brakes and Servicing

(3 credit, 1 lecture, 3 lab) Pre- or Corequisite: AM104

This course deals with general chassis servicing and light maintenance and includes battery servicing, fuses, wipers, bulbs, tires and lubrication with an emphasis on rebuilding and servicing brake systems and components.

AM114 Basic Small Engine Repair

(2 credit, 1 lecture, 1 lab) Prerequisites: None

This course provides basic knowledge of the operation, maintenance and minor repair procedures of small gasoline engines and is not recommended as an approved elective for the associate degree.

AM118 Auto Maintenance for the Homemaker

(2 credit, 1 lecture, 1 lab) Prerequisites: None

This course, for non-automotive students, furnishes the necessary knowledge to recognize danger signals, handle emergency problems, make minor repairs and perform general automotive maintenance. This course is not recommended as an elective for the associate degree.

Course Descriptions

AM124 Engine Servicing Theory II

(3 credit, 3 lecture, 0 lab) Pre- or Corequisite: AM106

This course covers cylinder head and crankcase details of construction, operations and nomenclature. Methods of inspecting and rebuilding are discussed, as students are introduced to specification charts. For full benefit, enroll in AM125 at the same time.

AM125 Engine Servicing Lab II

(3 credit, 0 lecture, 4 lab) Pre- or Corequisites: AM104, AM124

This lab course allows students to experience the use of special procedures, tools, measuring instruments, test devices and specifications as applied to engine rebuilding.

AM130 Automotive Steering and Suspension Theory

(2 credit, 2 lecture, 0 lab) Pre- or Corequisite: IT253 or written departmental approval

This course covers the history, design and principles of suspension and steering systems and includes the various methods of aligning and servicing the many varieties of systems in use today. For full benefit, enroll in AM131 at the same time.

AM131 Automotive Steering and Suspension Lab

(2 credit, 0 lecture, 3 lab) Pre- or Corequisites: AM104, AM130

This course furnishes the necessary technical knowledge and the practical experience to diagnose, align and repair front end, steering and suspension problems and covers all American and some foreign systems.

AM132 Manual Transmissions Theory

(2 credit, 2 lecture, 0 lab) Prerequisites: None

This course covers principles, history and methods of servicing manual transmissions, differentials and drivelines currently in use. For maximum benefit, enroll in AM133 at the same time.

AM133 Manual Transmissions Lab

(2 credit, 0 lecture, 3 lab) Pre- or Corequisites: AM104, AM132

This course provides practical experience in diagnosing troubles, repairing and adjusting manual transmissions, differentials and drivelines covered in AM132.

AM140 Automotive Electrical Systems Theory I

(2 credit, 2 lecture, 0 lab) Pre- or Corequisite: EL100 or written departmental approval

This course covers the principles of operation, servicing, troubleshooting and repairing the several starting and charging systems including batteries currently in use.

AM141 Automotive Electrical Systems Lab I

(3 credit, 0 lecture, 4 lab) Pre- or Corequisites: AM104, AM140

This course offers the practical experience necessary to inspect, test, service and repair all components in the cranking and charging systems.

AM142 Automotive Electrical Systems Theory II

(2 credit, 2 lecture, 0 lab) Pre- or Corequisites: EL100 or written departmental approval

This course offers a complete study of the electrical systems (except starting, charging, and ignition) used in automobiles including lighting circuits, horn circuits, directional signal circuits, power accessory systems, heating circuits and warning system circuits.

AM143 Automotive Electrical Systems Lab II

(3 credit, 0 lecture, 4 lab) Pre- or Corequisites: AM104, AM142

This course furnishes the necessary technical knowledge and practical experience to inspect, diagnose, test, service and repair all chassis electrical systems studied in AM142.

AM160 Auto Restoration: Metal Bodywork

(2 credit, 1 lecture, 2 lab) Prerequisites: None

This course develops knowledge and skill in traditional metal forming, joining and smoothing methods used primarily on older automobiles. Leading and prepara-

tion for painting are included. Students may bring their own parts to class. A materials fee is added.

**AM164 Automotive Restoration:
Surface Preparation and Painting**

(2 credit, 1 lecture, 2 lab) Prerequisites: None

This course covers the technical aspects of surface preparation, priming, finishing materials and their application as well as the special artistic touches which make a good paint job better. A materials fee is added.

**AM204 Automotive Parts and
Service Management**

(2 credit, 2 lecture, 0 lab) Prerequisites: None

This course is a study of the day-to-day operation of the parts and service departments including pricing, inventory control, scheduling, estimating, quality control, customer relations, parts ordering, selling, service training and customer follow-up. This course is normally offered ONLY every other SPRING semester.

**AM210 Automotive Engine
Performance Theory I**

(2 credit, 2 lecture, 0 lab) Prerequisites: None

This course covers the principles of operation, diagnosis, and repair of several kinds of carburetors, fuel injectors, and turbochargers used currently. To ensure more complete understanding, enroll in AM211 at the same time. This course is normally offered ONLY every other SPRING semester.

**AM211 Automotive Engine
Performance Lab I**

(2 credit, 0 lecture, 3 lab) Pre- or Corequisites: AM210, AM104

This course allows students to service, diagnose, and repair automobiles, applying the knowledge gained in AM210. Use of special analytical equipment is stressed. This course is normally offered ONLY every other SPRING semester.

**AM212 Automotive Engine
Performance Theory II**

(2 credit, 2 lecture, 0 lab) Pre- or Corequisites: AM211, EL100, or written departmental approval

This course covers the several types of ignition and emission control systems in use today and includes principles

of operation, servicing, and troubleshooting. To ensure maximum understanding, enroll in AM213 at the same time. This course is normally offered ONLY every other SPRING semester.

**AM213 Automotive Engine
Performance Lab II**

(3 credit, 0 lecture, 4 lab) Pre- or Corequisites: AM212

This lab offers many opportunities to apply the theories gained in AM212 and emphasizes the use of special test equipment in troubleshooting and adjusting systems after rebuilding or repair. This course is normally offered ONLY every other SPRING semester.

AM230 Automatic Transmission Theory

(2 credit, 2 lecture, 0 lab) Pre- or Corequisites: IT253 or written departmental approval

This course covers the history, principles, parts, and operation of several makes of automatic transmissions and includes an in-depth study of the hydraulic and mechanical functional aspects of the automatic. For best results, enroll in AM231 at the same time.

AM231 Automatic Transmission Lab

(2 credit, 0 lecture, 3 lab) Pre- or Corequisites: AM104, AM230

This course encourages application of all principles learned in AM230 and furnishes the necessary technical knowledge and practical experience to diagnose and repair automatic transmission problems. All modern, popular makes of automatics are covered.

AM254 Diesel Engine Theory

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This theory course is a study of basic diesel engines and related components not usually found on automotive gas engines and includes the study of fuel injection systems, governors, turbo chargers, and superchargers.

AM255 Diesel Engine Lab

(3 credit, 0 lecture, 4 lab) Pre- or Corequisites: AM104, AM254

This course furnishes the necessary technical knowledge and practical experience to service, repair, and diagnose diesel engines in the truck, farm, or heavy equipment fields.

Course Descriptions

AM260 Automotive Heating and Air Conditioning Theory

(2 credit, 2 lecture, 0 lab) Prerequisites: None

This course covers the different systems and components used for heating and air conditioning in today's vehicles as well as testing, troubleshooting, and servicing techniques. For practical experience, enroll in AM261 at the same time.

AM261 Automotive Heating and Air Conditioning Lab

(2 credit, 0 lecture, 3 lab) Pre- or Corequisites: AM260, AM104

This course applies the knowledge gained in AM260 by providing several service opportunities on operating systems, using special test equipment.

AM292 Cooperative Work/School Experience

(4 credit, 1 lecture, 15 lab or 5 credit, 1 lecture, 20 lab) Prerequisites: 30 credits with a 2.0 grade point average, plus departmental approval according to department standards

Enrolled students hold jobs related in some way to their field of study. Performance on the job is monitored and guided by the employer and college personnel. Attendance at one-hour weekly seminars and submission of a final report are required.

BUSINESS ADMINISTRATION

BA105 Accounting for Small Business

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course provides basic accounting principles and practices from a theoretical and practical approach, with emphasis on the small business.

BA115 Principles of Accounting I

(4 credit, 4 lecture, 0 lab) Prerequisites: None

This introduction to accounting fundamentals covers: the meaning and purpose of accounting statements, balance sheets, and profit and loss statements; the theory of debits and credits; accounts payable and receivable; the trial balance; adjusting and closing entries; and accounting for notes, interest, unearned and accrued

items. Approximately 10-12 hours per week of study time is required for success in this course. This course is normally offered ONLY in FALL semesters.

BA116 Principles of Accounting II

(4 credit, 4 lecture, 0 lab) Prerequisite: BA115, Pre- or Corequisite: DP113 or DP116

This course covers basic procedures for accumulating and using the accounting data needed for managerial planning, controlling, and decision making. This course is normally offered ONLY in SPRING semesters.

BA135 Introduction to Business

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This introduction to the environment, nature, and opportunities of business covers marketing, location and layout, personnel, finance, controls for decision making, and the legal environment of business.

BA136 Entrepreneurship

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course covers the special problems associated with the process of creating business ventures. The characteristics of the entrepreneur and the roles of business creators are examined.

BA200 Legal Environment of Business

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This 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.

BA214 Computerized Accounting

(3 credit, 2 lecture, 2 lab) Prerequisite: BA116

This introduction to computerized general ledger accounting includes: implementing the system, setting up the financial statements, data entry and transfer of the data entry to the general ledger.

BA215 Cost Accounting I

(3 credit, 3 lecture, 0 lab) Prerequisite: BA116, Pre- or Corequisite: DP113 or DP116

This course covers cost information systems and accumulation procedures for budgetary planning, and the recording and preparation of factory overhead, material, and labor costs in a form acceptable in AICPA.

BA216 Cost Accounting II

(3 credit, 3 lecture, 0 lab) Prerequisite: BA215

This course covers planning for profits and sales, and controlling of costs and profits, with an emphasis on cost and profit analysis.

BA233 Principles of Marketing

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This introduction to marketing (movement of goods and services from producer to consumer) emphasizes the behavior of buyers in the marketplace, the major functions of marketing and their impact on the national and international economy. This course is normally offered ONLY in FALL semesters.

BA234 Retailing

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This introduction to retailing includes buying and promoting, pricing, stocking goods and dealing with customers as well as the process of setting up a retail firm.

BA235 Small Business Management

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This introduction to the operation of the small business includes topics dealing with organization, financial structure, record keeping, and promotion of small business as well as salesmanship, personnel relations, customer psychology, and business law. This course is normally offered ONLY in SPRING semesters.

BA237 Management

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course covers, in detail, the managerial process, the purposes of organizations and how they function, and human behavior as it relates to organizations.

BA246 Tax Accounting

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course covers local, state and federal taxes of sole proprietorships and partnerships, as well as tax practices and procedures relating to assessment and collections.

BA248 Advertising

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course examines the role of advertising in society,

the creation and planning of advertising, and effective promotional activities.

BA250 Human Relations

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course examines the methods of selecting and training personnel, discipline problems, morale, wages, fringe benefits, promotions, separations, and other related areas.

BA251 Customer Relations

(2 credit, 2 lecture, 0 lab) Prerequisites: None

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. This course is normally offered ONLY in SPRING semesters.

BA253 Principles of Investment

(3 credit, 3 lecture, 0 lab) Prerequisites: BA135 or written departmental approval

This introduction to the securities market gives special attention to corporate securities and financial policies including limited income securities, common stocks, special classes of securities, security analysis and portfolio development policies.

BA292 Cooperative Work/School Experience

(4 credit, 1 lecture, 15 lab or 5 credit, 1 lecture, 20 lab) Prerequisites: 30 credits with a 2.0 grade point average, plus departmental approval according to department standards

Enrolled students hold jobs related in some way to their field of study. Performance on the job is monitored and guided by the employer and college personnel. Attendance at one-hour weekly seminars and submission of a final report are required.

CHILD DEVELOPMENT ASSOCIATE

CDA100 Introduction to CDA

(3 credit, 2 lecture, 2 lab) Prerequisites: None

This course examines the Child Development Associate (CDA) Credential, the Credential Award System, explores ways students can meet the CDA Competency

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Standards, and provides assistance in beginning the credentialing process.

CDA110 Child Development: Preschool Years (3 credit, 3 lecture, 0 lab) Prerequisites: None

This course covers psychological and physical growth patterns and emotional, social and cognitive skills from birth to age six including behavior, discipline, ages and developmental stages, and acquisition of skills in recognizing and interpreting child behavior.

CDA120 Preschool Curriculum (3 credit, 2 lecture, 2 lab) Prerequisites: None

This course explores the curriculum guides needed in preschool education concentrating on the social, emotional, creative, physical and cognitive skill development and needs of preschool children.

CDA130 Administration of Early Childhood Programs (3 credit, 2 lecture, 2 lab) Prerequisites: None

This course covers the role of the early childhood program administrator, food services, health, and safety; implementation and supervision of an early childhood program; and business techniques necessary to operate a successful early childhood program.

CONSUMER EDUCATION

CE033 Basic Income Tax Preparation (5 credit, 5 lecture, 1 lab) Prerequisites: None

This H & R Block Income Tax Course enables students with no prior knowledge to begin to gain a solid, working understanding of the intricacies surrounding most income tax returns through illustrated lectures, discussions and the practical use of tax forms. There are 27 three-hour classes. Students who successfully complete the course are awarded the H & R Block certificate of achievement. The five credit hours may be used only for general credit and are not applicable to any business requirement for one- or two-year business curricula.

CE040 Red Cross Multimedia First Aid & CPR (1 credit, 1 lecture, 0 lab) Prerequisites: None

This course provides fundamental principles and skills in basic first aid and accident prevention. Participants become prepared, through knowledge and skill development, to meet the needs of most situations in which CPR is needed and medical assistance is not excessively delayed.

CE100 Basic Consumerism (3 credit, 3 lecture, 0 lab) Prerequisites: None

This course develops basic consumer principles and skills to meet the challenging and changing demands of day-to-day living in a free enterprise economic system. The course emphasizes consumer protection, resource management, decision-making, planning for food buying, purchasing health services, insurances, using community resources and credit.

COSMETOLOGY

CS100 Introduction to Cosmetology (3 credit, 3 lecture, 0 lab) Prerequisite: Completed and registered State Board Registration form, with registration fee

This course is an orientation to the science of cosmetology and includes cosmetology laws and rules, sterilization and sanitation techniques and policies, the study of bacteriology pursuant to sterilization and sanitation, basic hair shaping and fingerwaving, shampoos and rinses, and scalp treatments.

CS101 Beginning Hairstyling (3 credit, 3 lecture, 0 lab) Prerequisite: CS100

This course provides the basic theory of pincurl and roller placements and pincurl and roller setting patterns and covers style selection, curl placement, comb out techniques, manicuring, and the correct use and care of all cosmetology equipment.

CS102 Beginning Hair Cutting and Permanent Waving Theory (3 credit, 3 lecture, 0 lab) Prerequisite: CS101

This course provides further theoretical training in the basic art of hairstyling and introduces basic hair cutting,

permanent waving and chemical hair relaxing. The course also covers basic electrical theory as it relates to cosmetology; the use and care of thermal and specialized electrical equipment; and theory pursuant to the care, styling and fitting of wigs and other hair goods.

CS103 Beginning Hair Coloring and Professional Development Theory

(3 credit, 3 lecture, 0 lab) Prerequisite: CS102

This course covers the basics of hair coloring and anatomy and physiology as related to cosmetology.

CS110 Introduction to Cosmetology Lab

(4 credit, 0 lecture, 8 lab) Corequisite: CS100

This course provides laboratory experiences in the science of cosmetology and includes cosmetology laws and rules pursuant to sterilization and sanitation practices, procedures and policies. Students perform basic techniques used in hair shaping, fingerwaving, shampooing and hair rinses, and scalp and hair treatments and learn the safe use and care of all materials, implements and equipment used in the basic techniques.

CS111 Beginning Hairstyling Lab

(4 credit, 0 lecture, 8 lab) Corequisite: CS101

This course provides further laboratory experience in fingerwaving, shampooing and scalp treatments and emphasizes pincurls, roller placements, setting patterns, and comb out and manicuring techniques and procedures. Safety and sanitary techniques and procedures are stressed.

CS112 Beginning Hair Cutting and Permanent Waving Lab

(4 credit, 0 lecture, 8 lab) Corequisite: CS102

This course provides further laboratory experiences in basic hairstyling and introduces haircutting, permanent waving, chemical hair relaxing, and thermal styling. Basic electrical theory as it relates to cosmetology is applied and the use of thermal and specialized electrical equipment is practiced.

CS113 Beginning Hair Coloring and Professional Development Lab

(4 credit, 0 lecture, 8 lab) Corequisite: CS103

This course provides further laboratory experiences in all basic areas covered in preceeding courses and intro-

duces basic haircoloring procedures, products, and techniques.

CS200 Advanced Hairstyling

(3 credit, 3 lecture, 0 lab) Prerequisite: CS103

This course provides an introduction to cosmetic chemistry, facial treatments and facial make-up as well as a review and further theory in advanced hairstyling and haircutting techniques. Methods of organization and operation of a dispensary and laboratory are also reviewed.

CS201 Advanced Hair Coloring and Permanent Waving

(3 credit, 3 lecture, 0 lab) Prerequisite: CS200

This course is a continuation of advanced hairstyling with special emphasis on basic and advanced haircoloring techniques and principles. The study of trichology as it pertains to haircoloring and hairstyling is also introduced.

CS202 Advanced Hairstyling II

(3 credit, 3 lecture, 0 lab) Prerequisite: CS201

This course reviews and continues to develop theoretical skills and knowledge in permanent waving. Salon management is introduced with special emphasis given to personal and professional development.

CS203 Cosmetology Salon Management and Board Review Theory

(3 credit, 3 lecture, 0 lab) Prerequisite: CS202

This course provides further training in salon management techniques as well as a complete review of all the theory covered in both the 100- and 200-level theory classes. The course prepares students for the State Board Theory Licensing Examination.

CS210 Advanced Hairstyling Lab

(5 credit, 0 lecture, 10 lab) Corequisite: CS200

This course provides laboratory practice in advanced hairstyling and haircutting techniques and dispensary and laboratory operation and organization and introduces skin care, facial make-up and facial treatment techniques.

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CS211 Advanced Hair Coloring and Permanent Waving Lab

(5 credit, 0 lecture, 10 lab) Corequisite: CS201

This course provides further laboratory experiences in advanced hairstyling with emphasis on haircoloring and the use of trichology in relationship to the application of all products used in the cosmetology industry.

CS212 Advanced Hairstyling Lab II

(5 credit, 0 lecture, 10 lab) Corequisite: CS202

This course provides further laboratory experiences and the development of the technical skills of hairstyling, haircutting, coloring, permanent waving, and hair, skin and nail care. The use of techniques and theories gained through the study of trichology are stressed and personal and professional development techniques are practiced.

CS213 Salon Management and Board Review Lab

(5 credit, 0 lecture, 10 lab) Corequisite: CS203

This course provides practical training in salon management techniques and professional ethics in the laboratory setting and reviews all practical experiences to prepare students for the State Board of Cosmetology Licensing Examination. Special emphasis is placed on the Pre-Board Examination.

CS250 Cosmetology Instructional Internship

(16 credit, 9 lecture, 22 lab) Prerequisites: Written departmental approval and current cosmetology license

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.

CRIMINAL JUSTICE

CJ100 Introduction to Criminal Justice

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course provides a broad overview of the history and scope of the American Criminal Justice System (CJS) 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.

CJ110 Introduction to Corrections

(3 credit, 3 lecture, 0 lab) Prerequisites: None

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 re-integration. 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 provided. 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.

CJ115 Stress Management for Correctional Officers

(1 credit, 1 lecture, 0 lab) Prerequisites: None

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, and students select and demonstrate those most appropriate for them.

CJ120 Corrections Institutions/Facilities

(3 credit, 3 lecture, 0 lab) Prerequisites: None

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 students pursuing a social science orientation. Students will explore federal, state, county, and local facilities including maximum, close, medium, and minimum custody facilities. It addresses community facilities, co-educational 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, definitions and concepts, and their application.

CJ125 Police Administration and Operations
(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course is for persons pursuing careers in criminal justice or those already employed within the system and explores the evolution of administrative theory with special emphasis on its impact and application at the operational level of law enforcement agencies.

CJ130 Criminal Investigation
(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

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.

CJ135 Report Writing for Line Officers
(1 credit, 1 lecture, 0 lab) *Prerequisites: None*

This course focuses on the proper completion of forms used to document prisoner misconduct and other significant events in a criminal justice setting and provides the skills needed to complete these forms appropriately.

CJ210 American Criminal Law
(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course is for persons seeking employment in the criminal justice system and covers the historical development and philosophy of criminal law including legal definitions and concepts and their application to the criminal justice system.

CJ220 Legal Issues in Corrections
(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

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, court decisions and their impact on corrections are explored.

CJ230 Juvenile Delinquency
(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This introductory course is for persons interested or already employed in the criminal justice system and includes theories of delinquency causation, examination

of the family relationship and juvenile delinquency, the juvenile justice system, and delinquency prevention programs.

CJ240 Introduction to Security Systems
(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course is for persons employed or interested in a career in the broad field of public and private security administration.

CJ250 Client Relations in Corrections
(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

In this course, students will examine 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.

CJ260 Client Growth and Development
(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course provides an understanding of and sensitivity to the motivations and behaviors of correctional clients. Students will review the general factors believed to be influential in human development then analyzes specific problems of prisoners. The course includes prevention theories and intervention and treatment strategies.

CJ290 Criminal Justice Practicum
(5 credit, 0 lecture, 20 lab) *Prerequisites: Approval of CJ Coordinator*

This course is a planned program of internship, including observation, study, and work in selected criminal justice agencies. It supplements previous classroom study through participation in U.S. or foreign criminal justice systems.

DATA PROCESSING

DP110 Introduction to Data Processing
(3 credit, 2 lecture, 2 lab) *Prerequisites: None*

This course covers the fundamental concepts and applications of computers; the impact of the computer on human events and social institutions; the control, predic-

Course Descriptions

tions, and implications of future computer developments; and the logic of computer control using BASIC programming language.

DP111 Computer Applications in Health Care (3 credit, 2 lecture, 2 lab) *Prerequisites: None*

This course introduces nursing and allied health students to computer applications in health care and emphasizes basic computer literacy skills and hospital applications of computers. Students examine the use of computers in health care and the impact of technology on health care delivery. Course topics include computer hardware and software, computer applications in health care, future trends, and ethical issues. Lab experience provides an opportunity to interact with a computer using various software packages.

DP113 Introduction to the IBM PC and Compatible PCs

(1 credit, 0.5 lecture, 1 lab) *Prerequisites: None*

This course provides a brief introduction to the use of the IBM or compatible machines using the current operating system software and the use of application software on these machines.

DP116 Microcomputers: Operating Systems and Applications

(3 credit, 2 lecture, 2 lab) *Prerequisite: DP110 or written departmental approval*

This course introduces the operating systems used on today's microcomputers. The main emphasis is on the MS-DOS (Micro-Soft Disk Operating System) used on the IBM-PC and compatible machines. Students are also introduced to some commercial application software, file management, report generation, word processing, and spreadsheets. The PFS series from Software Publishing Company is used on the Apple and IBM-PC.

DP122 Introduction to Pascal

(3 credit, 2 lecture, 2 lab) *Prerequisite: DP110 or written departmental approval*

This course provides an elementary understanding of the principles and techniques of writing computer programs in PASCAL and covers problem solving, algorithm development, structured programming techniques, module design, and dynamic storage concepts.

DP220 COBOL Programming

(3 credit, 2 lecture, 2 lab) *Prerequisite: DP115 or DP122*

This course provides an elementary understanding of the principles and techniques of writing computer programs in the COBOL language and uses the features and capabilities of the COBOL language to solve business-related problems. Course topics include computer programming, flowcharting, data storage and procedural study.

DP222 Advanced Programming in Pascal

(3 credit, 2 lecture, 2 lab) *Prerequisites: DP122 or written departmental approval*

The course is a follow-up to DP122 and concentrates on the use of Pascal in the personal computer environment. Standard Pascal using Turbo Pascal, interactive programming techniques, advanced data structures in Pascal (stacks, queues, trees), production programming (libraries), and advanced file storage (random) techniques are covered.

DP225 RPG II Programming

(3 credit, 2 lecture, 2 lab) *Prerequisite: DP115 or DP122*

This course provides an elementary understanding of the principles and techniques of writing business-related programs in RPG II. The course is heavily oriented to hands-on programming and covers program design, flowcharts/pseudocode, report generation, editing, file concepts and use, and table processing.

DP230 Microcomputer Spreadsheets

(3 credit, 2 lecture, 2 lab) *Prerequisites: DP116 or written departmental approval*

This course is an introduction to electronic spreadsheets using microcomputers and covers popular spreadsheet applications programs available for use on microcomputers including the concepts, use and implementation of a broad spectrum of problems.

DP235 Microcomputer Data Base Applications

(3 credit, 2 lecture, 2 lab) *Prerequisites: DP116*

This course introduces the concepts of data base management and the application of a typical Data Base Management System to an organization's information needs utilizing microcomputers. The course uses microcomputers in the laboratory with DBASE III software.

DP240 Systems Concepts/Design

(3 credit, 3 lecture, 0 lab) *Prerequisites: BA135 and DP115 or DP116 or DP122*

This course covers 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 investigation; design of systems output, input, files, processing and controls; project management and implementation.

DP290 Programming Project

(3 credit, 1 lecture, 4 lab) *Prerequisites: BA116, BA135, DP240 and any other 200-level DP course*

This comprehensive laboratory project requires students to conduct detailed analysis and implementation of a data processing application program or system.

DP292 Cooperative Work/School Experience

(4 credit, 1 lecture, 15 lab or 5 credit, 1 lecture, 20 lab) *Prerequisites: 30 credits with a 2.0 grade point average plus departmental approval according to department standards*

Enrolled students hold jobs related in some way to their field of study. Performance on the job is monitored and guided by the employer and college personnel. Attendance at one-hour weekly seminars and submission of a final report are required.

ELECTRONICS - INDUSTRIAL

EL100 Concepts of Electricity

(3 credit, 2 lecture, 2 lab) *Prerequisite: Passing score on the prealgebra concepts test or written departmental approval*

This course provides a working knowledge of electrical terminology, DC and AC circuits, and measurements and topics including schematic symbols, power, capacitance, inductance, transformers, relays and DC motors. Knowledge of high school algebra is recommended.

EL110 Electrical Circuit Analysis I

(3 credit, 2 lecture, 2 lab) *Prerequisite: EL100 or written departmental approval; Pre- or Corequisite: MA120*

This course emphasizes the analysis of passive electrical circuits. Network theorems are applied in both DC and

AC applications and phasor analysis, the j operator, poly phase circuits and equipment calibration are discussed.

EL120 Electronic Devices

(3 credit, 2 lecture, 2 lab) *Prerequisites: EL110, Corequisite: MA120*

This course covers many electrical and electronic components including inductors, capacitors, transformers, diodes, transistors, and integrated circuits. Applications such as filters, resonant circuits, and basic amplifier configurations are used to reinforce knowledge. (COURSE REVISIONS ARE PENDING PRIOR TO FALL 1989.)

EL141 Microprocessors I

(3 credit, 2 lecture, 1.5 lab) *Prerequisites: None*

This course introduces microcomputer structure and programming using the Motorola 6800 microprocessor for examples. Topics include number systems and codes, microcomputer basics, computer arithmetic and an introduction to programming and the 6800 microprocessor. Laboratory time is provided for developing and executing machine language programs.

EL160 Electronic Test Equipment

(3 credit, 2 lecture, 2 lab) *Prerequisite: EL241*

This course explores the use of test equipment in electronic servicing and uses a variety of servicing examples ranging from audio amplifiers to computer systems. Many practical troubleshooting hints are offered including the use of the human senses.

EL210 Electronic Circuits

(3 credit, 2 lecture, 2 lab) *Pre- or Corequisite: EL120*

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 will be included in the laboratory experiments, along with proper soldering and desoldering techniques. (COURSE REVISIONS ARE PENDING PRIOR TO FALL 1989.)

EL230 Digital Electronics

(3 credit, 2 lecture, 2 lab) *Prerequisites: EL100, DP110 and MA104 or written departmental approval*

This course presents techniques used in building and analyzing digital circuitry and includes numbering and

Course Descriptions

coding systems, digital logic gates, Boolean algebra, combinational and sequential logic circuits, and applications.

EL240 Microprocessors

(3 credit, 2 lecture, 2 lab) *Pre- or Corequisite: EL120*

This course is a continuation of EL230 and includes microcomputer basics and assembly language programming, interfacing memory, A/D converters and other I/O devices.

EL241 Microprocessors II

(1.5,1) *Prerequisite: EL141 or EL230 or written departmental approval*

This course continues EL141's discussion of microprocessors, with emphasis on circuits required in computer interfacing. Basic keyboard and display interfacing are discussed in lecture and built in lab.

EL251 Industrial Electrical Maintenance I

(2 credit, 1 lecture, 1 lab) *Prerequisite: EL100 or written departmental approval*

This course is for those who have an understanding of electrical basics and want to learn more about industrial motors and controls. Included is a study of the National Electrical Code, wiring symbols and diagrams, motors, and basic control circuits.

EL252 Industrial Electrical Maintenance II

(2 credit, 1 lecture, 1 lab) *Prerequisites: EL251 or written departmental approval*

This course builds on knowledge and skills taught in EL251 and is for students who have a good understanding of basic industrial motor circuits. Included is a study of the National Electric Code, timing circuits, speed control, reduced voltage starting and troubleshooting.

EL253 Industrial Electrical Maintenance III

(2 credit, 1 lecture, 1 lab) *Prerequisite: EL252 or written departmental approval*

This course emphasizes the use, selection, setup and servicing of programmable controllers and provides an understanding of the programmable controller, its logic functions, its installation, and troubleshooting.

EL254 Industrial Electrical Maintenance IV

(2 credit, 1 lecture, 1 lab) *Prerequisite: EL253 or written departmental approval*

This course builds on the student's knowledge of programmable logic controllers by using them to program a robot. Also included is a study of robot types, components, safety, maintenance, and off-line computer programming.

EL261 Electronic Communications

(2 credit, 0 lecture, 3 lab) *Prerequisites: EL210*

This is a course in communications systems, such as AM and FM radio, television, and digital data links. Antenna systems are also included. This advanced course is for students interested in employment as radio, television, or telephone technicians.

EL271 Microprocessor Interfacing

(3 credit, 0 lecture, 4 lab) *Prerequisites: EL241*

This course is a continuation of the study of microprocessors and is primarily concerned with standard peripheral devices and how they are interfaced into a microprocessor system. More advanced microprocessor systems, such as the 6800, are also studied.

EL281 Robotics and Industrial Electronics

(3 credit, 0 lecture, 4 lab) *Prerequisite: EL241*

This course is a study of industrial robots including their classification, operation, programming, and functional analysis. Additional topics include motors, sensors, and control systems.

EL292 Cooperative Work/School Experience

(4 credit, 1 lecture, 15 lab or 5 credit, 1 lecture, 20 lab) *Prerequisites: 30 credits with a 2.0 grade point average plus departmental approval according to department standards.*

Enrolled students hold jobs related in some way to their field of study. Performance on the job is monitored and guided by the employer and college personnel. Attendance at one-hour weekly seminars and submission of a final report are required.

FOOD SERVICE TECHNOLOGY

FST100 Introduction to Food Service (3 credit, 3 lecture, 0 lab) Prerequisites: None

This course provides an introduction to the food service industry and covers the many divisions of the industry and their function and relationship to careers.

FST101 Food Service Sanitation (2 credit, 2 lecture, 0 lab) Prerequisites: None

This course provides an in-depth analysis of the Occupational Safety and Health Act as it relates to the food service operator. In-depth analysis of individuals' roles in sanitation as they relate to food service and its customers are also covered.

FST110 Food Production Skills--General (4 credit, 2 lecture, 4 lab) Prerequisite: FST101

This course presents the various food production methods geared toward quantity food production and covers basic terminology and special considerations of safety and sanitation in a hands-on experience. The course includes preparation of all types of meals.

FST120 Food Production Skills--Entree (4 credit, 2 lecture, 4 lab) Prerequisite: FST101

This course is a continuation of FST110 with special emphasis on preparation of both luncheon and dinner entrees.

FST130 Meat and Portion Control (2 credit, 1 lecture, 2 lab) Prerequisite: FST101

This course provides a study of meat, its relationship to menu and how costs can affect menus. Identification of meat cuts and their methods of preparation are covered with an emphasis on meat quality and its significance to customer satisfaction and profitability.

FST140 Nutrition and Menu Planning (3 credit, 3 lecture, 0 lab) Prerequisites: None

The course covers normal nutrition and how food is absorbed into the body and includes menu planning with a special emphasis on nutritional value and menu attractiveness. Special projects in all areas of menu planning are included.

FST200 Equipment Design, Layout, Selection (2 credit, 1 lecture, 2 lab) Prerequisites: None

This course covers the equipment and facilities available to the food service industry. A course project consists of the overall design and equipment layout for maximum productivity and the selection of the actual equipment based on desired function, quality and performance of a specific food service facility.

FST201 Food Service Management (3 credit, 3 lecture, 0 lab) Prerequisites: None

This course covers the manager's role in the operation of a food service establishment and includes the study of people and their performance as well as management controls and their relationship to successful food service operation management.

FST210 Food Production Skills--Bakery (4 credit, 2 lecture, 4 lab) Prerequisite: FST101

This course is a continuation of FST110 and FST120, with special emphasis on preparation of all baked products including cake and pastry decoration.

FST220 Food Production Skills--Catering (4 credit, 1 lecture, 5 lab) Prerequisite: FST101

This course covers the types and methods of catering operations with special emphasis on planning menus and preparing hors d'oeuvres and other items appropriate for various themes.

FST230 Food Purchasing (3 credit, 3 lecture, 0 lab) Prerequisites: None

This course covers the standards of quality and quantity in purchasing for all phases of the food service operation. The proper selection of food service equipment, ranging from place settings in the dining room to kitchen equipment, all types of food and grocery selection, and standardized procedures for each purchase are also covered.

FOREIGN LANGUAGES

FL120 Elementary French I (4 credit, 4 lecture, 0 lab) Prerequisites: None

This course includes fundamental training in basic language skills stressing oral and written expression and

Course Descriptions

aural comprehension and is offered to students with no French background or one year of high school French. Students electing this class should plan to take FL121 second semester.

FL121 Elementary French II

(4 credit, 4 lecture, 0 lab) *Prerequisite: FL120*

This course is a continuation of FL120 Elementary French.

FL130 Elementary Spanish I

(4 credit, 4 lecture, 0 lab) *Prerequisites: None*

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 the oral recitation and classroom conversation along with an examination of pertinent aspects of Hispanic culture.

FL131 Elementary Spanish II

(4 credit, 4 lecture, 0 lab) *Prerequisite: FL130*

This course is a continuation of FL130 Elementary Spanish.

HUMANITIES

HU100 Fundamentals of Music

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

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.

HU101 Music Appreciation

(3 credit, 3 lecture, 0 lab) *Pre- or Corequisite: HU100 recommended*

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 records and demonstrations.

HU110 Music in the Elementary Classroom

(3 credit, 2 lecture, 1 lab) *Prerequisites: None*

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.

HU111 Teaching Drawing to Children

(1 credit, 1 lecture, .5 lab) *Prerequisites: None*

This basic drawing course is for people interested in learning to draw what they see. Course topics include contour, light and shadow, perspective, and proportions of the human figure along with methods of instruction appropriate for use with children or the adult beginner in art.

HU112 Teaching Ceramics to Children

(1 credit, 1 lecture, .5 lab) *Prerequisites: None*

This introductory, hands-on course in working with clay covers many hand-building techniques for making pottery and sculpture, decorating and glazing techniques, and the loading and firing of electric and sawdust kilns.

HU113 Teaching Sculpture to Children

(1 credit, 1 lecture, .5 lab) *Prerequisites: None*

This course provides instruction and practical experience in the creation of various types of sculpture and emphasizes modeling, carving, and assembling techniques using low-cost materials suitable for children or the adult beginner.

HU114 Teaching Painting to Children

(1 credit, 1 lecture, .5 lab) *Prerequisites: None*

This course provides instruction and practical experience in the use of color, composition, and various painting media to create paintings emphasizing materials and techniques suitable for children or the adult beginner.

HU115 Teaching Printmaking to Children

(1 credit, 1 lecture, .5 lab) *Prerequisites: None*

This course provides instruction and practical experience in the use of various printmaking media and techniques to create designs and prints emphasizing materials and techniques suitable for children or the adult beginner.

HU118 Art Materials and Methods-Studio

(1 credit, .5 lecture, .5 lab) Prerequisites: None

This course examines the use of various materials and techniques to make art objects through films, examples and demonstrations.

HU119 Teaching Art Appreciation to Children

(1 credit, 1 lecture, 0 lab) Prerequisites: None

This course includes lecture and discussion of works of art using prints or actual art objects, experiments involving perception and the elements and principles of design, and demonstrations of the methods and materials used by artists to create art forms.

HU120 Introduction to Art

(2 credit, 1 lecture, 2 lab) Prerequisites: None

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

HU121 Sketching

(2 credit, 1 lecture, 1.25 lab) Prerequisites: None

In this course in basic free-hand drawing techniques including shading, perspective and proportions, students learn to accurately sketch a variety of three-dimensional forms with emphasis on using the sketch as a method of communication.

HU122 Drawing I

(3 credit, 1 lecture, 3 lab) Prerequisites: None

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.

HU123 Drawing II

(3 credit, 1 lecture, 3 lab) Prerequisites: None

This course further develops the drawing techniques of contour, gesture, shading, and proportion as they apply to the human figure. Students use a variety of materials to draw figures and portraits from models in the studio.

HU124 Lettering & Calligraphy

(3 credit, 2 lecture, 2 lab) Prerequisites: None

This introductory course in typography presents the history of typestyles, their classification and identification including lettering for specific purposes, advertising layouts, and an introduction to calligraphy.

HU125 Painting I

(3 credit, 1 lecture, 3 lab) Studio, Prerequisites: None

This 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.

HU126 Painting II

(3 credit, 1 lecture, 3 lab) Studio, Prerequisites: HU125

This course places emphasis on composition and color theory.

HU130 Ceramics I

(3 credit, 1 lecture, 3 lab) Studio, Prerequisites: None

This 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.

HU131 Ceramics II

(3 credit, 1 lecture, 3 lab) Studio, Prerequisites: HU130

This course emphasizes further development of hand-built and wheel-thrown forms and exploration of decorating, glazing and firing techniques.

HU150 Beginning Photography

(3 credit, 2 lecture, 2 lab) Prerequisites: None

This course introduces basic photographic techniques including camera use, developing, printing, enlarging, and matting of black-and-white photographs.

HU155 Advanced Black & White Photography

(3 credit, 2 lecture, 2 lab) Prerequisite: HU150 or written departmental approval

This course is a continuation of the basic black-and-white course, expanding the elementary principles and skills learned to include methods of manipulating the finished image, such as toning and techniques of retouching

Course Descriptions

and the effects of exposure and development on black-and-white films.

HU185 Special Ensemble I

(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

After auditioning with the director, ensemble groups will meet twice a week. Ensembles may include women's, men's or mixed singing groups.

HU186 Special Ensemble II

(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

This course is a continuation of HU185 and offers students interested in the performing arts an opportunity to further develop musical talents. The small ensemble performs at several campus and community events throughout the academic year.

HU191 Choir I

(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

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.

HU192 Choir II

(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

This course is a continuation of HU191 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.

HU195 Jazz Band I

(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

This course is for instrumentalists with previous band experience. The band performs at various concerts and community programs throughout the school year. Weekly rehearsals emphasize the jazz medium.

HU196 Jazz Band II

(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

This course is a continuation of HU195. The band performs at various concerts and community programs throughout the school year. Weekly rehearsals emphasize the jazz medium.

HU200 Humanities I

(4 credit, 4 lecture, 0 lab) *Prerequisites: None*

This course examines the artistic, literary and philosophical nature of man, integrating material from pre-Renaissance art, literature, music, philosophy and religion. This course is normally offered ONLY in FALL semesters.

HU201 Humanities II

(4 credit, 4 lecture, 0 lab) *Prerequisites: None*

This course emphasizes the modern (post-Renaissance) historical development of thought in art, literature, music, philosophy and religion. Completion of HU200 before enrolling in HU201 is recommended but not required. This course is normally offered ONLY in SPRING semesters.

HU220 Introduction to Philosophy

(3 credit, 3 lecture, 0 lab) *Prerequisite: HU200 recommended*

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.

HU222 Bioethics

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course covers some of the major ethical theories and their relevance to the decision-making process in the biological or health-care related fields including issues related to conception and birth, life and death, and individuals' rights.

HU225 Art for the Elementary Teacher-Lecture and Studio

(2 credit, 1 lecture, 2 lab) *Prerequisites: None*

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.

HU227 Painting III

(3 credit, 1 lecture, 3 lab) *Prerequisite: HU126*

This studio course emphasizes exploration of traditional or experimental painting techniques.

HU228 Painting IV

(3 credit, 1 lecture, 3 lab) *Prerequisite: HU227*

This studio course emphasizes development of individual expression.

HU230 Watercolor Painting

(2 credit, 1 lecture, 2 lab) *Prerequisites: None*

This course includes basic instruction in color mixing and the techniques of painting with watercolor.

HU232 Ceramics III

(3 credit, 1 lecture, 3 lab) *Prerequisites: HU131*

This studio course emphasizes making more complex hand-built or wheel-thrown forms and learning kiln firing procedures.

HU233 Ceramics IV

(3 credit, 1 lecture, 3 lab) *Studio, Prerequisites: HU232*

This studio course emphasizes refining forms and develops knowledge of raw materials and glaze formulation.

HU240 American Art Seminar I

(1 credit, 1 lecture, 0 lab) *Prerequisites: None*

This course covers major American artists and movements from the native Americans through the 19th century, critically examining artists' works with lectures and discussions exploring the derivations, significances, meanings and trends evident in their artistic expressions.

HU241 American Art Seminar II

(1 credit, 1 lecture, 0 lab) *Prerequisites: None*

This course covers major American artists and movements of the 20th century, critically examining artists' works with lectures and discussions exploring the derivations, significances, meanings and trends evident in their artistic expressions.

HU245 French Impressionism

(1 credit, 1 lecture, 0 lab) *Prerequisites: None*

This course explores the artists, techniques, and environments of the Impressionist movement in painting which took place in France one hundred years ago and is one of the most popular periods in art history.

HU250 Color Photography

(3 credit, 2 lecture, 2 lab) *Prerequisite: HU150 or written departmental approval*

This introduction to color photography covers techniques of film development, color printing, and color balance of color prints.

HU287 Special Ensemble III

(1 credit, 0 lecture, 2 lab) *Prerequisite: HU185*

This course is a continuation of HU186 and offers students interested in the performing arts an opportunity to further develop musical talents. The ensemble performs at several campus and community events throughout the academic year.

HU288 Special Ensemble IV

(1 credit, 0 lecture, 2 lab) *Prerequisite: HU186*

This course is a continuation of HU287 and offers students interested in the performing arts an opportunity to further develop musical talents. The ensemble performs at several campus and community events throughout the academic year.

HU293 Choir III

(1 credit, 0 lecture, 2 lab) *Prerequisite: HU191*

This course is a continuation of HU192 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 in small vocal ensembles.

HU294 Choir IV

(1 credit, 0 lecture, 2 lab) *Prerequisite: HU192*

This course is a continuation of HU293 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 in small vocal ensembles.

HU297 Jazz Band III

(1 credit, 0 lecture, 2 lab) *Prerequisites: HU195*

This continuation of HU196 is intended for instrumentalists with previous band experience. The band performs at various concerts and community programs

Course Descriptions

throughout the school year. Weekly rehearsals emphasize the jazz medium.

HU298 Jazz Band IV

(1 credit, 0 lecture, 2 lab) Prerequisite: HU196

This course is a continuation of HU297 is intended for instrumentalists with previous band experience. The band performs at various concerts and community programs throughout the school year. Weekly rehearsals emphasize the jazz medium.

INDUSTRIAL TECHNOLOGY

IT100 Machine Tool Theory

(2 credit, 2.25 lecture, 0 lab) Prerequisite: Written departmental approval

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 electro-chemical 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.

IT102 Basic CNC Operation

(2 credit, 2.25 lecture, 0 lab) Prerequisites: Written departmental approval

This course provides hands-on experience in programming Computer Numerical Control systems used with machine tools. Course topics covered include circular and linear interpolation, absolute programming, Preparatory (G) and Miscellaneous (M) functions. Students write programs and transfer them on punched tapes to be used on a machine tool simulator.

IT104 Statistical Process Control

(1 credit, 1 lecture, 0 lab) Prerequisites: None

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.

IT105 Statistical Problem Solving

(1 credit, 1 lecture, 0 lab) Prerequisite: IT104 or written departmental approval

This course includes a brief refresher on the basic statistical concepts learned in IT104, 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 nonconformities are emphasized.

IT120 Plastics Technology

(2 credit, 2.25 lecture, 0 lab) Prerequisites: None

This course presents several types, characteristics and uses of modern plastics and includes demonstrations of handling, forming, and blending techniques.

IT121 Plastic Injection Molding

(2 credit, 2 lecture, 0 lab) Prerequisites: None

This course covers proper set-up, operation, adjustment, and minor repairs to an injection molding machine through classroom and hands-on experience. Common molding materials, their major characteristics, and the effects of recipe changes are also covered.

IT130 Metallurgy and Heat Treatment

(2 credit, 2.25 lecture, 0 lab) Prerequisites: None

This course covers 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, study of properties of steel, surface treatments, powder metallurgy, and classifications of steels. Stress, strain and strength of materials is also covered.

IT155 Industrial Safety and First Aid

(2 credit, 2.25 lecture, 0 lab) Prerequisites: None

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. An eight-hour basic first-aid section is taught by a certified Red Cross instructor, and successful students are eligible for Red Cross certification.

IT220 Basic Machine Operations

(3 credit, 2 lecture, 2 lab) *Prerequisites: None*

This course covers the theory and practice in the basic operations of typical machine tools, such as lathes, mills, drills, and grinders, as well as the use of precision bench tools and layout equipment. This course provides practical knowledge of machine processes and basic machine shop skills.

IT221 Advanced Machine Operations

(3 credit, 1 lecture, 3 lab) *Prerequisite: IT220 or written departmental approval*

This course covers advanced machine operations on the milling machine, lathe and surface grinder and provides training in boring, taper turning, indexing and the setup and operation of a sine bar and turntable. Gaining of speed, accuracy and confidence on these machine tools is emphasized.

IT253 Basic Fluid Power

(3 credit, 2 lecture, 2 lab) *Prerequisites: None*

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 43 projects using specialized fluid power trainers.

IT254 Advanced Hydraulics

(3 credit, 2 lecture, 2 lab) *Prerequisite: IT253*

This course provides training in advanced hydraulics and covers hydraulic motors, specialized hydraulic valves, servo systems accumulators, flow meters, closed loop systems, plumbing and sealing services, system design, and trouble shooting, hydraulic symbols and formulas. Laboratory work includes demonstrations and a series of 20 projects using specialized hydraulic trainers.

IT260 Manufacturing Processes

(2 credit, 2 lecture, 0 lab) *Prerequisites: None*

This classroom lecture course covers 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 manufacturing, computer numerical control, computer management systems, and various methods of manufacturing. Field trips

to manufacturing sites are included and a research paper is required.

IT270 Industrial Quality Control

(2 credit, 2.25 lecture, 0 lab) *Prerequisites: None*

This course defines the changing quality concepts of modern-day industry and further defines quality organization, quality costs, data collection, process control, customer relations and product reliability. The course encompasses theory and practical application of Statistical Process Control (SPC).

IT292 Cooperative Work/School Experience

(4 credit, 1 lecture, 15 lab or 5 credit, 1 lecture, 20 lab) *Prerequisites: 30 credits with a 2.0 grade point average plus departmental approval according to department standards.*

Enrolled students hold jobs related in some way to their field of study. Performance on the job is monitored and guided by the employer and college personnel. Attendance at one-hour weekly seminars and submission of a final report are required.

LANGUAGE ARTS

LA100 Freshman English I

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course includes college-level writing instruction with emphasis on exposition, argumentation, research techniques, grammar and punctuation.

LA101 Freshman English II

(3 credit, 3 lecture, 0 lab) *Prerequisite: LA100 or written departmental approval*

This course is an extension of LA100 Freshman English I with emphasis on exposition, argumentation, research techniques, grammar and punctuation.

LA160 Journalism

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This introductory course covers the basic techniques in writing, the principles of effective news writing, a survey of newsroom organization and practical experience provided through laboratory sessions. **THIS COURSE IS NORMALLY OFFERED ONLY AT THE PRISON EXTENSIONS.**

Course Descriptions

LA161 Journalism Lab I

(1 credit, 0 lecture, 2 lab) Prerequisites: None

This course provides practical experience on a newspaper.

LA162 Journalism Lab II

(1 credit, 0 lecture, 2 lab) Prerequisites: None

This course provides advanced practical experience on a newspaper.

LA200 American Thought and Literature I

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course introduces American literature through a thematic approach which emphasizes American social and cultural values and conflicts. Study follows American thought through the Puritan period, the age of reason and romanticism to the beginnings of realism and naturalism. Readings and discussions stress themes, problems, and causes which have continuing relevance in America today.

LA201 American Thought and Literature II

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course continues the thematic approach of LA200 surveying modern American literature and emphasizing late-19th and 20th century literature. Realism, naturalism, existentialism, and experimental writing are analyzed and recurrent themes, social issues, problems and causes are stressed.

LA210 Speech

(3 credit, 2 lecture, 1 lab) Prerequisites: None

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.

LA212 Oral Interpretation

(3 credit, 2 lecture, 1 lab) Prerequisites: None

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.

LA220 English Literature from the Beginning to 1798

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This systematic study of English literature stresses the principal authors and their works. Reading and discussion includes representative writings of the 18th century and surveys current critical approaches.

LA221 English Literature from 1798 to Present

(3 credit, 3 lecture, 0 lab) Prerequisites: None

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.

LA230 Short Story

(3 credit, 3 lecture, 0 lab) Prerequisites: None

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.

LA235 Children's Literature

(3 credit, 3 lecture, 0 lab) Prerequisites: None

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. *FOR ONE-CREDIT MODULES OF THIS COURSE, SEE THE LISTINGS UNDER LA295.*

LA240 The Novel

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course focuses on the themes of novels through the study of various schools of criticism. The more-than-casual reader is encouraged to analyze and interpret literature in novels from the 18th through 20th centuries.

LA250 Creative Writing

(3 credit, 1 lecture, 2 lab) Prerequisites: None

This course allows students to sharpen their ability to use the English language in expressing creative thought in any or all of the traditional genres. Students are encouraged to greater achievement in types of writing already

tried and are expected to attempt work in new areas in a workshop atmosphere with common exchange of ideas.

LA260 Drama

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course is an introduction to drama as a literary form and requires the reading of representative writings of the period from classical times to present.

LA261 Drama As a Performing Art

(3 credit, 1 lecture, 2 lab) *Prerequisites: None*

This course provides experience in producing, acting, staging and directing plays.

LA270 Poetry

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course compares contemporary and classic examples of poetry to historically durable examples of structure and content.

LA280 A Survey of Black American Literature

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This is a chronological survey of Black American writing from 1760 to the present with emphasis on 20th century examples of poetry, fiction, drama, and autobiography.

THE FOLLOWING LA295 COURSES ARE ONE-CREDIT-HOUR MODULES OF CHILDREN'S LITERATURE. ANY THREE MAY BE CONVERTED INTO CREDIT FOR CHILDREN'S LITERATURE (LA235). STUDENTS WISHING TO MAKE THIS CONVERSION MUST CONTACT THE REGISTRAR.

LA295 Children's Literature: The Younger Child, Preschool - 8 Years

(1 credit, 1 lecture, 0 lab)

This course is a one-credit module of Children's Literature (see LA235)

LA295 Children's Literature: The Middle (8-12) Years

(1 credit, 1 lecture, 0 lab)

This course is a one-credit module of Children's Literature (see LA235).

LA295 Children's Literature: Young Adults

(1 credit, 1 lecture, 0 lab)

This course is a one-credit module of Children's Literature (see LA235).

LA295 Children's Literature: Fairy Tales

(1 credit, 1 lecture, 0 lab)

This course is a one-credit module of Children's Literature (see LA235).

MATHEMATICS

MA100 Elementary Algebra

(4 credit, 4 lecture, 0 lab) *Prerequisite: Passing score on ASSET Numerical Skills Test*

This course reviews the properties of the basic number systems, using the tools of beginning algebra including first-degree equations and inequalities, special products and factoring, graphs and linear systems, radicals and quadratic equations.

MA104 Intermediate Algebra

(4 credit, 4 lecture, 0 lab) *Prerequisites: MA100 or a passing score on the ASSET Elementary Algebra Test or written departmental approval*

This course provides algebraic skills, including manipulation and proofs, necessary for the study of college algebra and analytic geometry. The usual topics through quadratics plus the exponential and logarithmic functions, the binomial theorem, sequences, systems of equations, complex numbers, permutations and combinations with an introduction to probability are covered.

MA110 Applied Algebra

(2 credit, 2.25 lecture, 0 lab) *Prerequisite: A passing score on ASSET Numerical Skills Test*

Formerly Shop Math I, 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.

MA111 Applied Geometry (2 credit, 2.25 lecture, 0 lab) *Prerequisite: MA110*

Formerly Shop Math II, this course in plane geometry covers propositions and axioms, definitions, circles, area,

Course Descriptions

and angular formulas. Volumes from solid geometry are also covered.

MA112 Applied Right Angle Trigonometry

(2 credit, 2.25 lecture, 0 lab) Prerequisite: MA111

Formerly Shop Math III, this is a course in right triangle trigonometry as used in the machine trades. Functions, right triangles, and solving practical shop problems are included.

MA113 Applied Oblique Angle Trigonometry

(2 credit, 2.25 lecture, 0 lab) Prerequisites: MA112

This course covers the use of oblique triangles and the trigonometry necessary to solve practical machine shop problems.

MA116 Managerial Mathematics

(3 credit, 3 lecture, 0 lab) Prerequisites: MA104, passing score on the ASSET Intermediate Algebra Test, or written departmental approval

This is a study of mathematics relating to various business situations involving matrix algebra, sets, probability, linear programming, and statistics.

MA120 Trigonometry

(3 credit, 3 lecture, 0 lab) Prerequisites: MA104 or a passing score on the ASSET Intermediate Algebra Test or written departmental approval

Trigonometric functions are studied first through right triangles and subsequently through the circular functions of real numbers. Graphing, identities, inverse functions, Law of Sines, Law of Cosines, complex numbers and exponential functions are also covered.

MA151 Math for Elementary Teachers

(3 credit, 3 lecture, 1 lab) Prerequisites: MA100, passing score on ASSET Elementary Algebra Test, or written departmental approval

This course provides the necessary background to teach mathematics in the elementary school including such subjects as the origin of systems of numeration, sets, systems of whole numbers, bases other than 10, systems of integers, and rational and real numbers.

MA159 College Algebra

(4 credit, 4 lecture, 0 lab) Pre- or Corequisite: MA120 or both proof of having taken the ASSET Intermediate Algebra Test and written departmental approval

This course covers basic algebraic concepts, linear and quadratic equations and inequalities (singular and systems), relations and functions, matrices and determinants, exponential and logarithmic functions, complex numbers, polynomials and rational functions, second degree equations, sequences, series, mathematical induction, combinatorics and probability. This course is normally offered ONLY in SPRING semesters.

MA190 Elementary Statistics

(3 credit, 3 lecture, 0 lab) Prerequisites: MA100, passing score on the Elementary Algebra Test or written departmental approval

This course introduces basic statistical techniques including mean, standard deviation, frequency, probability, binomial distribution, normal curve, sample means, confidence limits, hypothesis testing, chi-square, linear correlation and regression.

MA250 Calculus and Analytic Geometry I

(5 credit, 5 lecture, 0 lab) Prerequisite: MA159 or both proof of having taken the ASSET College Algebra Test and written departmental approval

This course covers functions and continuity, limits, differentiation, integration, definite integrals, and inverse functions. This course is normally offered ONLY in FALL semesters.

MA251 Calculus and Analytic Geometry II

(5 credit, 5 lecture, 0 lab) Prerequisite: MA250

This course covers definite integral applications, integration techniques, L'Hopital's Rule, improper integrals, sequences and series, conics, plane curves, parametric equations, and polar coordinates. This course is normally offered ONLY in SPRING semesters.

NATURAL SCIENCES

The MCC science department recommends that students who have weak high school science backgrounds or who have been out of school for several years take the NS100-101 sequence before enrolling in any other college science classes. Other students should select from the biological

and physical science courses listed below in order to fulfill the science requirements at Montcalm Community College. (NS102, NS108 and NS120 are not lab courses and therefore will not fulfill the science requirements for an associate in arts and sciences.)

For each of the following science course descriptions, whenever the word "equivalent" or "equivalency" is used, it shall be interpreted as meaning students must show evidence of possessing similar academic background, knowledge and skills as compared to the course for which the equivalency is being sought.

NS100 Biological Science

(4 credit, 3 lecture, 2 lab) Prerequisite: ASSET Testing

This course provides a basic general education in some major biological sciences (botany, ecology, genetics and zoology) and a basis for relation to the total environment, enabling students to evaluate their interest and potential in the biological sciences.

NS101 Physical Science

(4 credit, 3 lecture, 2 lab) Prerequisite: ASSET Testing

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. This course is normally offered ONLY in SPRING semesters.

NS102 Physical Geography/Earth Science

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course examines the earth-sun relationship, climatic factors on the earth, the geographic grid, land forms, rocks and minerals and covers skills in map reading as well as the study of the earth's natural resources and man's impact on these resources is also covered.

NS103 Anatomy and Physiology I

(5 credit, 4 lecture, 2 lab) Prerequisite: NS100 or written departmental approval of chemistry background equivalent to that taught in NS100

This course introduces 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, tissues, cellular metabolism, skeletal system, muscular system, and nervous system. Emphasis is placed on homeostatic mechanisms whenever feasible. Laboratory exercises include dissection and physiological experiments pertinent to the lecture topics covered. This course is normally offered ONLY in FALL semesters.

NS105 Introductory Chemistry

(4 credit, 3 lecture, 2 lab) Prerequisites: None

This course covers the basic topics of inorganic chemistry including metrics, types of bonds, gases, chemical reactions, solutions, acids, bases and salts.

NS108 Problem-Solving

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course in general problem-solving skills covers the techniques used in solving a variety of problems that occur in all aspects of college courses and in all walks of life. This elementary course assumes no prior knowledge beyond basic reading, writing and arithmetic skills.

NS110 Botany

(4 credit, 3 lecture, 2 lab) Prerequisite: NS100 or written departmental approval of equivalency

This survey of the plant kingdom includes plant structure, classification and ecological relationships. Students have an opportunity to submit a collection from the local flora and special attention is given to taxonomic principles and collection procedures along with the use of plant keys. The major portion of class time is spent out-of-doors.

NS111 Introduction to College Physics I

(3 credit, 2 lecture, 2 lab) Prerequisite: MA100 or written departmental approval

This class for vocational students and those that need a beginning physics class examines classical mechanics and sound. This course is normally offered ONLY in FALL semesters.

NS112 Introduction to College Physics II

(3 credit, 2 lecture, 2 lab) Prerequisite: NS111

This course covers thermodynamics, electricity and magnetism, optics and modern physics. This course is normally offered ONLY in SPRING semesters.

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NS115 Zoology

(4 credit, 3 lecture, 2 lab) *Prerequisite: NS100 or written departmental approval of equivalency*

This course is a general survey of the animal kingdom including comparative studies of the structure, function and behavior of representatives of animal groups. The anatomy and physiology of the human is emphasized in the study of mammals.

NS120 Environmental Geography

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course is an introduction to human use of the earth's surface and an inquiry into selected environmental problems from man's use of the physical landscape.

NS201 Microbiology

(4 credit, 3 lecture, 2 lab) *Prerequisites: NS100 and NS101 or written departmental approval of equivalent biology and chemistry background*

This course is a study of the biology of various micro-organisms, including viruses, bacteria, fungi, and protozoa and offers the opportunity to observe the roles of these organisms in health and disease and their impact on everyday life. Laboratory exercises provide hands-on opportunities to grow and work with a variety of living micro-organisms.

NS203 Anatomy and Physiology II

(4 credit, 3 lecture, 2 lab) *Prerequisites: NS103 or the equivalent or written departmental approval. The NS103 equivalent must be a laboratory course. (Previous chemistry background would be helpful.)*

This continuation of NS103 covers the integumentary system, special senses, digestive system, endocrine system, respiratory system, blood, cardiovascular system, lymphatic system, urinary system, water and electrolyte balance, reproductive system and human genetics. Laboratory exercises are performed throughout the semester and related clinical 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 display. This course is normally offered ONLY in SPRING semesters.

NS208 Nature Study

(4 credit, 2 lecture, 3 lab) *Prerequisites: None*

This field course provides a background of information

enabling recognition and some knowledge about many of the common plants and animals found in the local area. The laboratory used is the out-of-doors.

NS220 College Chemistry I

(5 credit, 4 lecture, 2 lab) *Prerequisite: One year of high school chemistry, NS101 or departmental approval*

This course covers the basic topics of inorganic chemistry and includes atomic models, nuclear chemistry, compound formation, stoichiometry, gas laws, solutions, reaction rates, acids and bases. This course is normally offered ONLY in FALL semesters.

NS221 College Chemistry II

(5 credit, 4 lecture, 2 lab) *Prerequisites: NS105 with a B+ or higher or NS220*

This course covers the basic topics of organic chemistry including alkanes, alkenes, alkynes, alcohols, ethers, phenols, thiols, amines, carboxylic acids and esters. Time permitting, brief lectures are given on lipids, carbohydrates and proteins. This course is normally offered ONLY in SPRING semesters.

NS230 Introductory Physics I

(4 credit, 3 lecture, 2 lab) *Prerequisite: written departmental approval*

This course is for students interested in the life sciences including biology, medical technology, pre-medicine and pre-dentistry and covers concepts of light, force and motion, and energy as they apply to biological mechanism and instrumentation.

NS231 Introductory Physics II

(4 credit, 3 lecture, 2 lab) *Prerequisite: NS230*

This course is a continuation of NS230 and covers fluids, elasticity of matter and membranes, sound, electromagnetism, quantum theory and radioactivity.

NURSING

NUR102 Basic Nursing Skills I

(7 credit, 3 lecture, 11 lab) *Prerequisite: Admission to the nursing program*

This course is designed to provide students with the basic knowledge and skills essential for efficient bedside nursing. Student are expected to begin the process of apply-

ing nursing theory to meet the basic needs of the patient. Course includes simulated lab experience and actual clinical experience.

NUR104 Basic Nursing Skills II

(12 credit, 1 lecture, 22 lab) *Prerequisite: Successful progression from the first semester or written departmental approval*

This course is designed to assist the student to perform more in-depth nursing procedures than in NUR102. Skills of a more technical nature will be emphasized. The goal will be to develop a concept of the total nursing process. Students will care for geriatric, medical-surgical, pediatric and obstetric patients.

NUR110 Food in Health and Disease

(2 credit, 2 lecture, 0 lab) *Prerequisite: Admission to the nursing program*

This course presents basic nutrition facts with their relationship to health. Students become familiar with food nutrients, good nutrition and variations of diet therapy.

NUR117 Clinical Practicum III

(6 credit, 0 lecture, 12 lab) *Prerequisite: Successful progression from the second semester*

This is the final clinical course in Level I of the nursing program. Students draw from previous clinical experience in applying the nursing process and participate in the total process of administering drugs to patients.

NUR120 Concepts of Interpersonal Relationships

(2 credit, 2 lecture, 0 lab) *Prerequisites: Admission to the nursing program*

This course examines the person as a nurse and as a patient to help students identify and meet emotional needs. Theories of communication are introduced and communication skills are practiced. Students learn to identify basic dynamics of human behavior and begin to use the tools of therapeutic communication.

NUR125 Nursing Seminar

(1 credit, 1 lecture, 0 lab) *Prerequisite: Successful progression from the second semester*

This course focuses on current issues and trends in nursing related to education, nurse practice acts, and professional organizations.

NUR145 Maternal-Child Nursing I

(3 credit, 3 lecture, 0 lab) *Prerequisite: Successful progression from the first semester*

The psychologic and physiologic bases of maternity care are studied in this course. Needs for support during ante-, intra- and post-partum periods; parental-infant bonding; and education for childbirth and parenting are stressed. Complications during pregnancy and in the newborn period are related to the processes underlying these problems. The class also includes the study of health care problems of children, the proper assessment for each, and the identification of appropriate nursing measures.

NUR150 Introduction to Medical-Surgical Nursing

(2 credit, 2 lecture, 0 lab) *Prerequisite: Admission to the nursing program*

This medical-surgical nursing introductory course presents the causes and effects of disease, body defenses, and prevention of disease. Common specific, long-term illnesses and appropriate nursing actions are discussed.

NUR151 Medical-Surgical Nursing II

(3 credit, 3 lecture, 0 lab) *Prerequisite: Successful progression from the first semester*

This course presents the more common medical and surgical conditions and the treatment involved in providing nursing care and presents the concept of assessing and meeting the total needs of the patient including the patient's return to a normal, functional life.

NUR152 Medical-Surgical Nursing III

(1 credit, 1 lecture, 0 lab) *Prerequisite: Successful progression from the second semester*

This course is a continuation and review of the previous medical-surgical nursing courses.

NUR161 Introduction to Pharmacology I

(1 credit, 1 lecture, 0 lab) *Prerequisite: Admission to the nursing program*

This course introduces basic principles of pharmacology, safety and dosage calculation as related to the administration of medications.

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NUR162 Pharmacology II

(1 credit, 1 lecture, 0 lab) Prerequisite: Successful progression from the first semester

This course presents information on medications according to their classifications necessary for the nurse to know in order to utilize the nursing process in caring for patients.

NUR200 Role Transition

(2 credit, 2 lecture, 0 lab) Prerequisite: Acceptance to the second year of the nursing program

This course is designed to facilitate students' adaptation to the associate degree nurse role. The focus will be on utilization of the nursing process, assessments, using nursing diagnoses and writing nursing care plans.

NUR225 Leadership Role in Nursing

(3 credit, 1 lecture, 4 lab) Prerequisite: Successful progression from the second year, second semester

This course assists students, within the framework of the nursing process, to develop professional leadership skills, to delegate appropriate tasks to others, to set priorities in nursing practice, and to further develop independent accountability.

NUR245 Maternal-Child Nursing II

(7 credit, 3 lecture, 8 lab) Prerequisite: Successful progression from the second year, first semester

This course is a more in-depth study of the physiologic and psychologic bases of maternal, newborn, and pediatric care than presented in NUR145. Parental-infant bonding and education for childbirth and parenting continue to be stressed. The high-risk mother and infant problems with necessary treatments, including nursing implications and care, are presented. Embryology and genetic problems are discussed and promotion of child health is emphasized with further study of the health care problems of children. A detailed study of ongoing developmental changes, environmental influences, assessment techniques and principles of disease process with regard to the special health and developmental needs of the pediatric client are emphasized.

NUR251 Advanced Medical-Surgical Nursing

(10 credit, 4 lecture, 12 lab) Prerequisite: Admission to the second year of the nursing program

This course focuses on using the nursing process in giv-

ing care to adults who are acutely ill or have multiple health problems. Nursing intervention in assisting the client and family in their holistic adaptive responses to illness and stress is discussed with an emphasis on the nurse's role in disease prevention, health maintenance and teaching. Information builds upon the theory learned in all other prerequisite courses and enables students to apply previously learned knowledge and skills.

NUR255 Community Mental Health

(6 credit, 2 lecture, 8 lab) Prerequisite: Successful progression from the second year, first semester

This course introduces students to man's psycho-social adaptation to stressors in the environment. Recent developments in treatment modalities such as family therapy, behavior modifications, and reality orientation are presented. Using the nursing process to work with patients with varying degrees of dysfunction in a wide variety of settings is discussed. Students work with clients in a mental health center, day care center, substance abuse center, and/or a psychiatric hospital setting. The content is focused on helping students enhance their understanding of human behavior during both sickness and health and to acquire skill in interpersonal relationships.

OFFICE EDUCATION

OE100 Beginning Typing

(3 credit, 2 lecture, 2 lab) Prerequisites: None

This course is an introduction to and a mastery of the typewriter keyboard and includes personal and business letters, elementary tabulation, simple outlines and report writing.

OE101 Intermediate Typing

(3 credit, 0 lecture, 4 lab) Prerequisite: OE100 or written departmental approval

This open-lab course includes training in speed-building and focuses on writing business letters including practice in proofreading, tabulation, special communication forms, reports, and legal papers.

OE102 Machine Shorthand

(4 credit, 3 lecture, 2 lab) Prerequisite: OE100

This course introduces the theory and operation of the Stenograph Shorthand Machine and develops a knowl-

edge of Stenograph's computer-compatible theory and skills in machine dexterity, shorthand reading ability and dictation.

OE103 Shorthand I

(4 credit, 4 lecture, 1 lab) *Prerequisite: OE100 or written departmental approval*

This course covers the elementary principles of Gregg Shorthand.

OE104 Shorthand II

(4 credit, 3 lecture, 2 lab) *Prerequisite: OE103*

This course includes a review of all shorthand principles, an intensive training in shorthand speed-building, the development of shorthand outlines and the ability to take new-matter dictation.

OE105 Refresher Course in Gregg Shorthand

(2 credit, 2 lecture, 1 lab) *Prerequisite: OE103 or written departmental approval*

This course is for students who need review in the theory of Gregg Shorthand with emphasis on basic alphabetic principles, word beginnings and endings, blends, brief forms and phrases. Students also take dictation and transcribe.

OE115 Speedwriting

(3 credit, 3 lecture, 1 lab) *Prerequisites: OE100*

This course teaches a complete and working knowledge of an alphabetic speedwriting system and develops skills in reading and fluency in writing and taking dictation. This knowledge can be applied to a professional setting or personal tasks.

OE120 Business Mathematics

(3 credit, 3 lecture, 0 lab) *Prerequisite: Passing score on the ASSET Numerical Skills Test*

This course deals with practical application of mathematics concepts and fundamentals in business situations. Topics include consumer loans; retailing, buying and pricing; inventory calculation; mortgage and installment credit; and simple business statistics. Many of the problems deal with solving equations and algebraic methods so students must have some algebra background.

OE129 Business Communications I

(3 credit, 3 lecture, 0 lab) *Pre- or Corequisites: OE100*

This course develops basic communications skills through a review of language structure with attention given to grammar, English for business use, vocabulary, punctuation, capitalization, spelling and numbers.

OE130 Business Communications II

(3 credit, 3 lecture, 0 lab) *Prerequisite: OE129*

This course focuses on human relations, electronic technology, proper and concise word usage, the formation of effective sentences and paragraphs, and planning techniques for writing effective correspondence in business.

OE150 Typewriting Improvement

(1 credit, 0 lecture, 1.5 lab) *Prerequisite: OE100 or written departmental approval*

This course is for students wishing to improve typewriting speed and accuracy skills and includes pretesting, diagnosing problem areas, typing extensive drills and posttesting.

OE175 Records Management

(3 credit, 3 lecture, 1 lab) *Prerequisite: OE100*

This course presents the principles of the alphabetic, numeric, geographic, and subject systems of records management, as well as records maintenance, decision-making, and career opportunities in the records management field.

OE202 Advanced Typing

(3 credit, 0 lecture, 4 lab) *Prerequisite: OE101 or written departmental approval*

This open-lab course develops continued speed-building techniques, advanced production typewriting techniques and skills in business letters, tabulations, report writing, legal documents and business forms.

OE203 Shorthand III

(4 credit, 0 lecture, 4 lab) *Prerequisites: OE101 and OE104*

This open-lab course further develops the ability to write new-matter dictation with increasing emphasis on speed and accuracy in transcription.

Course Descriptions

OE205 Legal Terminology and Transcription (3 credit, 0 lecture, 4 lab) *Pre- or Corequisite: OE101*

This open-lab course is a study of legal terminology as transcription skills are developed. This course develops a marketable skill in the use of office transcribing machines and client and court documents are prepared.

OE206 Legal Office Procedures (3 credit, 0 lecture, 4 lab) *Prerequisite: OE205*

This open-lab course focuses on the duties and responsibilities of the legal secretary. Transcription skills using legal terminology are enhanced on various pieces of transcription equipment with assignments in general office duties, non-court documents, and court documents.

OE207 Medical Terminology (3 credit, 0 lecture, 4 lab) *Prerequisites: None*

This open-lab course assists the beginning medical secretarial student master medical terms. Students can proceed to a functional vocabulary while pursuing a career specialty.

OE208 Medical Office Procedures (3 credit, 0 lecture, 4 lab) *Prerequisites: OE101 and OE207*

This open-lab course covers the duties of the medical secretary which involve bookkeeping, insurance, medical ethics, legal responsibilities, scheduling, and record keeping. In addition, students develop a marketable skill in the use of office transcribing machines and will transcribe histories, reports, and medical correspondence.

OE220 Voice Transcription (3 credit, 0 lecture, 4 lab) *Pre- or Corequisite: OE202*

This open-lab course stresses development of transcription skill with the operation of cassette-tape transcribers, emphasizing typing skills, the correct use of grammar and punctuation, and building efficient transcription skills.

OE225 Information Processing I (4 credit, 4 lecture, 1 lab) *Prerequisite: OE101*

This lecture course introduces basic concepts, terminology, and the emergence of information processing into the electronic office. Spelling, grammar, punctuation, and vocabulary are drawn together in practical application on IBM-compatible microcomputers. This course

also examines career paths which have emerged as a result of information processing.

OE226 Information Processing II (3 credit, 0 lecture, 4 lab) *Prerequisite: OE225 Corequisite: OE220*

This open-lab course emphasizes development of increased keyboarding skills on the NBI shared-logic word processor and introduces students to information processing simulation procedures through handwritten, rough-draft, and dictated documents.

OE227 Information Processing III (3 credit, 0 lecture, 4 lab) *Prerequisites: OE225 Corequisite: OE220*

This open-lab course stresses advanced-level concepts and varied office simulations. It includes skills in information processing, database, and spreadsheet applications on the IBM PC microcomputer, and dictation using cassette equipment.

OE230 Office Procedures (3 credit, 3 lecture, 1 lab) *Prerequisite: OE101*

This course emphasizes advanced-level office administration for meeting the needs of business, industry, and the professions. It includes concepts and organization of office work, work measurement, communications, information systems, administrative support, records management, reprographics, human relations, and professional development.

OE240 Business Calculators (3 credit, 0 lecture, 4 lab) *Prerequisite: OE120*

This open-lab introductory course in the operation of the electronic display and electronic printing calculators applies the basic functions of the machines with practical applications to business problems.

OE290 Field Experience (3 credit, 0 lecture, 6 lab) *Prerequisites: OE206, OE208 or OE230 and permission from the instructor*

This course consists of a carefully planned cooperative work experience in the office. Students must complete approved work experience arranged by the instructor, show evidence of satisfactory progress through employer reports and instructor visitations at the office site, and complete a minimum of 96 clock hours during the semester.

OE292 Cooperative Work/School Experience
(4 credit, 1 lecture, 15 lab or 5 credit, 1 lecture, 20 lab) *Prerequisites: 30 credits with a 2.0 grade point average plus departmental approval according to department standards*

Enrolled students hold jobs related in some way to their field of study. Performance on the job is monitored and guided by the employer and college personnel. Attendance at one-hour weekly seminars and submission of a final report are required.

PHYSICAL EDUCATION

All students taking physical education courses must submit evidence of physical fitness from a doctor to Montcalm Community College. The form will be placed in the student's file and kept on record for one year.

PE101 Golf
(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

This course is an introduction to the fundamental skills of golf. It offers a general overview of all aspects of the game and provides a foundation of the basic skills and knowledge required to help students pursue recreational enjoyment of golf.

PE102 Bowling
(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

This course introduces the fundamentals of bowling including equipment selection, stance, approach, delivery, scoring and rules.

PE103 Personalized Body Conditioning
(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

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.

PE104 Archery
(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

This hands-on course teaches the beginning skills of archery for students interested in learning a new and challenging sport.

PE105 Sports Fundamentals
(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

This course provides the basic, general knowledge needed to more fully enjoy watching and participating in volleyball, basketball, softball, racquetball, and badminton. The student will be given a broad overview of each sport, its rules and skills.

PE106 Volleyball
(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

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.

PE107 Cross Country Skiing
(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

This course teaches the fundamental principles of cross country skiing. This includes clothing and equipment, its use and maintenance. Basic skills are learned in the field and trails.

PE108 Social Dancing
(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

This course introduces the basic steps in modern social dancing including swing, foxtrot, cha-cha, waltz and disco and the courtesies necessary for developing poise and confidence on the dance floor.

PE109 Folk Dancing
(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

This is a general course designed to develop skills and techniques in the various country and folk dances.

PE110 Introduction to Physical Fitness
(1 credit, 1 lecture, 1 lab) *Prerequisites: None*

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.

Course Descriptions

PE111 Karate I

(1 credit, 0 lecture, 2 lab) Prerequisites: None

This course is designed to teach the basic kicks, punches and blocks of karate.

PE112 Karate II

(1 credit, 0 lecture, 2 lab) Prerequisite: PE111

This is a continuation of PE111. Students completing this course will be encouraged to attempt the tests for their lower-degree belts.

PE113 Cross Country Skiing/Beginning Tennis

(1 credit, 0 lecture, 2 lab) Prerequisites: None

This course allows participation in winter and spring physical activities. Fundamental cross country skiing principles are learned in the first half of the spring semester and the basic skills of tennis are learned in the second half.

PE114 Personal Self-Defense

(1 credit, 1 lecture, 1 lab) Prerequisites: None

This course covers basic self-defense strategies in avoiding potential dangers. Methods of instruction include techniques for avoiding and averting physical harm as well as the presentation and discussion of concepts and philosophies about personal self-defense.

PE115 Advanced Personal Self-Defense

(1 credit, .5 lecture, 1 lab) Prerequisites: PE114

This course covers advanced techniques in personal self-defense using methods found in Karate, Judo, Aikido, Kendo and other martial art forms.

PE116 Racquetball

(1 credit, 0 lecture, 2 lab) Prerequisites: None

This course teaches the fundamental skills and knowledge of rules needed to play racquetball for fun and fitness.

PE118 Bicycling

(1 credit, 0 lecture, 2 lab) Prerequisites: None

This course teaches how to select, adjust, maintain, and use equipment properly. Students also learn safety and riding techniques.

PE119 Beginning Tennis

(1 credit, 0 lecture, 2 lab) Prerequisites: None

This course teaches the basic skills of tennis, including serve, forehand and backhand ground strokes. Students also learn the rules and strategy of the game. A class tournament is held during the last week of class.

PE120 Intermediate Tennis

(1 credit, 0 lecture, 2 lab) Prerequisite: PE119

This course refines the basic skills of tennis, including service, forehand, and backhand ground strokes, and covers the rules and strategy of the game. A tournament is held during the last week of class.

PE121 Sports Officiating

(1 credit, 0 lecture, 2 lab) Prerequisites: None

This course presents the rules of a major sport, which is chosen by the participants of the class and covers officiating techniques, relationship of players, officials and aspects of administration. Students may choose, upon completion of the class, to take the state examination to become a registered official in the chosen sport.

PE122 Beginning Skiing

(1 credit, 0 lecture, 2 lab) Prerequisites: None

This course teaches the basic ski maneuvers through wide-stance parallel turns and includes information on ski maintenance and waxing different types of skis, bindings and ski equipment.

PE123 Intermediate Skiing

(1 credit, 0 lecture, 2 lab) Prerequisite: PE122

This course includes all intermediate ski maneuvers with special emphasis on parallel skiing as well as an introduction to ski racing and information on ski maintenance, skis and bindings.

PE124 Advanced Skiing

(1 credit, 0 lecture, 2 lab) Prerequisite: PE123

This course teaches the fundamentals of ski instruction and advanced ski techniques and consists of the theory of ski mechanics, theory of teaching skiing, theory of basic ski maneuvers, practice teaching and advanced ski techniques.

PE130 Beginning Swimming

(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

This course includes the basic swimming strokes including the front crawl, back crawl, side stroke, breast stroke, and elementary backstroke. Safety, nonswimming rescues, swimming hygiene, water entries and survival swimming are also covered.

PE131 Intermediate Swimming

(1 credit, 0 lecture, 2 lab) *Prerequisite: PE130*

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 butterfly, overarm sidestroke, trudgen crawl and inverted breaststroke. The course also covers diving, treading water, boating safety, turns, safety, non-swimming rescues and survival swimming.

PE133 Advanced Lifesaving and Water Safety

(1 credit, 0 lecture, 2 lab) *Prerequisite: PE131*

This course trains students to work as lifeguards in situations where a Red Cross Advanced Lifesaving and Water Safety Certificate is required.

PE134 Water Safety Instructors Certification

(1 credit, 0 lecture, 2 lab) *Prerequisite: PE133*

This course trains students to work as Red Cross certified swimming instructors. Basic stroke evaluation as well as teaching techniques and water safety are covered.

PE135 Skin and Scuba Diving

(2 credit, 1 lecture, 2 lab) *Prerequisites: Swimming ability indicated by the ability to tread water using feet and arms only for 5 minutes; swim 200 yards without fins, and swim under water 50 feet without fins or push-off.*

This course teaches skills needed to become a safe scuba diver. Upon successful completion of the course, students are encouraged to take P.A.D.I. certification tests.

PE136 Water Exercise

(1 credit, 0 lecture, 2 lab) *Prerequisites: None*

The 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.

PE140 Advanced Open Water & Rescue Diving

(2 credit, 1 lecture, 2 lab) *Prerequisites: Students must be at least 15 years of age and have scuba diving and current CPR certification*

This course provides theory and practical application in advanced and rescue diving.

PE205 Emergency Health Care

(2 credit, 2 lecture, 0 lab) *Prerequisites: None*

This course covers first aid for wounds, shock, burns, poisoning, etc., as well as CPR. Students successfully completing the course qualify for Red Cross Standard First Aid certification.

PE231 Swimming Fitness

(1 credit, 0 lecture, 2 lab) *Prerequisite: PE131 or written departmental approval*

This course provides the knowledge and guidance to improve health and physical fitness through exercise and training in a swimming program. This conditioning course covers the advantages and benefits of swimming; principles of training, evaluation and motivation; minor health annoyances and stroke mechanics.

PARALEGAL STUDIES

PL100 Introduction to Paralegal Studies

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course provides a broad overview of paralegal services and is primarily for students intending to pursue a career in law, short of becoming a lawyer. The course explores paralegal duties, responsibilities, and challenges and has relevance to all students interested in the legal system. Career opportunities, practical applications of legal philosophy and research methodology, and related subjects are included. A key part of the course focuses on developing an appreciation of the American legal system's processes and operations. Students also become exposed to legal research, terminology, and legal writing. This course is normally offered ONLY in FALL semesters.

Course Descriptions

PL110 Legal Research and Writing

(3 credit, 3 lecture, 0 lab) Prerequisite: LA100

This course is designed to teach students the sources of law and how to research legal issues using these sources. The course will require the students to write a legal memorandum and a legal brief using the required format for each paper. Students also learn how to analyze legal issues and prepare careful, crafted, written presentations of their research and analysis.

PL200 Estates, Wills and Trusts

(3 credit, 3 lecture, 0 lab) Prerequisite: PL100

This course is designed to train the prospective paralegal in the administration of estates, wills and trusts. Emphasized will be those duties and responsibilities that can be performed by the paralegal under the supervision of an attorney. Appropriate federal and state tax laws will also be introduced. This course is normally offered ONLY in SPRING semesters.

PL215 Litigation I: Pretrial Matters

(3 credit, 3 lecture, 0 lab) Prerequisite: PL100

This is the first of two courses designed to familiarize students with the litigation process. It provides the student with an in-depth study of pre-trial considerations necessary for litigation including jurisdiction, venue, statutes of limitations, pleas, discovery and other pre-trial matters. This course is normally offered ONLY in FALL semesters.

PL216 Litigation II: Trial and Appellate Procedures

(3 credit, 3 lecture, 0 lab) Prerequisite: PL215

This course is a continuation of PL215 and provides an in-depth study of trial considerations and procedures. Evidence, interviews, client preparation, jury selection, arguments, instructions to the jury, verdicts and other pertinent trial-related activities are covered with an emphasis on the role of the legal assistant in trials and appeals. This course is normally offered ONLY in SPRING semesters.

SKILLS DEVELOPMENT

SD108 Problem Solving

(3 credit, 3 lecture, 0 lab) Prerequisites: None

This course in general problem-solving skills covers the techniques used in solving a variety of problems that occur in all aspects of college courses and in all walks of life. This elementary course assumes no prior knowledge beyond basic reading, writing, and arithmetic skills.

SD110 Career Development

(1 credit, 1 lecture, 0 lab) Prerequisites: None

This course is an overview of career/life style planning. Values, skills, interviews, occupational information, resumes, interest inventories, decision making and placement are covered.

SD120 Dealing with Stress

(1 credit, 1 lecture, 0 lab) Prerequisites: None

This course introduces the concepts of stress and stress management. Identifying stressors, psychological and physical responses to stress and the techniques for managing stress are presented and students are exposed to various relaxation techniques including progressive relaxation, autogenic, biofeedback and imagery and physical exercise as a means of stress reduction is also explored. Students design and implement personal stress management programs as a final class project.

SD130 Women's Awareness

(1 credit, 1 lecture, 0 lab) Prerequisites: None

This course offers skills for improving self-awareness and understanding to increase the ability to plan and set goals. Women in history, stereotyping in our society, career options and family relationships are discussed.

SD140 Reading for Fun and Profit

(1 credit, 0 lecture, 1 lab) Prerequisites: None

This course helps develop a keener appreciation of reading for fun as a leisure-time activity which is not only entertaining, but also thought provoking and for profit as an activity that can help one develop a fuller personality, grow intellectually, become more aware of the world and one's place in it, and enhance one's self worth and value to others in society. Students study a selection of reading material and meet periodically to discuss, interpret and evaluate the material.

SD145 Keyboarding

(1 credit, 0 lecture, 2 lab) Prerequisites: None

This open-lab course is an introduction to the computer keyboard. The concept of typing the alphabet, numbers, and symbols by touch is stressed.

SD150 Developmental Reading I

(1 credit, 0 lecture, 1 lab) Prerequisites: None

The purpose of this course is to assist students in the development and improvement of reading skills. In a lab format, students receive testing to identify reading skill levels and individual assistance from a reading specialist as needed. A grade of S indicates satisfactory completion of the course.

SD151 Developmental Reading II

(1 credit, 0 lecture, 1 lab) Prerequisites: None

The purpose of this course is to assist students in the development and improvement of reading skills. In a lab format, students receive testing to identify reading skill levels and individual assistance from a reading specialist as needed. A grade of S indicates satisfactory completion of the course.

SD152 Developmental Reading III

(1 credit, 0 lecture, 1 lab) Prerequisites: None

The purpose of this course is to assist students in the development and improvement of reading skills. In a lab format, students receive testing to identify reading skill levels and individual assistance from a reading specialist as needed. A grade of S indicates satisfactory completion of the course.

SD153 Developmental Reading IV

(1 credit, 0 lecture, 1 lab) Prerequisites: None

The purpose of this course is to assist students in the development and improvement of reading skills. In a lab format, students receive testing to identify reading skill levels and individual assistance from a reading specialist as needed. A grade of S indicates satisfactory completion of the course.

SD156 Efficient Study

(2 credit, 2 lecture, 0 lab) Prerequisites: None

This course provides instruction and practice in time management, textbook study, note-taking, study environment and memory techniques. Using reference ma-

terials in the library and identifying and overcoming self-defeating behaviors are also included. Students wishing to evaluate present study abilities should contact the Skills Development Lab to schedule a time to take the ASSET Study Skills Test. The result of this test can assist students in deciding whether to enroll in this course.

SD160 Arithmetic Review I

(1 credit, 0 lecture, 1 lab) Prerequisites: None

This course provides a review of whole numbers and fractions and is especially recommended to students who score below 13 on the ASSET Numerical Skills Test. Instruction in an individualized learning lab allows students to progress at their own pace.

SD161 Arithmetic Review II

(1 credit, 0 lecture, 1 lab) Prerequisite: Take concurrently with SD160 or a score of 13 or above on the ASSET Numerical Skills Test

This course provides a review of decimals, ratio and proportion, and percentages in an individualized, self-paced learning lab. This course is recommended to students who have mastered the skills taught in SD160 and who want a further arithmetic review. It may also be useful for students who plan to take Business Math or Business Calculators.

SD162 Systems of Measurement

(1 credit, 0 lecture, 1 lab) Prerequisite: SD161 or a score of 18 or above on the ASSET Numerical Skills Test

This course provides a review of basic geometry concepts and the metric system. Topics include area, perimeter and volume of parallelograms, trapezoids, triangles and circles, the metric system and conversion between the metric system and the American measurement system and between Fahrenheit and Celsius measures. This class takes place in an individualized, self-paced learning lab. It may be useful to students prior to enrolling in drafting, nursing, and other programs that utilize these concepts.

SD163 Pre-Algebra

(1 credit, 0 lecture, 1 lab) Prerequisite: SD162 or a score of 18 or more on the ASSET Numerical Skills Test

This class provides an introduction to the basic concepts of elementary algebra. Exponents, square roots, scientific notation, integers, equations and statistical concepts of mean, median and mode are included. This class is taught in an individualized, self-paced learning lab. SD163

Course Descriptions

may be useful to students prior to taking Business Math, Introduction to Data Processing, NS101, EL100, MA100 or MA110.

SD170 Basic Writing Skills

(2 credit, 0 lecture, 2 lab) *Prerequisites: None*

This course provides an opportunity to learn the skills necessary to write concise, correctly punctuated sentences using standard English and the basics of essay writing. Major aspects of the course are the essay form, developing a thesis and supporting the thesis with specific evidence, writing an effective introduction and conclusion, and improving grammar and sentence mechanics. This course may be taken in preparation for LA100.

SD175 Improving Reading and Writing

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course offers an opportunity to improve communication skills in reading and writing. Throughout the course, the relationship between good writing and reading for comprehension are stressed. Emphasis is placed on grammar, sentence structure, vocabulary development, spelling and paragraph construction.

SOCIAL SCIENCES

SS110 Introduction to Social Science I

(4 credit, 4 lecture, 0 lab) *Prerequisites: None*

This course introduces the interdisciplinary approach to the study of society and human behavior, emphasizing methodology, the development of skills necessary to study and research in the social sciences and the study of power, its use and distribution as an overall framework for examining the nature of society's strengths and weaknesses. Materials focus primarily on economics and political science with special emphasis on the rights and responsibilities of citizenship and the form and functions of government at the national, state and local levels. This course is normally offered ONLY in FALL semesters.

SS111 Introduction to Social Science II

(4 credit, 4 lecture, 0 lab) *Prerequisites: None*

This course is a continuation of SS110 and completion of SS110 is recommended before enrolling in SS111. 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. This course is normally offered ONLY in SPRING semesters.

SS215 Principles of Economics

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This one-semester introductory economics course provides exposure to both macroeconomics and microeconomics with greater attention given to macroeconomics, which is related to issues of national economic policy. Studies include foundations of economic analysis, the public economy, national income, stabilizations, growth, employment and taxes.

SS220 General Psychology

(3 credit, 3 lecture, 0 lab) *Prerequisite: ASSET Testing*

This course familiarizes beginning students with the basic concepts and methods used by psychologists to study human behavior. Subjects covered include experimental methods, human growth and development, intelligence, perception, learning, motivation and emotion, personality disorder and therapy, and group behavior. Daytime, on-campus sections of this course employ an individualized study approach while other sections follow a more traditional classroom/lecture-discussion format.

SS221 Child Psychology

(3 credit, 3 lecture, 0 lab) *Prerequisite: ASSET Testing*

This course covers psychological theory and experimental findings as they apply to understanding and influencing children's growth and development emphasizing basic concerns such as the effects of heredity and environment, the processes of maturation, intellectual growth and development, and childhood anxiety.

SS225 Abnormal Psychology

(3 credit, 3 lecture, 0 lab) *Prerequisite: SS220 or written departmental approval*

This course covers the definition, description, measurement, diagnosis, causes, treatment, and prevention of abnormal behavior. Biological, psychosocial and socio-cultural perspectives are reviewed.

SS230 Sociology

(3 credit, 3 lecture, 0 lab) *Prerequisite: ASSET Testing*

This course familiarizes beginning students with the basic concepts and methods used by sociologists to study society and covers culture, social structure, social class,

institutions, demography, deviance, and social change, emphasizing the sociological perspective of human behavior and modes of social organization.

SS235 Social Problems

(3 credit, 3 lecture, 0 lab) *Prerequisite: ASSET Testing*

This course focuses on the sociological approach to social problems including mental illness, crime, poverty, family and community disintegration, violence, ecology and current events.

SS240 Political Science

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

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, 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.

SS250 United States History to 1865

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

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. The conflicts between individualism and collectivism and nationalism and sectionalism, as well as 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, 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.

SS251 United States History Since 1865

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course is a continuation of SS250, 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.

SS255 Michigan History

(3 credit, 3 lecture, 0 lab) *Prerequisites: None*

This course presents beginning students with 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 themes and periods above.

SS260 Cultural Anthropology

(3 credit, 3 lecture, 0 lab) *Prerequisite: ASSET Testing*

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.

Course Descriptions

TECHNICAL DRAFTING AND DESIGN

TD100 Technical Drafting

(3 credit, 1 lecture, 4 lab) Prerequisites: None

This laboratory/lecture course covers the knowledge and manipulative skills needed for work with drafting instruments to create linework, lettering, geometric construction, sketching, multiview projection, sectioning, basic dimensioning, and isometric, oblique and perspective projection.

TD105 Blueprint Reading

(2 credit, .5 lecture, 1.75 lab) Prerequisites: None

This technical blueprint reading course with practical applications is structured around a workbook approach to learning, with lecture sessions preceding workbook assignments. Topics include basic projection of views, lines, reading scales, sketching, isometric and oblique projection, sections, perspectives, threads, title blocks, stock lists and interpreting blueprints.

TD106 Layout and Precision Measurement

(2 credit, .5 lecture, 1.75 lab) Prerequisite: TD105

This technical blueprint reading course with practical applications is structured around a workbook approach to learning, with lecture sessions preceding workbook assignments. Topics include geometrical and positional tolerancing and symbols, fits between mating parts, weldment blueprint reading and weldment assembly. Students are required to check manufactured parts against part prints with precision measuring devices.

TD110 Descriptive Geometry

(3 credit, 1 lecture, 4 lab) Prerequisite: TD100

This laboratory/lecture course consists of one hour of lecture and four hours of supervised laboratory instruction each week. Topics include projection of points, lines, and planes; revolution of objects; intersection of planes and solids; and projection of oblique and true view surfaces.

TD120 Shop Drawing

(2 credit, .5 lecture, 1.75 lab) Prerequisites: None

This course covers the basic principles and techniques of shop drafting, stressing the essentials of equipment usage, linework, lettering, isometric and oblique drawings,

multiview (orthographic) projection, geometric construction, basic auxiliary views, and basic dimensioning.

TD130 Technical Drafting II

(3 credit, 1 lecture, 4 lab) Prerequisites: TD100 or equivalent

This lecture/laboratory course includes one hour of lecture theory directly related to four hours of instructor supervised laboratory each week. The course includes dimensioning, English and metric tolerancing, threads, fasteners, springs, representation of screws, nuts, bolts, dowels, and detailing of assembly drawings.

TD135 Tool and Die Design I

(2 credit, .5 lecture, 1.75 lab) Prerequisite: TD120 or equivalent or written departmental approval

This course is structured primarily for tool-and-die apprentice students. Lectures are followed by reinforcing laboratory sessions which consist of sketching sheet metal die components. Emphasis is not on line quality and technique, but the communication of ideas and design graphically. Topics include basic discussion of tools, dies and punches; blanking force and standard die sets and die components with emphasis on drop-through blank dies. Students are required to maintain a notebook, which is reviewed by the instructor at the end of the course and returned for future reference.

TD136 Tool and Die Design II

(2 credit, .5 lecture, 1.75 lab) Prerequisite: TD135

This course is structured primarily for tool-and-die apprentice students. Lectures are followed by reinforcing laboratory sessions, which consist of sketching sheet metal components related to the classroom discussion. Topics include basic flat part progressive dies; compound blank and pierce dies; stock guides; pitch gauges; stock feeders; roller guides; ball bearing guide pins and bushings; strip layout; availability of various standard punches, dies, and components; and knowledge and review of tool-and-die standardized components and catalogs.

TD137 Tool and Die Design III

(2 credit, .5 lecture, 1.75 lab) Prerequisite: TD136

This laboratory/lecture course emphasizes sheet metal progressive draw dies. Emphasis is not on line quality and technique, but the communication of ideas and designs graphically. Topics include mathematical development of a product design into a flat blank pattern,

progression of dies, development of draw and redraw stations, stock lifters, hydraulic assisted draw pads, press cushions and air pins and horizontal cams.

TD140 Plastic Mold Design I

(2 credit, .5 lecture, 1.75 lab) *Prerequisite: TD120 or written departmental approval*

This course covers the fundamentals of plastic molding, plastic product design, types of molds, toolmaking processes, equipment and methods, materials for model making and designing and drafting practices as well as compression and transfer molds, injection molds for thermoplastics, cold mold design, extrusion dies for thermoplastics, blow mold construction and design, mold design for expanded polystyrene, and special fixtures.

TD141 Plastic Mold Design II

(2 credit, .5 lecture, 1.75 lab) *Prerequisite: TD140*

This course is a continuation of TD140.

TD142 Plastic Mold Design III

(2 credit, .5 lecture, 1.75 lab) *Prerequisite: TD141*

This course is a continuation of TD141.

TD215 Product Design

(3 credit, 2 lecture, 3 lab) *Prerequisites: TD100 and TD110 or written departmental approval*

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 with emphasis on manufacturability and producibility of a particular new product design.

TD230 Jig and Fixture Design

(3 credit, 1 lecture, 4 lab) *Prerequisite: TD130*

This laboratory/lecture course includes four hours of drafting practice and one hour of drafting lecture theory directly related to the laboratory work. The course includes the design of indexing jigs and milling fixtures. Use of standard components from various catalogs is also emphasized.

TD250 Computer Aided Drafting

(3 credit, 2 lecture, 2 lab) *Prerequisite: Departmental approval*

This course is a combination of four hours of lecture and laboratory and consists of computer-generated graphics to include terminology, techniques and application of computer aided drafting (CAD) to engineering, tool design, architecture and electronics. Two-dimensional design drafting is stressed.

TD292 Cooperative Work/School Experience

(4 credit, 1 lecture, 15 lab or 5 credit, 1 lecture, 20 lab) *Prerequisites: 30 credits with a 2.0 grade point average plus departmental approval according to department standards*

Enrolled students hold jobs related in some way to their field of study. Performance on the job is monitored and guided by the employer and college personnel. Attendance at one-hour weekly seminars and submission of a final report are required.

WELDING TECHNOLOGY

WE107 Welding Technique and Joint Preparation

(3 credit, 1 lecture, 3 lab) *Prerequisites: None*

This course gives students with no welding training or experience the opportunity to learn welding skills and proper techniques. Rod selection and out-of-position welding are covered. Projects from home are encouraged.

WE108 Welding and Fabrication

(3 credit, 1 lecture, 3 lab) *Prerequisites: None*

This course emphasizes the five basic joint designs utilizing the oxyacetylene and arc process with emphasis on the 1, 2, 3, and 4 F positions.

WE110 Automotive Welding

(2 credit, 1 lecture, 2 lab) *Prerequisites: None*

This course gives automotive maintenance students an understanding of the basic techniques, machine operations and safety rules pertaining to soldering, welding, and brazing of lighter gauge materials.

Course Descriptions

WE120 Welding and Fabrication II

(3 credit, 1 lecture, 3 lab) *Prerequisites: None*

This course allows welding students to continue developing skills on the 1,2,3 and 4G weldments. Testing of weldments by means of destructive and non-destructive methods is used to insure students are properly developing welding skills.

WE121 Advanced Welding

(3 credit, 1 lecture, 3 lab) *Prerequisites: None*

This course provides the training required for accomplishing qualification-type weldments in accordance with the A.W.S. welding code, using the S.M.A.W. process. M.I.G. procedures are also covered.

WE122 Related Welding Skills

(3 credit, 1 lecture, 3 lab) *Prerequisites: None*

This course is for students needing a welding course to meet the requirements of other MCC technical programs. Students receive basic training in the areas of oxy-acetylene, M.I.G. welding and oxy-acetylene flame cutting.

WE124 Agriculture and Construction Welding

(1 credit, .5 lecture, 1.5 lab) *Prerequisites: None*

This course is for those who make their own repairs on machinery. Topics include basic arc welding, basic gas welding, cast iron brazing, hard-surface application, flame cutting, and control of heat related stresses. Small student-furnished projects are allowed but must be removed after each class.

WE125 TIG Welding

(2 credit, .5 lecture, 1.75 lab) *Prerequisites: None*

This course is a comprehensive coverage of the Gas/Tungsten Arc Welding process, developed especially for and in consideration of the tool-and-die industry.

WE292 Cooperative Work/School Experience

(4 credit, 1 lecture, 15 lab or 5 credit, 1 lecture, 20 lab) *Prerequisites: 30 credits with a 2.0 grade point average plus departmental approval according to department standards*

Enrolled students hold jobs related in some way to their field of study. Performance on the job is monitored and guided by the employer and college personnel. Attendance

at one-hour weekly seminars and submission of a final report are required.

DIRECTED STUDY

XY292 Cooperative Work/School Experience

(4 credit, 1 lecture, 15 lab or 5 credit, 1 lecture, 20 lab) *Prerequisites: 30 credits with a 2.0 grade point average plus departmental approval according to department standards*

Enrolled students hold jobs related in some way to their field of study. Performance on the job is monitored and guided by the employer and college personnel. Attendance at one-hour weekly seminars and submission of a final report are required.

XY295 Modular Course

(1 or 2 credit hours) *Prerequisites: None*

These courses are one- or two-hour units of study which contain part of an existing course and respond to special, often one-time needs, and usually are publicized separate from the regular semester schedules.

XY299 Directed Studies

(1 or 2 credit hours) *Prerequisite: Written departmental approval*

These courses are usually for advanced students or those who have exhausted regular college offerings. The directed study cannot be used near the end of the semester to fill requirements, but must be planned in advance. Careful attention must be given to the description of the work proposed because there is no other course outline on file to document the experience. Students interested in directed study must contact an instructor who will sponsor the proposed activities. The teacher completes the written plan on proper forms and seeks approval from the instructional administrator before work begins. Students must enroll in an appropriately labeled section of Directed Studies 299, e.g., HU299, SS299, etc.



General Information

Student Rights & Responsibilities

Family Educational Rights and Privacy Act

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

2. Student files are maintained in the Student Services Office and the Registrar is responsible for their upkeep. Information is maintained on previous transcripts, grades while attending Montcalm Community College, financial aid records and veteran's administration records. All Student Services and instructional administration employees have access to these student records. All full-time instructors have access to the records of students attending or students who have attended their classes. National League for Nursing achievement test scores, State Board scores and NAPNES Pharmacology Achievement test scores are maintained in the Office of the Director of Nursing and Allied Health. The Director of Nursing and Allied Health, the nursing faculty and the secretary to the Director have access to the information which is released only upon request by the student.

3. Students wishing to inspect their records may do so by contacting the Registrar in the Student Services Office. They may inspect the record of their professional test scores by contacting the secretary to the Director of Nursing and Allied Health.

4. 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 following information relating to a student: the student's name, address, telephone number, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, the most recent previous educational agency or institution attended by the student, and other similar information. Students have the right to refuse permission of their inclusion in directory information.

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.

6. 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 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 unsolved, may file their concern with H.E.W.

8. All students will be informed of the policy upon initial registration and copies will be available upon request.

Policy Against Discrimination

It is the policy of Montcalm Community College that no person shall, on the basis of sex, race, religion, color, national origin, age, or solely by reason of handicap, be excluded from participation in, be denied the benefits of, or be subjected to discrimination in any of its programs, activities, or in employment.

James D. Lantz is the college Non-Discrimination Coordinator. His office is located in the Library/Administration Building, telephone (517) 328-2111, extension 220.

Code of Student Ethics

Preamble

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. Enforcement of MCC rules and regulations is the responsibility of the Dean of Student 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 Montcalm Community College. 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 Montcalm Community College.

Discrimination

Montcalm Community College prohibits any form of discrimination that denies equal rights and privileges on the basis of sex, race, religion, color, national origin, or handicap.

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

Alcoholic Beverages and Drugs

Any student drinking, being 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

Students are to adhere to all smoking regulations posted on the campus.

Explosives

The possession or use of explosives, firecrackers, or firearms on college property or at college or student-sponsored functions is not permitted without the expressed consent of college authorities.

Gambling

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

Cheating-Plagiarism

All students are expected to be honest in their studies, work and play. 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, failure to give credit for ideas, thoughts or material taken from another, is considered a form of 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 from time to time.

Parking - Speed Limits

All students are to park in designated student parking areas only. Students are to observe speed limits as posted and to 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 Montcalm Community College.

Students are to keep the college informed of their current addresses and phone numbers while attending Montcalm Community College.

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.

Publications

Publications and/or advertisements not approved by Montcalm Community College will not be authorized for posting or distribution on campus.

Authorization to post or distribute materials may be obtained from the Dean of Student Services.

Financial Responsibility

Students are expected to keep current any financial indebtedness to the college. Students owing money to the college for such matters as fees, loans, library fines, bookstore accounts, 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 official transcript will be delayed until such accounts are paid.

Montcalm Community College reserves the right to change or add rules and regulations at any time.

Conclusion

It is understood that final authority for the Student Code of Ethics and all regulations rests with the Montcalm Community College President and the Board of Trustees.

Provisions for Review of Disciplinary Decisions

Each student at Montcalm Community College, subject to disciplinary action as a result of misconduct, shall have the following recourse to due process:

1. At such time as the Dean of Student Services has rendered a disciplinary decision, the aggrieved student may request in writing a review of the procedures taken by the Dean of Student Services with the President of the college within 10 days.
2. In the event the President sustains the decision of the Dean, the aggrieved student may request a hearing before the Board of Trustees by giving notice in writing to the Secretary of the Board not later than 10 days after the President's decision is announced.
3. In the event the decision of the Dean of Student Services is reversed by the President, the decision of the President shall be binding upon both parties, unless reversed by the Board of Trustees.
4. The hearing before the Board of Trustees shall be conducted so as to assure both parties the right to counsel of their own choosing, the right to provide witnesses, the right to question witnesses, and such other process as may be necessary to provide coincident exposure to two points of view.
5. In all cases, decisions rendered by the Board of Trustees, subsequent to a hearing regarding a disciplinary case, shall be final and binding upon all parties.

Policy and Procedure on Substance Abuse

The faculty, staff and administrators of Montcalm Community College believe that the future of our nation is threatened by the epidemic increase in substance abuse among our citizens. We also believe that with increased awareness, counseling, assessment and prescribed treatment, substance abusers can overcome their illness or chemical dependency.

To assist students in avoiding or overcoming substance abuse problems, the following procedures have been publicized, implemented and followed as of August 1, 1987.

1. All Montcalm Community College students will have access to substance awareness workshops, seminars, and classes offered at the college.

2. A student who voluntarily seeks assistance in the Student Services Office to overcome his or her substance abuse problem(s) will receive counseling services on a confidential and non-punitive basis.

A. The counselor will work with the student and, if necessary, refer him or her to a community agency for assessment, prescribed treatment and follow-up.

B. A student who is participating in counseling or a prescribed program is not exempt from college rules.

3. A student who illegally uses alcoholic beverages or controlled chemical substances on the MCC campus faces possible disciplinary action, suspension from the college and/or prosecution under the law.

4. A person who sells or provides illegal alcohol or controlled chemical substances on the MCC campus may face immediate arrest and prosecution under the law.

Questions relative to the policy and procedures may be directed to the dean of Student Services in the Student Services Office or by calling (517) 328-2111.

Student Activities

Student activities exist for the purpose of enhancing student life and eligibility for participation shall include all students who are properly enrolled at MCC. Suggestions, questions and comments may be directed to the Activities Program Manager in the Activities Building.

Clubs

Although the primary role of college students centers on the formal learning environment, total student development also includes the informal activities. For this purpose a number of clubs and organizations are available. The Student Senate, as the umbrella of student organizations, sponsors such clubs as:

Art Club	Nursing Clubs
Drama Club	Ski Club
Journalism Club	Walking Club

To become a recognized club, the potential club members must contact the Student Senate officers or the Activities Program Manager (Student Senate Advisor) and follow the Senate guidelines for establishing club status and receiving funds.

Activities

Additional activities are available each year through other college-sponsored activities:

Club sports
Intramurals
Planned excursions
Social activities
Vocal & instrumental music

Students interested in initiating other activities are strongly encouraged to share their ideas with the MCC Activities Program Manager and members of the Student Senate.

Performance Groups

All students are invited to join any or all of the three performance groups. The choir, jazz band, and ensemble offer students the opportunity to learn and enjoy music as they provide entertainment for the campus and surrounding community. Students, staff or community

members can participate on a credit or non-credit basis. Counselors or the music instructors will answer questions concerning participation in these groups.

Intramurals

MCC offers a variety of intramural activities. Some of the intramurals offered have been volleyball, basketball, racquetball, tennis, table tennis, euchre, and softball. If you have any suggestions for other intramurals, contact the Recreation Program Manager or the Activities Program Manager.

Personal Equipment and Clothing

MCC does not provide towels, clothing, or equipment such as tennis rackets and balls. The student is expected to provide these items as required.

Locks and Lockers

Lockers are available on a rental basis for each semester and may be checked out at the Recreation Center in the Activities Building.

I.D. Cards

Student I.D. cards are issued after the drop/add period each semester. They may be picked up at the Recreation Desk in the Activities Building weekdays between 8 a.m. and 4 p.m. and during all scheduled open gym/open swim times. Replacement identification cards are available for \$2. This card is used to check out recreation equipment, such as basketballs, volleyballs and ping pong paddles, and library materials and to attend college functions.

Student Leave of Absence

1. A student who is unable to complete his/her course work due to a serious injury or illness may request a leave of absence. The request must be supported by a physician's statement that the student is unable to complete the course work at the current time and indicating the recovery period required.

2. The Dean of Student Services is authorized to approve such requests in accordance with procedures developed pursuant to this policy.

3. With approval for a leave of absence, tuition-and-fee credit may be issued where a class grade of C- or below or a withdraw grade has been given by the instructor. Tuition and fee credit will be issued only with the approval of the Dean of Student Services (and the Financial Aid Officer in cases where the student's account has been paid).

4. When a student is responsible for his or her own account balance at the time the leave is granted, the amount of any unpaid tuition and fees will be deferred until the leave expires.

5. Should the student decide not to return, he or she will still be responsible for any unpaid balance. At the time the leave expires, regular billing procedures will resume for both the returning and non-returning students.

Personal Injury & Emergency Procedures

Montcalm Community College does not provide medical care beyond first aid. If the emergency condition is such that the person is incapable of a rational decision, the 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 director of Business and Finance will be alerted as soon as possible.

Procedure

The first college employee on the scene will:

1. Have someone call for an ambulance, if needed, and briefly and accurately describe the accident. Call 911 on an outside line.
2. 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 seriousness of the accident.
3. Remain with the patient until the 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 Business and Finance no later than the next regular office day.

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 simple:

1. 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 Department and the public news media.

Definitions

Tornado Watch: Tornado expected to develop

Tornado Warning: Tornado has been sighted in the area

Safety Procedures

Whenever the watch or warning conditions exist for the vicinity of the college, the Montcalm Sheriff's Department will phone our switchboard with a specific directive. The officer calling will indicate whether it is a watch or warning and if it is in the immediate vicinity.

1. 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.
2. 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. It is your responsibility to know exactly where to go from whatever room you might occupy. Your cooperation will facilitate safety for all."

Campus Facilities

INSTRUCTION WEST This building (closest to the main parking lots) contains two auditoriums, three lecture classrooms, instructors' offices, and the Skills Development Lab. The auditoriums are used for speech classes, large lecture sessions, performances and community meetings. The Skills Development Lab provides developmental programs, tutoring, independent study materials, and opportunities for students to make up tests.

INSTRUCTION EAST This two-story building houses the nursing and allied health programs, science instruction, computer labs, secretarial and business programs, and studio art classes. It contains three science labs, an open secretarial lab, word processing and transcription rooms, two nursing labs, two art studios, a photographic darkroom, several classrooms and instructors' offices.

VOCATIONAL/TECHNICAL BUILDING This beige building in the northwest corner of campus contains labs and lecture rooms for the technical programs including automotive, electronics, drafting, machine tool and apprentice classes.

MOBILE OFFICE UNIT The yellow temporary building between Instruction West and Instruction East contains instructors' offices and the office of the maintenance supervisor.

ADMINISTRATION OFFICES Administrative offices, located in the lower level of the Library/Administration Building, include offices for the President, Director of Business and Finance, Vice President for Instruction, Instructional Administrators, Director of COPE, Dean of Student Services, Registrar and Financial Aid Officer. Directional signs are posted outside and within the building.

ACTIVITIES BUILDING Is the first campus building to the east and contains a pool, a gymnasium, the bookstore, the food services area, a student lounge area, the music room, a large conference room and the Community Services Office. Music, humanities and physical education classes as well as many non-instructional activities take place in this building.

BOOKSTORE The Campus Bookstore is located in the Activities Building. The store offers textbooks, student supplies, a variety of paperbacks, greeting cards, and

many items such as pennants, mugs, exercise clothing and tote bags bearing the college name. The bookstore is open during registration periods and weekdays throughout each semester.

MUSIC FACILITIES Modern music facilities in the Activities Building include a classroom, practice and storage area and provide space for music classes and performance group practice.

PHYSICAL EDUCATION FACILITIES MCC physical education facilities include an NCAA swimming pool, tennis courts, racquetball courts, a softball field, a touch football field, a gymnasium, an archery range and isokinetic and conditioning equipment. The facilities are available to students for class and for intramural recreational use.

THE BARN THEATRE is located west of the main entrance.

FARM HOUSE The MCC Farm House is located on Sidney Road west of College Drive and has been restored for use as a conference center.

CAREER LIBRARY The Career Library contains basic information useful in career planning. College catalogs, various brochures, job descriptions, and up-to-date employment trends are among the materials and information available in the Student Services Career Library.

NATURE TRAILS The Science Department has developed several trails through the college's nature area on college property and adjoining state land. Biology classes use the nature trails for short field trips and research projects, while individual students and community members with special interests may take self-guided nature walks. Further information may be obtained from the science instructors or from staff members in the library, the Student Services Office, or the Activities Building.

FITNESS TRAIL MCC's Fitness Trail, a course located around the perimeter of campus, offers the opportunity to experience a complete, well-balanced fitness and conditioning program at your own pace and level. The introduction area, located east of the Activities Building, begins the 20-station course. The exercise program, stressing stamina, endurance, agility, flexibility, and cardiovascular conditioning, begins with stretching e a r-

cises which lead into more strenuous exercising and ends with cool-down and relaxation exercises. MCC's Fitness Trail is open to everyone and is free of charge.

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

LIBRARY SERVICES The Learning Resources Center is available to students and the community and is located in the glassed-in upper level of the Library/Administration Building at the center of campus. The library includes books and reference materials, collections of periodicals, audio-visual equipment and materials, study areas, and a conference room.

Library

The college library has one of the largest book collections in the county and offers, free of charge, leisure reading and information for all area people. The staff provides individualized assistance in the use of the library.

Checkout periods for library materials are three weeks for books (reference books cannot be checked out) and one week for magazines. Other items may be checked out overnight with permission from staff members. Proof of identification is needed to check out library materials. Library cards are not issued.

Library hours when classes are in session are 8 a.m. to 10 p.m. Monday through Thursday and 8 a.m. to 4:30 p.m. Friday.

Complete silence is not demanded within the library, but the rights of others should be respected. Conference rooms are available for people who would like a private place to talk or study.

Library patrons may request that books of a specific subject area or title be ordered for the library collection. If the MCC library does not have the materials you desire, we can request them from other libraries.

Typewriters are available in the library area.

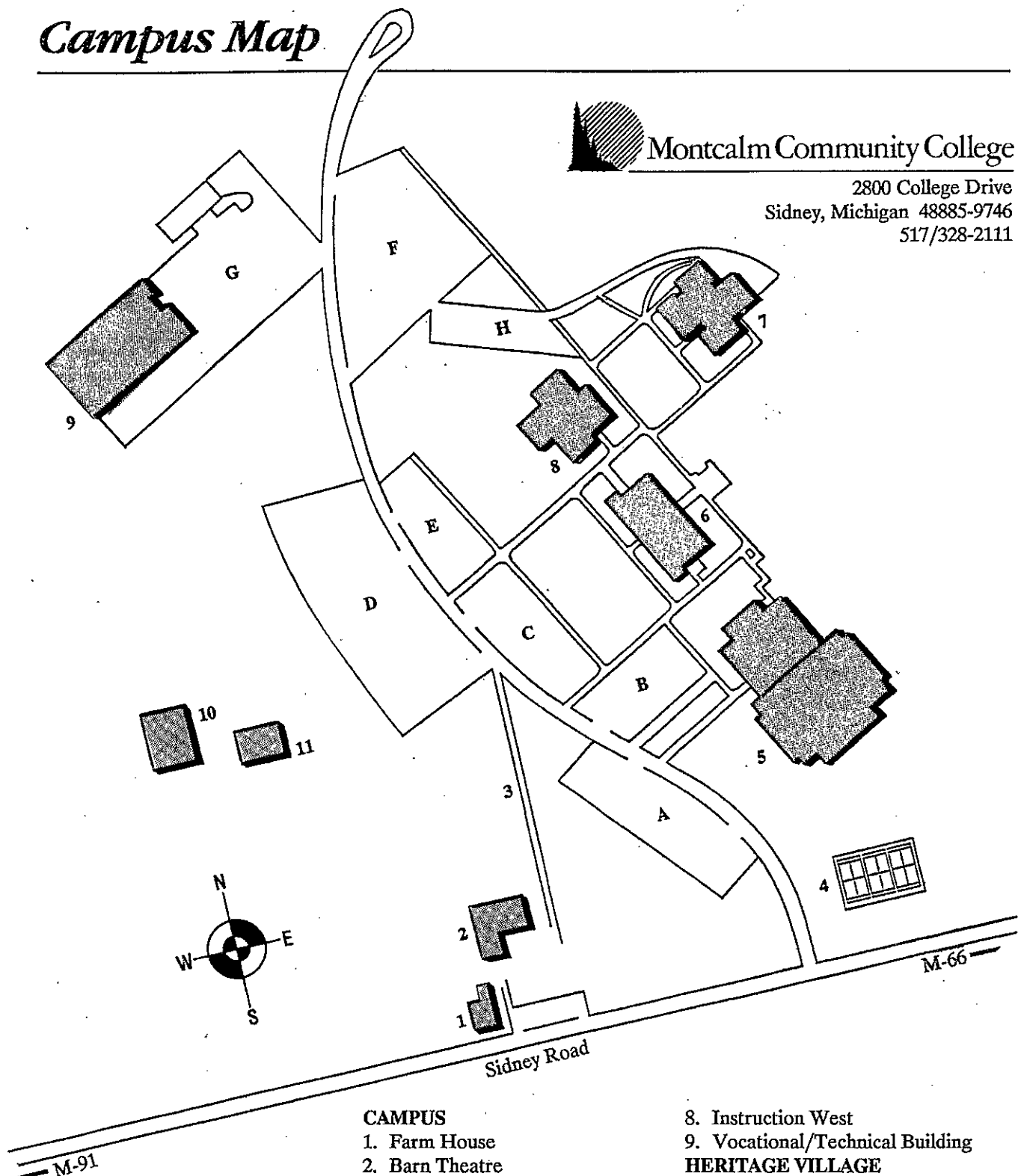
The LRC will provide audio-visual equipment for instructional purposes and to responsible student and community groups meeting on our campus.

Campus Map



Montcalm Community College

2800 College Drive
Sidney, Michigan 48885-9746
517/328-2111



CAMPUS

1. Farm House
2. Barn Theatre
3. Anderson Lane
4. Tennis Courts
5. Activities Building
6. Library/Administration Building
7. Instruction East

8. Instruction West
9. Vocational/Technical Building

HERITAGE VILLAGE

10. Gaffield Schoolhouse
11. Shoen Log House

PARKING LOTS

- A, D, E, F and G - Student/Visitor
B, C and H - Staff Only

Map is not to scale.

Glossary of College Terms

ACADEMIC relates to formal education studies other than technical or vocational studies. (See **LIBERAL ARTS**.)

ACADEMIC FREEDOM in medieval times assured the student the right to learn what he or she wished without outside interference by church or government. The term has come to refer to the right of the teacher to employ teaching methods and content which are effective in pursuing the course objectives.

ACCREDITATION is recognition by an approving organization such as the North Central Association of Colleges and Schools which accredits Montcalm Community College.

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 giving advice to students (e.g., financial aid, class scheduling or career choice).

APPRENTICE is a person who is on a planned program of occupational skills which are provided by an employer and related instruction training which is provided through a community college or high school.

ASSOCIATE DEGREE is a two-year degree from an accredited college.

AUDIT means students generally pay the regular fees for the class, but need not complete assignments or take examinations. Arrangements to audit a course must be made prior to registration. The option to switch to audit status is not open after the end of the drop and add period.

BACHELOR'S DEGREE is a four-year degree from an accredited college or university that is awarded upon successful completion of a prescribed major course of study.

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 campus information, classes, course programs and course descriptions.

COMMUNITY COLLEGE is a postsecondary institution authorized to give associate degrees and certificates as well as offering a variety of both credit and non-credit learning experiences. Programs include the liberal arts, technical studies, adult education and enrichment opportunities.

COUNSELOR is a professional who helps students with career/life planning (See **ADVISOR**.)

COMMUNITY SERVICES provides both non-credit learning opportunities and recreational activities. Information about classes and registration services are available in the Activities Building.

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 at the same time as another class.

CREDIT HOURS are assigned to each class, usually reflecting the number of lecture hours per week. Additional laboratory hours are required in some courses.

CURRICULUM is the collective term for various courses of study offered.

DROP-AND-ADD PERIOD is the time set aside after classes begin when students may add or delete classes from their schedules without penalty.

ELECTIVE is a class not specifically required in a student's course of study.

ENROLL is to sign-up for classes to be included 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, such as student government or athletics.

FEE is the amount of money charged for a class or service.

FINAL EXAM is the last test given in a class which 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-TIME STUDENT is a student taking 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) is the grade awarded by an instructor at the conclusion of a class indicating that a student failed to complete the required work. The grade may be changed to a standard letter grade upon completion of the work, usually within a specified time limit. The student should not register for that class again.

INTRAMURAL is a term generally used in connection with athletic teams which consist of students from a single institution who compete with each other, as opposed to interscholastic, which is competing with teams from other colleges.

LABORATORIES are science, computer, secretarial, automotive, 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 teacher qualifications who supervises a lab and provides assistance similar to that available from an instructor.

LEARNING RESOURCE CENTER (LRC) is what is traditionally called "the library" but also includes other services such as audio-visual aids and access to materials from off-campus sources. It is located on the upper floor of the Library/Administration Building.

LIBERAL ARTS are academic disciplines such as language, history or humanities that develop general intellectual ability and provide information of general cultural concern.

MATRICULATION is the act of enrolling at a college or university (See **ENROLL**.)

NON-TRADITIONAL STUDENT is a college student who is not a recent high school graduate.

OFFICE HOURS are scheduled times instructors are in their offices to meet with students. The hours are posted on faculty office doors.

OPEN LABORATORY is a classroom setting where self-teaching materials are located.

ORIENTATION is a scheduled time that students visit campus to receive counseling and visit facilities and personnel.

PART-TIME STUDENT is a student carrying 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 one or more classes.

SCHOLARSHIP is money awarded to a student to help defray the cost of higher education, often based on grades or financial need.

SEMESTER is a time period in which classes begin and end. At MCC, semesters begin in August and January and are 16 weeks long.

SEMESTER HOUR is the measurement of time spent in class, approximately one hour per week.

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.

SKILLS DEVELOPMENT LAB is a room in the Instruction West Building where students may develop basic reading and math skills.

STUDENT RIGHTS is the freedom of students which includes procedures for appealing grades and input on college or university policy-making.

STUDENT SERVICES is located in the lower level of the Library/Administration Building and offers the following services to complement the learning process: admissions, financial aid, records, registration, veterans information, counseling, placement and career library.

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 all grades from a particular college or university which shows a cumulative record of course work updated at the end of each semester.

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 having a problem with that subject. Students either needing a tutor or wishing to be a tutor should contact the Special Needs Program Supervisor.

WITHDRAWAL is the act of voluntarily dropping out of a specific class within a prescribed time. Students must initiate the request to withdraw and the instructor will assign a WP, withdrawal passing, or a WF, withdrawal failing, to the transcript.

Directory of Personnel

BOARD OF TRUSTEES

Brundage, Martha Jean	Secretary
Carbonelli, Karen	Treasurer
Doser, Beatrice	Chairperson
King, Hugh	Trustee
Marston, Robert	Trustee
Painter, Robert, M.D.	Vice Chairperson
Trebian, Orville	Trustee

ADMINISTRATIVE STAFF

Burns, Donald, Ph.D.	President
Carlson, John, M.L.S.	Learning Resource Center Director
Carter, Barbara, R.N., M.S.	Director of Nursing and Allied Health
Cook, Holly, B.S.	Director of Community Services
Forist, Margery, B.S.	Controller
Haling, Connie	Financial Aid Officer
Herman, Danny, M.S.	Dean of Correctional Education
Holton, Lon, M.A.	Dean of Student Services
Lantz, James, B.B.A.	Director of Business and Finance
Mathisen, Sally, B.S.	Registrar
Mulder, Dennis, M.A.	Dean of Liberal Arts and Business
Reeder, Frank	Maintenance Superintendent
Snow, Kenneth, Ph.D.	Vice President for Instruction

PROFESSIONAL STAFF

Baker-George, Jill, M.A.	Admissions Representative
Edwards, Denise, B.S.	Placement Representative
Middleton, Rod, A.A.A.S.	Programmer-Analyst
Smith, Therese, B.A.	Assistant to the President

FACULTY

Bezemek, William, M.S.	Business Data Processing
Binder, Donald, M.S.	Food Service Technology
Campbell, Robert, B.S.	Business Studies
Christensen, Earl, B.S.E.E.	Business Data Processing
Dargitz, John, M.A.	Drafting Technology
DeLong, Kenric, M.A.	Social Science
Ehlert, Sidney, M.S.	Electronics Technology
Fatka, Jim, M.A.	Language Arts
Fox, Nancy, M.A.	Humanities (Art)
Fox, Richard, M.A.	Automotive Mechanics
Larsen, Brenda, B.S.N.	Nursing Education
LeGree, Lawrence, M.S.	Automotive Mechanics
Lincoln, Karen, R.N.C., B.A.	Nursing Education
Lucka, James, M.A.	Counselor
Minnick, Robert, M.A.	Counselor
Morford, Leslie, M.A.	Social Science
Moutsatson, Peter, M.A.	Business Studies
Nelson, Dennis, M.A.	Social Science
Pastoor, John, B.A.	Language Arts
Peacock, James, B.A.	Criminal Justice
Roy, Janice, M.A.	Mathematics
Sendre, Beth, B.S.N.	Nursing Education
Smith, Kenneth, M.A.	Natural Science
Snook, Daniel, M.A.	Skills Development
Stearns, Donald, M.A.	Natural Science
Walden, Joanne, M.A.	Office Education
Witter, Marilyn, R.N., M.A.	Nursing Education



Montcalm Community College

2800 College Drive, S.W.

Sidney, Michigan 48885-9746

517-328-2111

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