It is the policy of Montcalm Community College 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.
This is Montcalm Community College which, prior to 1965, was the Anderson farm. The campus is nestled in a pristine rural setting where students have easy access to the outdoors with one of the finest outdoor laboratories in the state. Complex, infrastructure, trails, small lakes and arboretums are hard at work.

In addition, MCC serves as a focus for community affairs. It has a reinstated Community Service Department, a new Activities Building, complete with heated pool, food service and bookstore, plus a Bank, Theatre, restored from the original Anderson farm. There are three instructional buildings and a library/administration building which houses most of the administrative offices and a comprehensive library which is open to the public.

MCC takes classes to several off-campus sites, including the "college within the walls" in three penal institutions.

Most important of all—MCC affords each student the chance to gain a new identity. Small classes, close rapport with an experienced faculty, and opportunity to participate in outside activities which might be denied in other places assure the student is "a person." He or she should never be lost in the crowd.

Dear Friends:

Welcome to MCC, a community center of learning designed to serve men and women seeking preparation for career opportunities or changes in occupations and people wanting to improve their quality of life through additional knowledge.

Community and people's needs are important to Montcalm Community College and we strive to serve these needs through an exciting and responsive faculty, a sensitive staff, meaningful programs, and attractive facilities. We have found that age is not a limit to learning for the perennially young and interested individual.

We invite you to join us in the exciting world of people who are looking at and thinking about the future.

Sincerely,

Herbert G. Stoutenberg
President
table of contents

GENERAL INFORMATION
Historical Review ........................................ 1
Accreditation History .................................... 2
Mission and Goals ........................................ 3
Instructional Facilities ................................... 4
Admission to College ...................................... 5
Expenses .................................................. 6
Academic Regulations ..................................... 8

SERVICES FOR STUDENTS AND COMMUNITY
Student Services ......................................... 11
Student Life ............................................... 13
Community Services ....................................... 13
Financial Assistance ...................................... 14
Learning Resource Center ................................ 19
COPE Program ............................................. 19
Bookstore ................................................. 36
Veterans' Information .................................... 19

INSTRUCTIONAL INFORMATION
Associate Degrees Offered .............................. 21
  Associate in Arts and Sciences ....................... 21
  Associate in Applied Arts and Sciences .............. 21
Associate in General Studies .......................... 22
Course Code Index ....................................... 23
Course Descriptions ..................................... 24
Allied Health ............................................. 24
Apprentice Training ..................................... 26
Automotive Mechanics Technology .................... 28
Aviation Mechanics Technology ....................... 30
Business Administration ................................ 33
Consumer Education ..................................... 35
Cosmetology .............................................. 36
Data Processing ......................................... 37
Foster Parent ............................................. 38
Foreign Languages ....................................... 40
Humanities ................................................ 40
Language Arts ............................................ 42
Law Enforcement ......................................... 44
Mathematics .............................................. 45
Natural Sciences ........................................ 46
Office Education ........................................ 47
Physical Education ....................................... 50
Practical Nursing ........................................ 52
Residential Construction Technology ................. 54
Social Sciences .......................................... 56
Student Development ................................... 58
Trade Technical Education ............................ 60
Welding Technology ..................................... 63
Directed Study .......................................... 64

DIRECTORY OF PERSONNEL
Board of Trustees ....................................... 65
Administrative Staff ..................................... 65
Faculty .................................................. 65

CALENDAR 1980-83 ....................................... 66

GENERAL INFORMATION

historical review

As the result of the efforts of a group of concerned citizens, the Montcalm Community College idea passed through the study stages and became a reality by means of an election held March 2, 1965. The newly-elected Board of Trustees, provided with a one mill tax levy and a will to confront the task, selected a president and a business manager who began their official work in August of 1965. The processes of selection of a site and an architect were completed in early fall of 1965. Construction bids for the first building were opened in September of 1966 and the first buildings were dedicated September 26, 1967.

In order to emphasize the strong community commitment to vocational education, the third professional to join the MCC staff on February 1, 1966, was a Dean of Vocational/Technical Studies. The first full-time programs of MCC were vocational programs which started on August 29, 1966. By late fall of 1967, all of these programs were housed on campus.

The Liberal Arts, or academic aspect of the college, was started by offering several courses in the fall of 1966 at the Central Montcalm High School. In the fall of 1967, the college transfer and general education programs were also housed on the campus. During the ensuing years the quality of these programs has been proven by the success of the students who have transferred to baccalaureate institutions.

In August, 1966, a Director of Learning Resources began assembling materials for a comprehensive study center for MCC.

On July 1, 1967, with the arrival of the first Dean of Students, the formal counseling, admissions, and registration program began. Student activities such as student newspaper, choir, student government and interscholastic athletics began during the fall semester of the 1967-68 academic year.

Because of the recognized role of community involvement in a community college and the pressing priorities demanded of other administrators, on February 1, 1969, the position Director of Community Services was filled. This division assumed responsibility for coordinating needs of various groups from the community and the resources of the college. The results have been adult education courses, non-credit courses, short courses, conferences, and cultural activities. The development of off-campus teaching centers has been another direct result of efforts by Community Services.

The college staff, Board of Trustees, and citizens of Montcalm Community College District will strive to maintain the college as an institution dedicated to the service and well-being of the community it serves.

Both the institution and personal objectives stated above have become a mandate to those in whom the responsibility for the development of this college has been vested. These will consistently form the master guidelines against which decisions regarding the program of studies, building design, and provisions for student life are measured.
accreditation history

Montcalm Community College holds full accreditation with North Central Association.

Almost from the moment the first president began his work with MCC, the institution aggressively followed the prescribed steps which led to accreditation under the North Central Association of Colleges and Secondary Schools. By late 1965, the Association had appointed Dr. Daryl Pendagraft of the State University of Northern Iowa as the Consultant/Examiner for this college.

To expedite the transfer of MCC students to four-year institutions during the normal period of five or more years before accreditation, Michigan public and private colleges and universities assured—in writing—the acceptance of academic credits at full value for which a grade of "C" or better has been earned at MCC.

While technical and vocational courses were designed primarily to promote occupational competency for students enrolled in the programs, certain state universities agreed to appraise these MCC credits for possible transfer where they are appropriate to a student’s program.

MCC was awarded status as a Candidate for Accreditation by the North Central Association in April of 1969, in the minimum time possible. An extensive self-study was then prepared and submitted to NCA for evaluation. In December of 1973, a four-person evaluating team visited the MCC campus and in March, 1974, representatives from MCC appeared before a committee of the NCA Commission on Institutions of Higher Education. Shortly, thereafter, MCC was awarded full accreditation by NCA.

1990 ACCREDITATIONS and AFFILIATIONS
Michigan Department of Public Instruction Approved
Michigan Commission on College Accreditation
North Central Association of Colleges and Secondary Schools
Educational Directory, Part 3, Higher Education
U.S. Department of Health, Education and Welfare
American Association of Junior and Community Colleges
American Council on Education
College Entrance Examination Board
Michigan Association of Collegiate Registrars and Admissions Officers
Michigan Board of Nursing
Michigan Community College Association
Michigan Occupational Deans Administrative Council
Michigan Occupational Education Association
American Vocational Association

mission and goals

MISSION
The main purpose of Montcalm Community College is to meet the educational needs of the area citizens.

EDUCATIONAL GOALS
MCC subscribes fully to the following institutional goals:
— 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.
— 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.
— to provide opportunity for general education for those who study primarily to become more knowledgeable or skilled in an area of interest.
— to provide assistance for all students through educational counseling and guidance services.
— to provide a center and resources for community services (educational, recreational, and cultural).
— to provide an opportunity for organized activities to promote social skills and responsible citizenship.
— to provide educational leadership through the promotion of cooperation between area organizations and institutions.

The goals of MCC set forth above have been formulated as guidelines for developing a community of learning to enrich the lives of the participants through social involvement and practical and theoretical studies.

These stated goals are a mandate to the staff and trustees to continue reviewing and updating of the college’s academic programs, developing an appropriate institutional plan and insuring that the opportunity for education is available to the people served by the college.
Instructional facilities

The 1967-68 academic year became the era of transition from teaching in rented or borrowed facilities to full scale on-campus operations in buildings designed especially for Montclair Community College. During the year, students and instructors began using what are now named Instruction East, Vocational/Technical Building, and the Library/Administration Building. The Heating Plant/Service Building was also functioning.

The upper level of the Library/Administration Building is the central study area and Library. The lower level houses administration offices.

In addition to regular classrooms, Instruction East features three demonstration/lecture rooms for the sciences, each adjacent to a well equipped laboratory; a business secretarial wing with laboratories for business machines and shorthand transition; the practical nursing laboratory and classrooms, and the art room.

Instruction West was first used in August, 1969. In addition to a number of regular classrooms, it includes two lecture demonstration auditoriums with seating for 100 and 135 persons, a small group seminar room, and a developmental skills laboratory.

Early planning for Instructional facilities at MCC provided for a building which would accommodate both technical degree and vocational programs of study. However, facilities for a number of the classroom-oriented occupational studies—practical nursing, business education, drafting—were integrated into Instruction East. During the 1966-67 year it became obvious that there was a rapidly growing need for instructional space for the industrial/mechanical skills. Consequently, planning began in January, 1967, for the Vocational/Technical Building which was ready for use by automotive Mechanics, welding, industrial technology and apprenticeship beginning in January, 1968. The 1971 addition doubled the floor space permitting space for aircraft mechanics and a residential construction laboratory.

The Barn Theatre has been developed for drama activities of campus and community groups. Several miles of nature trails have been developed for nature study.

The most recent addition to the MCC campus is the Activities Building, completed late summer, 1976. This building was designed to provide space for large assemblies such as commencement exercises and indoor athletics. It provides space for physical education classes, music instruction, swimming, and other recreation, dining areas, plus student lounge. Also included in this building project were outdoor tennis courts and a softball diamond.

Admission to College

Applicants shall possess a high school diploma or, if over the age of 18 years, shall submit to an educational equivalency examination as prescribed by the Director of Student Services.

Exceptions to the above, in keeping with the "Open Door Policy" of Montclair Community College, may be made at the discretion of the Director of Student Services.

HOW TO APPLY FOR ADMISSION

1. You may obtain the application form from your high school counselor or the MCC Admissions Office.
2. Fill out and send the application with the non-refundable fee to the college's Admissions Office.
3. Have your high school send a copy of your transcript or high school equivalency examination (GED) to us.
4. Refer any questions you have to your high school counselor or the Admissions Office at MCC.

GUEST APPLICATION

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

FORMER STUDENTS

MCC extends to all students a continuous matriculation; therefore, former students need only to contact the Admissions Office to update the personal information file and reestablish their registration status. The only exception to this regulation applies to students who have been formally dismissed. They must re-apply through the Director of Student Services Office. Former students need not complete an admission form.

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, or denied the benefits of, or be subjected to discrimination in any of its programs, or activities.

Mrs. Lois Springsteen is the college EEO Officer/Title IX coordinator. Her office is located in the Library/Administration Building—telephone 517 328-2111, extension 220.
EXPENSES

The Trustees of Montcalm Community College sincerely desire to keep the cost of attending this institution as low as possible for the student. However, tuition charges are a direct reflection of the present economy, and the costs of operating a college are like the economy—changing rather rapidly.

If a tuition change becomes necessary for the following academic year, all present students and new applicants will be notified.

RESIDENCY POLICY

Determination of residency status is governed by the following:

1. Residence within the confines of the Montcalm Community College District for a period of six consecutive months prior to the last day of registration for any term will be considered evidence of district residence.
2. Residence within the confines of the State of Michigan for a period of six consecutive months prior to the last day of registration for any term will be considered evidence of State residence.
3. The residence of any unmarried student under 18 years of age shall be determined by the residency of his/her parent(s) or legal guardian(s) if the student resides with the legal guardian.
4. Students previously registered as a non-resident may change to district resident status upon satisfying the conditions of this policy.
5. A person in the military service of the United States and the spouse or minor children shall be considered Michigan or district residents as appropriate.
6. The residence of a resident alien shall be determined in the same manner as a United States resident.
7. Initial residency and change of status will be determined by the person charged with the responsibility for registration.

It is the student's responsibility to notify the Business Office prior to completion of registration for any semester of any change in residence that would affect the residence classification. The burden of proof rests with the student. Formal leases, purchase agreements, verifiable rent receipts, drivers license or other verifiable documents may be presented to the College as evidence that one has officially adopted a domicile within the boundaries of the Montcalm Community College District or State and has continuously maintained such residence for a period of not less than six months prior to registration for any semester.

Students who wish to appeal the status decision may request a review by writing to the MCC Business Office.

TUITION

Resident of Montcalm Community College District $17 per credit hour
Michigan Non-Resident Students $26 per credit hour
Out-of-State Students $35 per credit hour

OVER SIXTY?

Tuition is free! The free tuition policy does not include a waiver of other required fees. So come out of retirement and back to college today. It's the best educational bargain around.

FEES

Application for Admission (paid only once) $5
Activities (maximum $12 per semester) $1 per credit hour
Late Registration $5
Tuition charges for college credit apprenticeship programs shall be made in accordance with the residency requirements for all other students.
Non-credit course fees shall be established and assessed for each course.

HOW MUCH DOES IT COST?

A college education at Montcalm Community College may be one of the best educational investments you can make. Tuition is low and you can save expenses by living at home. The figures below are for the 1980-81 school year, beginning with Fall 1980.

An average semester for a full-time student consists of four or five courses totaling fifteen semester hours. The year's total, then, would be based on thirty semester hours. All costs are subject to change by the Board of Trustees.

Montcalm County residents $670
Tuition and Fees (17 credit hours) $256
Books and Supplies (estimate) 100
Transportation (estimate) 250
Total $650

Michigan Non-Residents
Tuition and Fees (17 credit hours) $375
Books and Supplies (estimate) 100
Transportation (estimate) 250
Total $600

These figures do not include personal expenses or maintenance at home costs.

OUT OF STATE RESIDENTS $35 per credit hour

PAYMENT OF TUITION AND FEES [FEES ARE NOT REFUNDABLE]

1. Tuition and fees are due and payable in full on the day of registration.
2. Students unable to pay the tuition and fees should consult the Business Office concerning a loan no less than three weeks prior to the enrollment date.
3. No other credit arrangements can be made through the college.

TUITION REFUNDS FOR ON-CAMPUS CLASSES

1. Refunds for students over 18 years of age will be made payable to the student and mailed to the address given by him/her, except in paragraph two (2) below.
2. Students under special scholarship and/or loan programs administered by MCC will receive no refund; the refund will be returned to the donor. Those scholarships given directly to the student and not administered by the college will be refunded as in paragraph one (1) above.

Tuition is 100% refundable during the enrollment period. The end of the enrollment period will be designated by the Registrar on the schedule for each academic session and shall coincide with the end of the drop and add period.

TUITION REFUNDS FOR OFF-CAMPUS CLASSES

No refunds after first night of classes.
academic regulations

Certain academic policies, regulations and practices prevail at Montcalm Community College. These provide the basic framework within which a student's achievement and academic status are expressed. Their appearance here is to be interpreted as official policy of the College enabling the community of learning to function.

SEMESTER SYSTEM
MCC 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 early January and ends about mid-May. Six and eight-week summer school sessions are usually offered by the college.

CLASSIFICATION OF STUDENTS
FRESHMAN - A student who has completed less than twenty-five semester hours of study.
SOPHOMORE - A student who has successfully completed at least twenty-five 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 twelve 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/her common desire to graduate after four semesters of study.
PART-TIME - A student carrying less than twelve semester hours.

GRADUATION REQUIREMENTS
Students working toward a certificate or diploma in a vocational/technical field must complete all established requirements for the award, including at least a 2.00 grade point average on a 4.00 point scale.

Those pursuing an Associate Degree must complete not only the required semester credits, but also the proper sequence of courses as herein presented, with an overall 2.00 grade point average.

Transfer students who have earned credits at other institutions of higher education may request that these credits be applied toward an Associate Degree at MCC. However, 24 credits of the total presented for graduation must be earned at MCC, and the student must be enrolled at this institution during the final semester before receiving his/her degree.

SELECTION OF PROGRAM OF STUDY
Selection of a student's program of study takes place prior to registration and/or the start of classes. During the counseling interview the student will be advised of specific course requirements necessary for completion of his/her program.

Exceptions to specific program requirements will be made only by the Director of the appropriate division of the college or the Director of Student Services and/or his/her designated representative. Exceptions must be authorized in writing.

CLASS ATTENDANCE
The faculty and administration of MCC encourages students to attend all classes in which they are registered. Absence from classes shall, in no way, relieve the student from completion of assigned work.

The matter of regular class attendance shall be resolved between each instructor and his/her students. When absences are anticipated, advance arrangements should be made for completion of work.

GRADING SYSTEM
Academic achievement will be appraised and recorded by means of the following system of letter grades:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Honor Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>4.0</td>
</tr>
<tr>
<td>A-</td>
<td>3.7</td>
</tr>
<tr>
<td>B+</td>
<td>3.3</td>
</tr>
<tr>
<td>B</td>
<td>3.0</td>
</tr>
<tr>
<td>B-</td>
<td>2.7</td>
</tr>
<tr>
<td>C+</td>
<td>2.3</td>
</tr>
<tr>
<td>C</td>
<td>2.0</td>
</tr>
<tr>
<td>C-</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>D-</td>
<td>0.7</td>
</tr>
<tr>
<td>E</td>
<td>Failure</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawed while passing</td>
</tr>
<tr>
<td>F</td>
<td>Withdrawed while failing</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
</tr>
<tr>
<td>V</td>
<td>Audit</td>
</tr>
<tr>
<td>S</td>
<td>Satisfactory completion</td>
</tr>
</tbody>
</table>

*Audit applies to the situation where a person pays tuition for a course but is not required to complete assignments or examinations.

INCOMPLETE GRADES
The I grade will be employed sparingly. It will be awarded in the case where a student has found it impossible to complete required course work by the close of a semester for reasons beyond his/her control. It is an indication by the instructor of his belief that the student will receive a passing grade when the requirements have been fulfilled. The following procedure is observed:

1. An "I" mark shall be entered on the record when a course of study is incomplete at the termination of the scheduled semester.
2. An "I" mark shall remain without alteration indefinitely or until such time as the requirements of the course are satisfied and warranting in writing by the instructor to the Registrar.
3. An "I" mark shall not be averaged with other grades to establish a grade point average (GPA).
4. Any student who receives veteran's benefits and receives an "I" in a course has one year to complete the "I".
HONORS
Each semester an Honors List will include those students enrolled for at least 12 semester hours who have attained a Grade Point Average from 3.3 through 3.69.

The President's Honor List will include those students who fulfill the above requirement and whose GPA for that semester is 3.70 or higher.

ACADEMIC PROBATION AND DISMISSAL
All students attending Montclair Community College will be subject to the following grade point regulations:
1. Students who attain less than a 1.7 Grade Point Average (D- average) for their first 15 hours at MCC will be dismissed. Dismissed students may refer to item 5 below.
2. Students who attain less than a 1.7 Grade Point Average (C average) at the end of their first enrollment period will be placed on academic probation.
3. Returning students who maintain less than a 2.00 cumulative Grade Point Average (C average) will be placed on academic probation.
4. Students on probation who achieve less than a 2.00 Grade Point Average will remain on probation. Dismissed students may refer to the item below.
5. Students who have been dismissed may appeal to the Dean of Student and Community Services for special consideration.
6. Students dismissed for academic reasons either from MCC or any other college, may be required to wait for a full semester before re-entering the college.
7. Students transferring into MCC shall be subject to all regulations stated above from the beginning of their enrollment.

SERVICES FOR STUDENTS AND COMMUNITY

student services

The college student services are designed to aid students and community members as they plan for learning, change and development in their lives.

The Student Services Office at Montclair Community College, located on the lower level of the Library/Administration Building, offers a variety of services to complement the learning process. For your convenience, the Student Services Office is open the following hours: Monday through Thursday, 8 a.m. - 8 p.m. and Fridays from 8 a.m. - 5 p.m.

Following is a list of the services:

ADMISSIONS/ORIENTATION
Information about admissions, orientation, and campus tours should be directed to the Director of Admissions or the Admissions Office, ext. 234 or 260.

PROGRAM ADVISEMENT
The counseling staff will assist in program planning including transfer information. All students are encouraged to make use of this service prior to registration.

REGISTRATION
Processing is in the Student Services Office. If you have questions you may contact the Student Services Office, ext. 247 or 226.

COUNSELING
Concerns of a personal nature may be discussed in private sessions, most conveniently arranged by appointment. Counseling staff members can be contacted directly or an arranged time can be scheduled by the Student Services Office secretary, ext. 224.

GENERAL INFORMATION
Publishing of the daily "Happenings," counseling appointments, health insurance, emergency procedures, class schedules, lost and found and other topics of general college information are handled in the Student Services Office.

TESTING
Such testing as the ACT (American College Test), GED (High School Equivalency), career oriented interest surveys and personality inventories can be scheduled by contacting the Student Services Office. Basic skills, testing in Reading, Mathematics and Writing is available prior to registration or by appointment with the Developmental Skills Coordinator.

RECORDS
Accurate records of enrollment, grade reports, and transcripts are maintained. Questions concerning these records should be directed to the Assistant Registrar or Registrar's Office.
student life

The academic and social atmosphere in which a student lives, works and plays is a vital part of the college experience. Students, as citizens in the college community, find that a large measure of the management of student affairs is in their own hands. The Student Senate is elected by representatives to the Student Senate and students actively participate in the planning and operation of student activities and share in the foundation of other Montclair Community College policies.

ORGANIZATIONS
The following extracurricular activities are normally available to interested students. It is common for new groups and organizations to be formed each year, and for some to become inactive, depending upon current student interest.

- Archery
- Choir
- Intramurals
- Student Senate
- Art Club
- Choir Intramurals
- Photography Club
- Cheerleading
- Ski Club
- Adult Club
- Stage Band
- Aero Club

STUDENT CODE
Within the limitations which govern an ordered community, the college accords student freedom of inquiry, expression and action. Freedom is not to be interpreted as license, for a corollary of freedom is responsibility. Citizenship in the MCC plan involves respect for the dignity and rights of each individual, respect for public and personal property, and personal academic honesty. Since regulations are necessary in any community, guidelines have been established in the form of a Student Code which accords students the greatest possible freedom consistent with the welfare of fellow students and of the institution. Violation of the Code may result in dismissal from the college.

community services

Community Services is that function of the college which assumes responsibility for identifying those needs not already being met by the more traditional instructional services of the college. Community Services may mean short-term courses and seminars; lectures and performances; off-campus classes and special events offered in an attempt to enrich the intellectual, recreational, and cultural life of the community. Such a program strives to develop life-long learning experiences based on the belief that "the one who is educated today and quits learning tomorrow is uneducated the day after."

It is the intent of the Community Services Department at Montclair Community College to seek a personalized relationship with individuals and groups in the college's service region. An open invitation is made to all who wish to express suggestions for educational, recreational, and cultural programming.

The Community Services office is located in the lower level of the Library/Administration Building. If you have any questions or would like assistance in this area please call, ext. 250.
financial assistance

Montcalm Community College operates a responsive and flexible financial aids program. Through a program of 1) scholarships, 2) grants, 3) campus employment, and 4) loans; MCC strives to make a college education possible for all qualified students. Any student who is seriously interested in MCC should not hesitate to apply for admissions because of a lack of financial resources.

In the selection of students who are to receive financial assistance, primary emphasis is placed on financial need and potential to succeed in a program of study.

The Financial Aid office is an integral part of the student and community services at MCC. Individual counseling is available for students and their parents relative to expenses, budgeting, and other circumstances related to college costs. The office is located in Student Services.

HOW TO APPLY FOR STUDENT FINANCIAL ASSISTANCE

The procedure for requesting financial aid through the college involves a few simple steps. It is important to note that you may use one application to earn consideration for all the aid programs handled by the college. Students should follow these steps:

1. Submit an “Application for Admission” to the Office of Admissions. (Does not apply to students who are currently enrolled in a program of study.)
2. Submit a Financial Aid form to the College Scholarship Service after January 1, prior to the fall semester enrollment, designating MCC as a recipient of the analysis. This form, available from your high school or MCC, may be used for Michigan Competitive Scholarships, basic grants, and other campus-based institutional and federal financial aid programs.

PREFERRED DEADLINE FOR APPLICATIONS

There are no “official deadlines” in applying for financial aid. However, to insure adequate time for handling of application materials and notifications of awards, the necessary forms should be submitted approximately two months prior to the semester for which the student intends to enroll.

MONTCALM COMMUNITY COLLEGE ADMINISTERED SCHOLARSHIPS

Students interested in the specific awards available should consult their high school counselor or the admissions office at Montcalm Community College.

1. Board of Trustees Scholarships
   A. Board of Trustees Scholarships of tuition and fees shall be offered to each of the seven constituent high schools at the rate of a minimum of two per area high school and one per each 50 graduates or fraction thereof over 100.
   B. Fifteen out-of-district Board of Trustees Scholarships of tuition and fees shall be offered to the high schools outside Montcalm County at a rate of no more than three per school.

2. Area High Scholarships
   A. Seven Vocational Scholarships of tuition and fees shall be granted to a student from each area high school who enrolls in a Vocational/Technical program at MCC. If impossible to find someone within a school for this division, the scholarship may be granted to someone in another school but must be in the same division.
   B. Seven Academic Scholarships of tuition and fees shall be granted to a student from each area high school who enrolls in an academic program at MCC. If impossible to find someone within a school for this division, the scholarship may be granted to someone in another school but must be in the same division.

3. Basic Education Scholarships
   A. One tuition and fees scholarship may be granted to each area high school for a student with a less than satisfactory academic record, a desire to attempt college level work and needing assistance in developing scholastic skills, and judged to have the moral character desired to good citizens. If impossible to find someone within a school for this division, the scholarship may be granted to someone in another school but must be in the same division.

4. Athletic Scholarships
   A. Up to 20 Athletic tuition scholarships shall be awarded. No more than ten of which shall be for students of either sex, and all of which shall be subject to requirements currently in effect.

5. Music Scholarships
   A. Up to 15 Performing Arts/Music tuition scholarships may be awarded and all shall be subject to requirements currently in effect.

6. Area Adult Scholarships
   A. Up to 10 Area tuition and fee scholarships may be awarded to independent students and all shall be subject to requirements currently in effect.

7. Adult High School Completion Scholarships
   A. Tuition and fee scholarships for up to seven credit hours will be awarded each year to students in adult high school completion programs.

8. Over 60 Scholarships
   A. Tuition scholarships shall be available to persons age 60 or older and shall be subject to requirements currently in effect.
LOCAL SCHOLARSHIPS
A number of local scholarships are offered each college year. Some of these scholarships do not require a Financial Aid Form to be on file. Contact the individual group or the financial aid office of Montcalm Community College for more information. Groups showing particular interest in helping area students attend MCC include:

Alyce Ann Beckmeyer Scholarship
Ferris Township Scholarship
General Telephone Co.
Greenville Federation of Women
Greenville Chamber of Commerce
Greenville Lions Club
Greenville Junior Chamber of Commerce
Ore-Ida Foods, Inc.
Sidney Sportman’s Club
Southside Child Study Club
Stan Auburn Scholarship
Stan and Marion Kemp Scholarship
Stanton American Legion
United Memorial Hospital Guild
VPW Lester J. Sitts Post 5065
Auxiliary Academic Scholarship

Many new local scholarships are made available each year.

STATE OF MICHIGAN STUDENT FINANCIAL AIDS PROGRAMS
Michigan Competitive Scholarships
Michigan residents who qualify on the national ACT exam prior to entering college and demonstrate financial need are eligible for this award. If you attend a Michigan community college or university on a full-time basis, your award could be equal to the cost of tuition and fees not to exceed a $1,200 maximum. Contact your high school guidance office to obtain the ACT test registration blank. For general information about the program write directly to the Michigan Department of Education, Financial Aids Service Area, Box 30008, Lansing, Michigan 48909 or call 517-373-3394.

Michigan Guaranteed Student Loan
Michigan residents who enroll on at least a half-time basis at an eligible institution may borrow funds up to $2,500 per academic year under this program. Repayments begin nine months after the student terminates his studies. A list of participating lending institutions may be obtained from MCC’s Office of Financial Aids. Application forms must be obtained from a local participating bank, credit union or savings and loan association. For general information write directly to Michigan Department of Education, Financial Aids Service Area, Box 30047, Lansing, Michigan 48909 or call 517-373-3394.

State Direct Student Loan Program
The Michigan Higher Education Student Loan Authority was created by ACT 222 of the Public Acts of 1976 to provide a source of loans to eligible students who are unable to secure loans from private lenders. Students accepted for enrollment or enrolled in good standing at a participating institution (college, university, community college or vocational school) may obtain a direct loan application kit from the Financial Aid Office to help pay educational expenses.

Eligible students must (1) be unable to obtain funds from commercial lenders; (2) be a Michigan resident; (3) be attending a participating institution on at least a part-time basis; (4) and the loans must be eligible for guarantee by the State Guarantee Agency. The annual percentage rate on these loans is seven percent simple interest.

The maximum loan for any academic level cannot exceed $2,500 for undergraduates or $5,000 for graduate/professionals or the total cost of education less other financial aid received, and should not be more than 50 percent of the total education costs for the year involved. The Student Loan Authority will determine the amount of each loan after consideration of the school’s recommendations.

FEDERAL LOANS
National Direct Student Loan Program
This loan program is for students who are enrolled at least half time and who have need for financial assistance to meet their education expenses.

A student, provided funds are available, may borrow a total of: (a) $2,500 if he/she is enrolled in a vocational program or has completed less than two years of a program leading to a bachelor’s degree; (b) $5,000 if he/she is an undergraduate student who has completed two years of study toward a bachelor’s degree. Accumulated loans at MCC may not exceed $2,500.

A borrower may have up to ten years and nine months, after he/she ceases to be at least a half-time student, to repay his/her loans. Repayments and interest of three percent per year begins nine months after a student receives a degree or permanently leaves an institution.

No repayments are required for up to three years while a student serves in the Armed Forces, Peace Corps, or VISTA.

Loan cancellation provisions are available for borrowers who go into certain fields of teaching or specified military duty.
To be considered for a loan under this program a student must:
1. Be a citizen or permanent resident of the United States.
2. Enroll as at least a half-time student (six credit hours or more). First priority is given to full-time students.
3. Show that they are making satisfactory academic progress toward a degree.
4. Demonstrate financial need as evidenced by a financial statement.

FEDERALLY FUNDED EMPLOYMENT
College Work-Study Program
Students, whose demonstrated financial need seems to be the greatest and who desire a job to help pay for their college expenses, are eligible for employment at Montcalm Community College under this program.

Students may work up to 20 hours weekly while attending classes full-time and, if funding is available, during vacation period or the summer. The work is normally arranged around the student’s class schedule.

The student should bear in mind that his employment should not detract from his studies. Assignments are made on the basis of financial need, academic record, and class schedule.

Interested students should contact the Office of Financial Aids.

FEDERALLY FUNDED GRANTS
Basic Educational Opportunity Grants
Available to any undergraduate student who enrolls on at least a half-time basis in a program of study which is six months in length or longer. The amount of the award is
based on a Federal formula which measures the ability of you and/or your family to meet your educational expenses. Awards are made to qualified students enrolled in eligible programs at approved public and private colleges, universities, community colleges, vocational schools and hospital schools of nursing. For further information and application forms contact your high school guidance counselor or our Office of Financial Aids.

Supplemental Education Opportunity Grants
This Federal program of assistance is intended for students "who for lack of financial means of their own or of their families, would be unable to obtain such benefits without such a grant." These grants must be matched with assistance of an equal amount in a package which may include other grants, loans or college-sponsored employment.

learning resources center
The Learning Resources Center is the central study and research area of the college. The collection of books and other materials was started in 1965. At the present time, the materials collection includes 20,000 volumes of books, periodicals, national and local newspapers, back issues of needed journals on microfilm, and several hundred disc and tape recordings.

Physical facilities provide for individual study carrels, group seating, conference rooms for both group and individual study, and a microfilm viewing room.

It should be noted that the use of the materials and facilities is not limited to only students and staff of the college, but that area residents are also encouraged to make use of what the Learning Resources Center has to offer.

cope program
Many Moncalm Community College students do not attend classes on the Sidney campus. These are "full-fledged" college students, but they temporarily reside within the walls of three state prisons in Ionia. Currently, COPE (College Opportunity-Prison Extension) students make up nearly 40 percent of the total college enrollment.

Recognizing these men as potential students, MCC began offering credit courses in the Michigan Reformatory in 1968. Since that early beginning the prison program has grown to include hundreds of COPE students served by a full-time staff which provides program coordination, counseling, library assistance and instruction.

Regular college faculty and part-time teachers from area institutions currently staff over 250 classes per year at the Reformatory, Michigan Training Unit, and Riverside Correctional Facility. The COPE schedule of courses enables students to pursue an Associate Degree or one of several vocational/technical programs.

The goal of the COPE staff is to live up to the meaning implied in the acronym, to help these men cope with the difficult futures they face.

bookstore
The college Bookstore serves as a source for students to obtain textbooks, supplies, and materials required for each course. Average cost for textbooks is estimated at $25 per course. Used books are often available at some savings to the students.

In addition to textbooks, some courses require the purchase of hand tools or instruments. Project-centered courses such as shop and technical courses also require the periodic purchase of special papers and supplies. Costs for such items may be obtained by visiting the college Bookstore located in the Activities Building.
veteran's information

If a student desires to receive veterans' benefits while enrolled, it is necessary to (1) submit an application for benefits to the Veterans Administration prior to enrollment, and (2) have his/her enrollment certified to the Veterans Administration after being registered.

After the veteran has enrolled, it is his/her responsibility to notify the Office of the Registrar of (1) any changes in training program or credit hour class load; (2) an extended class absence of more than one week; (3) a change in attendance (withdrawal from college); and (4) any change in dependents.

Veterans are reminded that they may be held liable for any overpayment of benefits as the result of failure to report any such changes. They are further reminded that satisfactory pursuit of study or training toward completion of an educational or vocational goal must be maintained.

Assistance in obtaining forms, completing forms, and support services for veterans is available through the office of the registrar or the veterans representative on campus. All veterans must read the section in the student handbook dealing with students receiving veterans benefits.

INSTRUCTIONAL INFORMATION

associate degrees offered

associate in arts and sciences

The sixty (60) semester credit hours required for an Associates Degree in Arts and Science must include the following courses:

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Course Number</th>
<th>Credit Hours</th>
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</thead>
<tbody>
<tr>
<td>Freshman English I</td>
<td>LA-100</td>
<td>3</td>
</tr>
<tr>
<td>Freshman English II</td>
<td>LA-101</td>
<td>3</td>
</tr>
<tr>
<td>Biological &amp; Physical Science</td>
<td>NS-100 &amp; NS101</td>
<td>8</td>
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<tr>
<td>OR if B+ or better in LA100</td>
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<tr>
<td>OR two other LA science classes</td>
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<tr>
<td>OR with sufficient science background</td>
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<td></td>
</tr>
<tr>
<td>Introduction to Social Science I</td>
<td>SS-110</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to Social Science II</td>
<td></td>
<td></td>
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<tr>
<td>OR two other SS courses</td>
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<td></td>
</tr>
<tr>
<td>Humanities I</td>
<td>HU-200</td>
<td>4 or 6</td>
</tr>
<tr>
<td>Humanities II</td>
<td>HU-201</td>
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<td>30 or 32</td>
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</tbody>
</table>

associate in applied arts and sciences

The Degree of Associate in Applied Arts & Sciences differs from the Associate in Arts and Sciences in two major ways:
1. Fewer general education courses are required.
2. Program requirements are clearly defined and total minimum credit hours vary with the program.

A student pursuing the Associates in Applied Arts and Sciences must follow a prescribed program curriculum. Minimum credit hours for graduation vary with each curriculum and must be strictly observed. The student should refer to the program outlines on the following pages, and take the following general education requirements as well.

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Course Number</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman English I</td>
<td>LA-100</td>
<td>3</td>
</tr>
<tr>
<td>Freshman English II</td>
<td>LA-101</td>
<td>3</td>
</tr>
<tr>
<td>OR if B+ or better in LA-100</td>
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<tr>
<td>any other LA course (except LA-210)</td>
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<td></td>
</tr>
<tr>
<td>Introduction to Social Science I</td>
<td>SS-110</td>
<td>4</td>
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<tr>
<td>Introduction to Social Science II</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR NS100 OR 101, HU200 OR 201, OR another SS course</td>
<td></td>
<td>3 or 4</td>
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|                                    |               | 13 or 14     |
### Associate in General Studies

This degree will provide students the opportunity to be directly involved in planning their career, by allowing them to choose courses which will meet their individual needs. Dependence upon the courses selected, credits may or may not transfer to four-year colleges or universities. The fulfillment of course requirements for this degree must be approved by the Dean of Student and Community Services.

Students pursuing the Associate in General Studies Degree must complete 60 hours of credit in academic, vocational/technical or community education. Of the 60 hours, 15 must be academic credits from at least three academic disciplines (humanities, language arts, mathematics, natural science or social sciences). SS110 or SS240 must be included.

Montcalm Community College also offers certificates in the following programs:
- Apprenticeship Training
- Medical Office Assistant
- Automotive
- Practical Nursing
- Aviation Maintenance
- Residential Construction
- Drafting Technology
- Welding Technology
- Legal Office Assistant

Program outlines for the certificates may be found in the MCC Program Guide.

### Notice of Intent to Graduate

A notice of intent to graduate must be filed by each student who wishes to receive an Associate Degree or Certificate. The notice must be filed in the Records Office at the beginning of the semester in which the student will complete the requirements for graduation. The requirements may be completed during any semester but the graduation ceremony is held only at the close of the spring semester.

### Course Code Index

This page will help locate descriptions of individual courses, such as HU122, Introduction to Art, and LA210, Speech. Use the index below in the following manner: find the subject matter in which you are interested, the letter prefix that follows tells where to find descriptions of the courses which cover that subject matter. For example, art course descriptions would be found under HU.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>Accounting/BA</td>
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<tr>
<td>Actting/LA</td>
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<tr>
<td>Advertising/BA</td>
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<tr>
<td>Airframe Mechanics/AV</td>
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<tr>
<td>Airframe &amp; Power Mech/AV</td>
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<tr>
<td>Algebra/MTH</td>
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<td>Allied Health/AH</td>
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<tr>
<td>Analytic Geometry/MA</td>
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<tr>
<td>Anatomy/NS</td>
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<tr>
<td>Anthropology/SS</td>
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<tr>
<td>Art/HU</td>
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<tr>
<td>Art (Appreciation)/HU</td>
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<tr>
<td>Automotive Mechanics/AM</td>
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<tr>
<td>Aviation Mechanics/AV</td>
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<tr>
<td>Biology/NS</td>
<td></td>
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<tr>
<td>Blueprint Reading/VE</td>
<td></td>
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<tr>
<td>Blueprint Reading [Building &amp; Const.]/RC</td>
<td></td>
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<tr>
<td>Blueprint Reading [Machine Tool] [App.]</td>
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<tr>
<td>Bookkeeping/CE</td>
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<tr>
<td>Botany/NS</td>
<td></td>
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<tr>
<td>Business Communications/CE</td>
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<td>Business Correspondence/CE</td>
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<tr>
<td>Business Law/BA</td>
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<tr>
<td>Business Mathematics/OE</td>
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<tr>
<td>Calculus/MA</td>
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<tr>
<td>Ceramics/HU</td>
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<tr>
<td>Chemistry/NS</td>
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<tr>
<td>Communications/LA</td>
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<tr>
<td>Communications [Business]/OE</td>
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<tr>
<td>Composition/LA</td>
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<tr>
<td>Computer Programming/DP</td>
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<tr>
<td>Computers/HAA, BB</td>
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<tr>
<td>Correspondence/OE</td>
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<tr>
<td>Data Processing/DP</td>
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<tr>
<td>Data Processing [Apprentices]</td>
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<tr>
<td>Diesel Engine/AM</td>
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<tr>
<td>Directing/XY</td>
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<tr>
<td>Drafting Technology/VE</td>
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<tr>
<td>Drafting &amp; Design [App.]</td>
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<tr>
<td>Drama/LA</td>
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<tr>
<td>Drawing/HU</td>
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<tr>
<td>Economics/SS</td>
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<tr>
<td>English/LA</td>
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<tr>
<td>Executive Sec. Studies/CE</td>
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<tr>
<td>Finance (Personal)/BA</td>
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<tr>
<td>Fine Arts/CE</td>
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<td>Fitness/PE</td>
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<tr>
<td>French/FL</td>
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<tr>
<td>General Business/BA</td>
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<tr>
<td>Geography/OE</td>
<td></td>
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<tr>
<td>Government/SS</td>
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<td>Heat Treatment</td>
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<tr>
<td>Industrial Supervision &amp; Management/BA, VE</td>
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<tr>
<td>Journalism/BA</td>
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<tr>
<td>Law [Business]/BA</td>
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<tr>
<td>Law Enforcement/LE</td>
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<tr>
<td>Legal Secretarial/OE</td>
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<tr>
<td>Literature/LA</td>
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<tr>
<td>Machine (Lab) [Apprentices]</td>
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<tr>
<td>Machine Shop</td>
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<tr>
<td>Management/BA</td>
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<tr>
<td>Manufacturing Processes</td>
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<tr>
<td>Marketing/BA</td>
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<td>Mathematics/MA</td>
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<td>Mathematics [Apprentices]</td>
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<td>Mathematics [Business]/BA</td>
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<td>Mathematics [Technical]/VE</td>
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<tr>
<td>Medical Assisting/OE</td>
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<td>Medical Terminology/OE</td>
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<td>Metallurgy Theory</td>
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<td>Metals Machining Technology/VE</td>
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<td>Mold Making &amp; Die Cast Dies</td>
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<tr>
<td>Natural Science/NS</td>
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<td>Nursing/Practical/NU</td>
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<td>Office Machines/OE</td>
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<td>Oral Interpretation/LA</td>
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<td>Painting/PH</td>
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<td>Philosophy/HU</td>
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<td>Physical Education/FE</td>
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<td>Physical Fitness/PE</td>
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<td>Physical Science/NS</td>
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<td>Physiology/NS</td>
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<td>Plumbing [Apprentices]</td>
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<td>Political Science/SS</td>
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<td>Psychology/SS</td>
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<td>Reading/ED</td>
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<td>Religion/HU</td>
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<td>Sculpture/MA</td>
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<td>Secretarial Studies/OE</td>
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<td>Shorthand/OE</td>
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<td>Speech/LA</td>
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<td>Sports/PE</td>
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<td>Statistics/MA</td>
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<td>Supervision &amp; Mgt./BA</td>
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<td>Tax [Income-Individual]/CE</td>
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<td>Taxation [Business]/BA</td>
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<td>Theatre/LA</td>
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<td>Tool Drafting [App.]</td>
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<td>Transportation/OE</td>
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<td>Trigonometry/MA</td>
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<td>Typewriting/GE</td>
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<td>Welding [Trade] [App.]</td>
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<td>Welding Technology/WE</td>
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<td>Writing [Residential]/RC</td>
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<td>Writing/LA, SD</td>
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<td>Zoology/NS</td>
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</tbody>
</table>
course descriptions

allied health

AH103 Surgical Principles and Procedures I (4,2,4) 96 contact hours
This course provides the trainee with beginning knowledge for uniform and safe performance in the operating room. The total needs of the surgical patient, pre-operative preparation, and other routines are emphasized. Also included is coordinated clinical practice with emphasis on basic surgical technician skills including the scrub, proper use of equipment and identification, and care and use of instruments.

AH104 Surgical Principles & Procedures II (5,3,3) 96 contact hours
This course will develop in-depth knowledge sufficient for the technician trainee to be a safe and productive assistant to the professional in the operating room. Specific types of surgical procedures will be learned with full development of the skills to assist with these surgical procedures. The coordinated clinical experience is vital to the technician training. Prerequisite courses: AH100, AH101 or FN130, AH102, and AH1103.

AH105 Food Service for Health Care Facilities I (1,1,0) 16 contact hours
For people employed in food service. Basic course includes: communications, sanitation, safety, food handling, regulations, nutrition and therapeutic diets.

AH106 Food Service for Health Care Facilities II (1,1,0) 16 contact hours
Continuation of course AH105 for food service personnel. Nutrition and life cycles, menu planning, meal preparation, equipment, storage and service procedures. Prerequisites: AH105.

AH107 Health Care Housekeeping (1,1,0) 16 contact hours
This course will examine the following principles and techniques of professional housekeeping in health care facilities: principles of sanitation and disinfection, basic and special cleaning procedures with emphasis on cleaning of the isolation unit, floor maintenance and pest control. Related areas to be covered are patient-housekeeper relations, accident prevention, principles of good body mechanics and institutional purposes and organization.

AH108 Introduction to Child Development Program (2,2,0) 32 contact hours
This course is designed to increase awareness and develop skills and competencies to use in meeting the needs of specific groups of preschool children in child development settings. Emphasis will be directed toward nurturing the children's physical, social, emotional and intellectual growth; establishing and maintaining a child care environment and promoting parent-child relationships.

AH125 Adult Foster Care in Michigan (1,1,0) 16 contact hours
A course that covers the history and philosophy of Adult Foster Care and its role in the continuum of services to mentally ill, mentally retarded, and aging clients. Course will also cover: funding, licensing, systems that impact Adult Foster Care and the role of the caregiver.

AH220 Coronary Care (4,3,2) 80 contact hours
This course is an introduction to the principles of nursing management of the patient with heart disease. Emphasis will be on identification of cardiac dysrhythmias and therapeutic intervention.

STUDENTS SHOULD HAVE COMPLETED AH125, ADULT FOSTER CARE IN MICHIGAN (1,1,0) AS PREREQUISITE FOR THE FOLLOWING ONE CREDIT COURSES.

AH110 Adult Foster Care Programming (1,1,0) 16 contact hours
A skill development course that assists the Adult Foster Care caregiver in becoming an integral part of a client's learning. Participants will be provided with information and opportunities to learn specific skills of observation, client assessment and successful teaching principles. A program instrument will be provided that allows caregivers to incorporate many variables that affect the client's learning, e.g., family, friends, physical environment of the home, the community.

AH135 The Aging Process (1,1,0) 16 contact hours
A course that covers a description and a clarification of the aging process, historical and current approaches to working with the elderly and the role of the Adult Foster Care Program and the caregiver.

AH136 Programs for Aging Residents (1,1,0) 16 contact hours
This course will relate to overall program management. It will review standards and policies specific to the aged resident; role of the caregiver; role of Adult Foster Care, individual program planning for residents, i.e., motivation, drug-monitoring, helping residents deal with death in the home, and community health resources.

AH145 Mental Retardation (1,1,0)
A course that covers the definition, causes and classification of Mental Retardation, historical and current approaches to working with mentally retarded, and the role of Adult Foster Care program and the caregiver.

AH146 Programs for Mentally Retarded Residents (1,1,0)
A skill development course that presents techniques to assess and teach mentally retarded adult foster care residents. The techniques will be applicable to all ranges of learning from basic care to skills needed for independent community living. The course will provide an opportunity for participants to design, implement, and assess programs for their present clients.

AH155 Health Care Incidents and Accidents (1,1,0) 16 contact hours
A skill development course that covers techniques of emergency care specifically relevant to the Adult Foster Care setting.

AH160 Health Care Nutrition (1,1,0) 16 contact hours
A course which covers the fundamentals of good nutrition, menu planning, meal preparation, quantity buying, and kitchen safety.

AH165 Facility Environmental Management (1,1,0) 16 contact hours
Course reviews good staffing procedures, including hiring policy, staff evaluation, inservice training, responsibility delegation, time management, staff "burn-out," and insuring proper environment conducive to resident growth. The course is specifically designed for the caregiver who has supervision of staff and provides direct resident care.

AH170 Activity Programming for the Adult Foster Care Resident (1,1,0) 16 contact hours
A skill development course that covers development of recreation and leisure time activities as a part of the overall program for a client. Course will include
developing activity for in-the-home and in-the-community, for groups and individuals.

AH175 Health Care/Human Growth and Development (1,1,0) 16 contact hours
Course will review body systems, discuss normal aging process. Summarize common ailments, and discuss common terminology which will be useful in future courses.

AH176 Death and Dying (1,1,0) 16 contact hours
Course will explore the concept of death and dying as it impacts on all types of individuals residing of various ages, home environment, and families.

AH180 Support Staff Development (1,1,0)
This course is intended to meet the varied aspects of the needs expressed by the employees in an AFC Facility. The orientation is focused on training for the cook, substitute worker, aide, laundry worker, bookkeeper, driver, housekeeper, and other persons who have contact with the residents. The philosophy of Adult Foster Care, licensing regulations, and inspection of attitudes, understanding, and behavior toward residents will be presented.

AH195 Mental Illness (1,1,0) 16 contact hours
A course that covers definitions of Mental Illness and Mental Health, classification of mental illness, historical and current approaches to treatment, including medication, and the role of the Adult Foster Care program and the caregivers.

AH196 Programs for Mentally Ill Residents (1,1,0) 16 contact hours
A skill development course that gives the caregiver specific techniques in assisting mentally ill clients develop skills moving toward independent living. The course will provide an opportunity for participants to design, implement, and assess programs for their present clients.

Apprentice training

AP100 Machine Tool Operation Theory (2 credit hours, 42 clock hours)
A lecture course consisting of the definition, history, operation and application of the various tool room machines. Tool topics covered include lathe, shaper, horizontal and vertical mills and surface and pedestal grinding. Emphasis is also placed on specific and special operations of these machines.

AP105 Blueprint Reading I (2 credit hours, 38 clock hours)
This course covers the following: three view projections, line alphabet, location of dimensions, sketching, shop terminology, drafting terminology, tolerance, decimal and angular tolerances, machine operations, sectional drawing, thread representation, finished surfaces representation, auxiliary views, violations of theory of true projection, arrangements of views, scale drawing, phantom outlines, structural steel shapes, mechanical accessories, A.S.A. symbols, systems of drill sizes and gear formulas.

AP106 Blueprint Reading II (2 credit hours, 36 clock hours)
A continuation of AP105.

AP110 Shop Mathematics I (2 credit hours, 36 clock hours)
This course covers the study of properties of common fractions, analyzing decimals, square root, using formulas, understanding percentages, equations, measuring instruments, applied geometry, geometric construction, and applications and logarithms. Also covered in this course are shop trigonometry, taper and tapering turning, screw threads, pulleys and gears, applied mechanics and strength of materials, speeds and feeds, gears, slide rule and milling machine indexing.

AP111 Shop Mathematics II (2 credit hours, 36 clock hours)
A continuation of AP110.

AP112 Shop Mathematics III (2 credit hours, 36 clock hours)
A continuation of AP111.

AP115 Strength of Materials (2 credit hours, 42 clock hours)
Areas covered by this course are simple stresses, shear, riveted joints, stresses in thin-walled cylinders-weld torsion, beam-shear and moment diagrams, stresses in beams, beam deflection, combined axial bending stresses, columns and materials.

AP120 Shop Drawing (2 credit hours, 36 clock hours)
A condensed course covering the basic principles and techniques of shop drafting stressing the essentials of: lettering, instrument usage, technical terms, applied geometry, free hand sketching, orthographic auxiliary and section drawings, dimensioning practices, detail and assembly drawing, conventions and standard drafting practices. Pictorial drawing and presentation of engineering data through the media of charts and graphs is also included.

AP125 Welding Theory and Practice (2 credit hours, 48 clock hours)
This course is a study of the techniques and processes used to fabricate metal products by welding. Laboratory experiences include oxyacetylene welding and cutting, soldering and brazing, shielded metal-arc welding, inert-gas-shielded (mig-tig) welding, and other special welding processes.

AP130 Metallurgy and Heat Treatment (2 credit hours, 36 clock hours)
Studied in this course are 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, power metallurgy, and classification of steels.

AP135 Tool and Die Design - Metal I (2 credit hours, 42 clock hours)
This course covers instruction on die design standards, solid and spring-stripped drop through blanking die, inverted type blanking die, compound blank and pierce die, composite section blanking, solid forming dies, and progressive type dies such as pierce, blank, notch, countersink, cutoff and form.

AP136 Tool and Die Design - Metal II (2 credit hours, 42 clock hours)
A continuation of AP135.

AP137 Tool and Die Design - Metal III (2 credit hours, 42 clock hours)
A continuation of AP136.

AP138 Tool and Die Design - Metal IV (2 credit hours, 42 clock hours)
A continuation of AP137.

AP140 Tool and Die Design - Plastic Mold I (2 credit hours, 42 clock hours)
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. Also studied are 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.
AP141 Tool and Die Design - Plastic Mold II (2 credit hours, 42 clock hours)  
A continuation of AP140.

AP142 Tool and Die Design - Plastic Mold III (2 credit hours, 42 clock hours)  
A continuation of AP141.

AP143 Tool and Die Design - Plastic Mold IV (2 credit hours, 42 clock hours)  
A continuation of AP142.

AP145 Use of Mechanists Handbook (2 credit hours, 42 clock hours)  
This course includes: tables of squares, cubes, circles and logarithms, solution of triangles and trig tables, geometry, mechanics, wire and sheet metal gauges, uses of iron and steel-heat treat and hardness tables, helical springs, and keys or keyways.

AP150 Social Economics (1 credit hour, 30 clock hours)  
This course studies labor in our economy, including labor's obligations to the employer, the employer's obligation to the labor, services for employees, logic behind collective bargaining, the union contract and how labor unions operate. Covered under our economic system are competitive prices in action, capital equipment, wages, profit, and money and banking. Also included in this course are business cycles, circular flow of money, problems of instability, inflation and deflation, the role of the government in the economy, and the study of international trade.

AP155 Safety and First Aid (1 credit hour, 18 clock hours)  
This course studies the "why and how of first aid." Subjects covered are: wounds, common and special; shock, physical and electrical and heart attack; artificial respiration; injuries to bones, joints, and muscles of the body and skeletal injuries; burns and ill effects of heat and cold; common emergencies, transportation, causes and industrial types of accident prevention; and first aid kits and supplies.

Automotive Mechanics Technology

AM100 Automotive Gas Engines Theory (3,3,0)  
The purpose of this course is to provide the student with an in-depth study of the construction and operation of automotive gas engines.

AM101 Automotive Gas Engines Lab (5,0,7)  
The purpose of this course is to give you shop experience in the diagnosis and overhaul procedures involved with Gas Engines. You will be able to improve your proficiency in the use of precision measuring instruments, special tools, and machining techniques as used in the repair of these units.

AM102 Manual Transmissions, Rear Axles and Drive Trains (5,2,5)  
The purpose of this course is to give you shop experience in the diagnosis and overhaul procedure involved in Manual Transmissions, Rear Axles, and Drive Trains. You will be able to improve your proficiency in the use of precision measuring instruments and special tools as used in the repair of these units.

AM114 Basic Small Engine Repair (2,1,1)  
The purpose of this course is to give the student a basic knowledge of the operation, maintenance and minor repair procedures of small gasoline engines.

AM115 Advanced Small Engine Repair (2,1,1)  
The purpose of this course is to give the student an advanced knowledge of the theory of operation and the maintenance and repair procedures for small engines. Shop work consists of rebuilding or overhauling of small engines and the related components in the cooling, lubrication, ignition and fuel systems.

AM118 Basic Automotive Repair and Maintenance (2,1,1)  
This course is designed to furnish the student the necessary knowledge to recognize danger signals, handle emergency problems, make minor repairs and perform general maintenance on the automobile.

AM121 Motorcycle Maintenance and Repair (3,1,2)  
This course is designed to give the student the basic knowledge of theory and operation needed to maintain most kinds of motorcycles. Lab work consists of tune-ups and major overhauls including knowledge of cooling, ignition, lubrication and fuel systems.

AM122 Snowmobile Maintenance and Repair (3,1,2)  
This course is designed to give the student the basic knowledge of theory and operation needed to maintain most kinds of snowmobiles. Lab work consists of tune-ups and major overhauls, including knowledge in cooling systems, ignition systems, lubrication systems, and fuel systems.

AM150 Basic Automotive Engine Tune-Up Theory (3,3,0)  
The purpose of this course is to provide the student with an in depth study of the construction and operation of Automotive Gas Engines.

AM151 Automotive Engine Tune-Up Lab (3,0,7)  
The purpose of this course is to give you shop experience in the diagnosis and repair procedures involved in the ignition, fuel, and emission control systems of the automobile. You will be able to improve your proficiency in the areas of conventional and electronic ignition systems, fuel systems including current domestic and imported carburetors, electronic fuel injection and emission control systems. You will also use such equipment as Ignition Scopes, Distributor Machines, and Infrared Analyzers. Prerequisites: AM150, within one year or concurrently.

AM152 Automotive Electrical Systems (5,2,5)  
This course is designed to furnish the student the necessary technical knowledge and the practical experience to diagnose and repair automatic transmission problems. All modern popular makes of automatics are covered. Included is an in depth study of the hydraulic and mechanical functional aspects of the automatic.

AM200 Automatic Transmissions (5,2,5)  
This course is designed to furnish the student the necessary technical knowledge and the practical experience to diagnose and repair automatic transmission problems. All modern popular makes of automatics are covered. Included is an in depth study of the hydraulic and mechanical functional aspects of the automatic.

AM201 Automotive Brakes (4,2,3,5)  
This course is designed to furnish the student with the necessary technical knowledge and practical experience to diagnose and repair brakes and braking system problems. Lab experience involves diagnosis and repair on late model units using latest methods on modern equipment.
AM202 Automotive Front Ends and Steering (4,2,3,5)
This course is designed to furnish the student the necessary technical knowledge and the practical experience to diagnose and repair front end, steering, and suspension problems. All American made and some foreign systems are covered.

AM232 Automotive Parts Management (2,2,0)
This course provides an in-depth study of the operation and management of the automotive replacement parts section of the Automotive Trades. Familiarization with parts coding along with inventory control, pricing, and sales techniques constitutes a major part of the course. Included in the course are the fundamentals of bookkeeping and the handling of currency as it applies to parts management and sales. Parts coding systems and unique features of all major automobile manufacturers in the United States as well as popular foreign car makers will be included.

AM233 Automotive Service Management (2,2,0)
A comprehensive course in the management of the service department of the auto dealership or service garage. The major emphasis of the course will be on the accurate diagnosis of automobile defects, cost estimating, quality control, personnel management, scheduling, and customer relations. All aspects of service management will be explained and practiced through simulated and actual service procedures.

AM250 Diesel Engines Theory (3,3,0)
This course is a study, in theory, of basic diesel engines and related components not usually found on automotive gas engines. Included is the study of fuel injection systems, governors, and turbo chargers.

AM251 Diesel Engines Lab (5,0,7)
This course is designed to furnish the student the necessary technical knowledge and the practical experience to service, repair and diagnose diesel engines in the truck, automobile, farm or heavy equipment fields.

AM252 Automotive Heating and Air Conditioning (4,0,5)
This course is designed to give the student basic knowledge of automotive heating and air conditioning theory and service diagnosis procedures. In addition, it is intended to help the student develop correct working habits and good judgement in the performance of his duties as an air conditioning mechanic.

gas-welding, and arc-welding. It will also provide the student with an understanding of the procedures for welding magnesium and titanium.

AV105 Basic Science (3,3,2)
This course is designed to provide the student with a basic understanding of electricity, physics, and basic mathematical skills.

AV111 Airframe Assembly and Rigging (3,2,2)
This course provides the student with an understanding of the method of assembly and rigging of both rotary-wing and fixed-wing aircraft, including alignment of structures and the balancing of movable surfaces. Prerequisites: AV101, AV105.

AV112 Hydraulic and Pneumatic Systems (6,4,6)
This course is designed to provide the student with an understanding of hydraulic and pneumatic power systems and components, including a study of landing gear systems.

AV114 Aircraft Instruments and Controls (5,4,4)
This course includes the study of cabin atmosphere control systems, instrument systems, communication and navigation systems, and position and warning systems. Prerequisites: AV101, AV105.

AV115 Aircraft Fuel Systems (3,2,3)
This course is a study of aircraft fuel system requirements, fuel systems, fuel system components, and the repair of fuel systems and their components.

AV116 Materials and Processes I (2,1,1)
This course includes the study of nondestructive testing methods, aircraft hardware, and cleaning methods.

AV117 Materials and Processes II (2,1,2)
This course includes the study of aluminum alloys, heat treatability and weldability, as well as heat treat code designations. Included is the study of the causes of corrosion, its identification, removal, and the protection of parts from further erosion.

AV118 Aircraft Electrical Systems I (2,2,1)
This course will provide the student with an understanding of aircraft electrical system operation and the repair of electrical system components. Prerequisites: AV105.

AV119 Aircraft Electrical Systems II (2,1,3)
This course is a continuation of AV118 with emphasis on interpretation of circuit diagrams and troubleshooting of aircraft systems. Prerequisites: AV118.

AV201 Aircraft Reciprocating Engines (5,4,4)
This course includes the study of the aircraft piston type engine including the engine parts and their function. The course will also study engine displacement, compression ratio, and horsepower.

AV202 Metal Processing (3,2,3)
This course includes a study of the engine's electrical system, its components, and the repair of those components, as well as engine instrument systems and fire protection systems. Prerequisites: AV105.

AV204 Engine Lubrication Systems (3,2,2)
This course covers the source of lubricants, their use, and engine lubricating systems.
AV205 Aircraft Drawings (2,1,2)
This course will include the study of basic drawing procedures, making sketches, and reading blueprints, graphs, and charts.

AV211 Aircraft Reciprocating Engine Overhaul (5,3,5)
This course includes the study of the overhaul procedures for conducting a major overhaul on a reciprocating engine and the procedures for removing and reinstalling an engine on an aircraft. Prerequisites: AV201, AV204.

AV212 Aircraft Engine Ignition Systems (4,2,4)
This course includes the study of the operating principles of the aircraft magneto, its overhaul and the repair and replacement of ignition harnesses. Prerequisite: AV106.

AV213 Engine Fuel Induction Systems (5,3,5)
This course includes the study of the operation and overhaul of float carburetors, pressure carburetors and fuel injection systems. The student will also study engine fuel systems, induction systems, including superchargers, engine cooling systems and engine exhaust systems. Prerequisite: AV105.

AV214 Turbine Engines (3,2,2)
This course is designed to provide the student with a basic understanding of the theory of operation, disassembly and reassembly of jet engines as well as operating procedures and troubleshooting practices.

AV215 Aircraft Propellers (4,2,4)
This course includes a study of the operation and repair of fixed pitch, constant speed and feathering propellers.

AV216 Aircraft Servicing (5,2,5)
This course includes the study of the requirements for making an airframe and powerplant conformity and airworthiness inspection. The course also includes instruction in ground operations, servicing, maintenance forms and records, maintenance publications, and mechanics privileges and limitations. Prerequisites: All AV courses except AV215, AV217 and AV218.

AV217 Weight and Balance (2,1,2)
This course includes the study of the proper procedures for weighing an aircraft, finding the center of gravity and the movement of the center of gravity with changes in loading. Prerequisite: AV105.

AV218 FAA Review (2,2,2)
This course is a review of all previously studied subjects designed to prepare the student to take the FAA written, oral and practical examinations for both the airframe and powerplant mechanics licenses. Prerequisites: All AV courses except AV215, AV216 and AV217.

AV250 Pilot Ground School (3,3,0)
This course provides the student with information regarding pre-flight planning, airplane systems, airport, communications, air traffic control, weight and balance, meteorology, Federal Aviation Regulations, the Airman's Information Manual, the use of the flight computer, basic navigation, radio navigation and medical facts of flight. Successful completion of this course should be very helpful in taking the FAA pilot's written exam.

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business administration

BA215 Financial Accounting (4,4,0) Fall & Spring Semesters
An introduction to accounting and fundamentals; 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; accounting for notes, interest, unearned and accrued items are examined.

BA116 Managerial Accounting (4,4,0) Spring Semester
A study of the basic procedures used to account for partnerships, corporations, and manufacturing costs with the intent to provide understandable and reasonable accurate financial reports. Prerequisite: BA115 or equivalent.

BA135 Introduction to Business (3,3,0) Fall & Spring Semesters
The student is introduced to the environment, nature, and opportunities of business. Types of ownership are covered and the operation of business is investigated through marketing, location and layout, personnel, finance, and controls for decision making. The legal environment of business is also investigated.

BA160 Basic Assessment Administration (4,4,0)
Students are introduced to basic techniques of assessment administration needed to assess a unit of government. Topics to be covered will include property tax law, property descriptions, cost approach, market value to value, equalization forms, personal property and the appeals process. Prerequisites: None.

BA161 Assessment Administration II (4,4,0)
Students will learn advanced techniques of assessment administration. Topics covered include the cost approach to value with emphasis on depreciation measurement, market approach, the analysis of comparable sales and the income approach to value. Commercial-Industrial appraising techniques, using the three approaches to value will be covered, as well as materials on personal property statement, determination, recording and analysis according to the Michigan compiled laws. Prerequisites: Level I Certification or one year's experience in assessment administration.

BA200 Business Law (3,3,0) Fall Semester
A study of the relationship between law and society. Through case discussion the rules of law, as they apply to contracts, personal property, bailments, and sales, will be better understood by the individual.

BA201 Business Law II (3,3,0) Spring Semester
A continuation of BA200. Security devices, commercial paper and agency and employment are considered. Special emphasis is placed on corporate and partnership law.

BA215 Cost Accounting I (3,3,0) Fall Semester
A study of cost information systems and accumulation procedures for the purpose of budgetary planning. The recording and preparation of factory overhead, material, and labor costs in a form acceptable to AICPA will be taught. Prerequisite: BA115.

BA216 Cost Accounting II (3,3,0) Spring Semester
Planning for profits and sales and controlling of costs and profits are covered. Emphasis will be placed on cost and profit analysis. Prerequisite: BA215.
meeting the demand for funds, the factors affecting the supply of funds, and monetary and credit policies and problems.

BA235 Principles of Investment (3,3,0) On Demand
The student is introduced to the securities market with special attention to corporate securities and financial policies. Limited income securities, common stock, and special classes of securities are covered. Security analysis and portfolio development policies are investigated. Prerequisite: BA135 or equivalent.

BA235 Purchasing (3,3,0) Fall Semester (odd years)
The purchasing department's role in logistics, objectives and contributions are studied. Coordination of purchasing with other management functions such as materials management, the computer, and ethics are studied. Prerequisite: BA237.

BA236 Sales Management (3,3,0) Spring Semester
To provide the student with necessary background in organization, management, and operation of an effective sales force. The laws of effective selling are covered extensively.

BA238 Credits and Collections (3,3,0) Fall Semester
This course is designed to provide the student with understanding of basic credit principles. Use of credit as a tool, analysis of debtors and the individual's ability to pay, use of credit references, and development of skills and techniques normally used in a credit department for collection of past due accounts are covered.

BA239 Money and Banking (3,3,0) On Demand
The nature and origins of money and credit; the history of banking institutions, with emphasis upon the Federal Reserve System; along with statutory controls of money, credits, and banks are studied.

BA240 Tax Accounting (3,3,0) Spring Semester
Local, state and federal taxes of sole proprietorships, partnerships, and corporations are studied. Tax practices and procedures relating to assessment and collection are also covered.

BA241 Advertising (3,3,0) Spring Semester
The role of advertising in society is investigated together with its institutions and media. The creation and planning of advertising is covered along with effective promotional activities.

BA242 Human Relations in Business (3,3,0) Spring Semester
This course covers the methods of selecting and training personnel, discipline problems, morale, wages, fringe benefits, promotions, separations, and other related areas.

BA243 Financial Principles (3,3,0) On Demand
Monetary and credit systems are covered extensively with emphasis placed on
CO100 Basic Consumerism (3,3,0)
A course in developing basic consumer principles and skills to meet the
ever-changing and ever-changing 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 (4,4)
This course is an orientation to the science of cosmetology and includes
cosmetology laws and rules as well as sterilization and sanitation techniques and
policies. Basic hair shapings and finger waving will also be covered in this course.

CS101 Beginning Hairstyling (4,4)
Students will gain more experience in finger waving and learn the basics of
pin-curling, shampooing, maneuvers, and facials. The use and care of
cosmetology equipment will also be covered.

CS102 Beginning Hair Cutting and Permanent Waving (4,4)
This course will provide further training in the elements of basic hairstyling and
an introduction to hair shaping, permanent waving and scalp and hair
trims. Basic electrical theory as related to cosmetology and the use of
thermal and specialized electrical equipment will also be covered.

CS103 Beginning Hair Coloring and Professional Development (4,4)
This course will cover basics in hair coloring, chemical hair relaxing, wiggy and
professional development and ethics.

CS110 Introduction to Cosmetology Lab (4,8)
This course provides students with laboratory experiences in the science of
cosmetology and includes cosmetology laws and rules as well as sterilization and
sanitation techniques and policies. The student will practice basic hair shapings
and finger waving.

CS111 Beginning Hairstyling Lab (4,8)
This course will provide students with laboratory experiences in the practice of
finger waving, and the practice of basic pin-curling, shampooing, maneuvers, and
facials. The use of cosmetology equipment will be stressed.

CS112 Beginning Hair Cutting and Permanent Waving Lab (4,8)
This course provides students with laboratory experiences in basic hairstyling and
hair shaping, permanent waving and scalp and hair treatments. Basic
electrical theory as related to cosmetology will be applied and the use of thermal
and specialized electrical equipment will be practiced.

CS113 Beginning Hair Coloring and Professional Development Lab (4,8)
This course will provide students with laboratory experiences in hair coloring,
chemical hair relaxing, wiggy and professional development and ethics.

CS200 Advanced Hairstyling (4,4)
This course will provide students with an introduction to cosmetic chemistry.
Students will receive training in advanced hairstyling and shaping.

CS201 Advanced Hair Coloring and Permanent Waving (4,4)
This course is a continuation of advanced hairstyling with special emphasis on
coloring and permanent waving. The basics of trichology will also be presented.

CS202 Advanced Hairstyling II (4,4)
This course continues to develop the student's technical skills in hairstyling,
shaping, coloring and permanent waving. A continuation of the science of
trichology will further be developed.

CS203 Cosmetology Salon Management and Board Review (4,4)
This course will provide training to students in salon management techniques,
professional ethics and job preparation skills. A review of all theoretical and
practical experiences will be covered in a 35-hour segment of this course,
designed to prepare students for the State Board Licensing Examination.

CS210 Advanced Hairstyling Lab (4,8)
This course will provide students with laboratory experiences in cosmetic
chemistry at the introductory level. Students will practice advanced hairstyling
and shaping.

CS211 Advanced Hair Coloring and Permanent Waving Lab (4,8)
This course will provide students with laboratory experiences in advanced
hairstyling with emphasis on coloring and permanent waving. The student will
become familiar with the basics of trichology.

CS212 Advanced Hairstyling Lab II (4,10)
This course will provide the students with further laboratory experiences in the
technical skills of hairstyling, shaping, coloring and permanent waving. Further
study in the science of trichology will be stressed and further development of all
basic skills learned throughout the program will be improved.

CS213 Salon Management and Board Review Lab (4,10)
This course will provide students with training in salon management techniques,
professional ethics and job preparation skills in the laboratory setting. A review of
all theoretical and practical experiences will be covered in a 35-hour segment of
this course, which is designed to prepare students for the State Board
Licensing Examination. Special emphasis will be placed on the Pre-Board
Examination.

data processing

DP110 Introduction to Electronic Data Processing (3,2,1)
This course will provide the student with a basic understanding of the
procedures, uses and limitations of unit record data processing equipment as
applied to various areas of business.

DP120 Introduction to Computer Language/COBOL (3,2,1)
This course will provide the student with an elementary understanding of the
principles and techniques of writing computer programs in the COBOL language.
The features and capabilities of the COBOL language will be utilized in solving
business related problems. Topics covered will be computer programming,
flowcharting, data storage and procedural study. Prerequisites: DP110 and a
basic knowledge of mathematics desirable.

DP121 Introduction to Computer Language/Fortran (3,2,1)
Fortran is a computer language used to communicate commands to a computer.
Completion of the course will enable students to flowchart problems and then
program this information as instructions for the computer. Topics include: Write
statement, read statement, Format statement, Do-loops, arrays, subroutines and
addition I/O statements. Prerequisites: DP110, MA100, or OE120.
foster parent

The following courses are available specifically for the development and teaching of Foster Parent Training.

FP101 Introduction to the Role of Foster Parenting and the Problems of Separation (1 credit hour, 20 contact hours)
This course was prepared for use in training foster parents. It is designed as a response to the concerns of foster parents, agency personnel, and child welfare professionals. This course was designed for a 20-hour format. The goals center around increasing knowledge and skill as foster parents and in addition the course may include some areas where foster parents will find themselves reexamining some of their attitudes or basic values. Movement toward course goals will be viewed as success rather than the attainment of any particular level. The chief goal will be to introduce, or clarify for the experienced foster parent, the role of the foster parent.

THE ABOVE COURSE FP101 IS INTENDED AS A PREREQUISITE FOR THOSE THAT FOLLOW.

FP202 The Three Families of the Foster Child (1 credit hour, 20 contact hours)
This course provides foster parents with an overview of the normal emotional development of children with the perspective that life experience of foster children may cause developmental lag or exaggeration of normal behaviors. Foster parents will gain understanding of the foster child's special conflict engendering situation of having a natural family, a foster family and an ideal (or fantasy) family.

FP205 Fostering the School Age Child (1 credit hour, 20 contact hours)
This course will acquaint foster parents with the general developmental tasks of the seven to twelve year old child. The many ways in which the foster parent can aid the school age child's adjustment to separation will be reviewed. The importance of a sense of identity will be examined as well as ways in which foster parents can facilitate a successful school adjustment.

FP206 Fostering the Child with Mental Retardation I (1 credit, 20 contact hours)
This course will help the foster parent to gain understanding of mental retardation and its effects on the individual. The foster parents will learn the differences between mental retardation and mental illness and how mental retardation may influence development and behavior.

FP207 Fostering the Child with Mental Retardation II (1 credit, 20 contact hours)
This course is a continuation of FP206. The foster parent will develop skills in parenting the mentally retarded child to maximize the child's ability to function with joy, dignity, and happiness. Further skills in assessing and planning for the child will be practiced.

FP208 Fostering the Physically Handicapped Child (1 credit, 20 contact hours)
The course will help foster parents develop attitudes and techniques which are conducive to enhancing and improving the physically exceptional foster child's physical, emotional, social, and mental development. Foster parents will examine and become comfortable with their own values, attitudes and feelings about dependency and difference in children. They will be assisted in understanding how the nature of the handicap can affect development in the child, as well as their own parenting.

FP209 Fostering the Teenager (1 credit, 20 contact hours)
This course is designed to assist foster parents in understanding the developmental process of teenagers. The various kinds of teen behaviors that may constitute social problems will be presented to assist them in developing ways to guide teens and cope with these behaviors.

FP210 Handling Lying, Dishonesty, and Destructive Behavior (1 credit hour, 20 contact hours)
This course is designed to help foster parents interpret the meaning of lying, stealing and other forms of dishonesty. The course will assist them in dealing with destructive behavior by providing alternative acceptable behaviors. Assisting the child to develop controls and learn how to deal with their own feelings will be a major focus.

FP213 Fostering the Battered and Abused Child (1 credit, 20 contact hours)
This course will examine the special and complex developmental needs of the battered or abused child so that foster parents can provide a corrective and healing environment. Discussion will aide the foster parent to understand their role in working with the variety of professional helpers who may be involved with the battered or abused child.

FP214 Communicating with the Professional (1.1, 0) 20 contact hours
This course will help students identify those behaviors and problem areas of children which are most relevant to professional evaluation and to assist the students in developing techniques to describe those behaviors specifically enough to insure comprehensive professional assessment and treatment.

FP215 Guiding the Sexual Development of the Foster Child (1 credit hour, 20 contact hours)
A course designed to provide foster parents with increased understanding of the normal and healthy development of sexuality in children.

FP216 Working with Natural Families (1 credit, 20 contact hours)
This course is specifically designed for foster parents to address their role in relationship to the natural families of their foster children.

FP217 All Under One Roof (1 credit, 20 contact hours)
The course will focus on helping the foster parents develop skills at providing a positive environment for all of the children in their home. The foster parent will learn to sort out normal kid problems from "fostering" and "placement" problems and develop sensitivity in recognizing and managing the feelings of children who have differential ties to the family.

FP218 Legal Aspects of Fostering (1 credit, 20 contact hours)
This course is designed to help foster parents understand the legal basis for placing children in foster care, and the legal processes which bring foster children to them. The major focus will be to develop understanding of the legal rights guaranteeing children family care, education, medical treatment and to understand the nature of their own rights and responsibilities toward the children in their home.
foreign languages

FL120 Elementary French I (4,4,0)
Fundamental training in basic language skills stressing oral and written expression as well as aural comprehension. Open 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 (4,4,0)
A continuation of French 120. Prerequisite: FL120 or equivalent.

FL130 Elementary Spanish I (4,4,0)
An introductory course in the Spanish language with emphasis upon grammar, vocabulary, diction and conversation. There will be considerable use of tape and disc recordings in the Listening Center.

FL131 Elementary Spanish II (4,4,0)
A continuation of FL130. Prerequisite: Spanish 130 or equivalent.

humanities

HU100 Fundamentals of Music (3,3,0)
Development of the techniques necessary to the understanding and knowledge of music fundamentals. Student shall have the opportunity to develop basic skills in reading and writing music, along with sight singing, ear training, rhythmic organization, and keyboard familiarity. No prerequisite.

HU101 Music Appreciation (3,3,0)
An introduction to the various styles of music, the course is designed to increase the student's understanding, awareness and enjoyment of music through the development of proper listening habits. Class presentations will include recordings and demonstrations.

HU110 Music in the Elementary Classroom (3,2,1)
This course is designed to give the student a knowledge of well-rounded music programs for the elementary grades. Stress is placed in creative experiences, use of appropriate materials and methods pertinent to the elementary classroom.

HU118 Art Materials and Methods (1,0,2) Studio
This course will provide the students with the opportunity to use various art materials and techniques to make art objects. Films and examples will be shown and demonstrations will be given by the instructor when new ways of working are introduced.

HU120 Introduction to Art (2,1,2)
This course provides the student who has very little background in art with the basic information about color, design, composition, and the use of art materials and techniques which he will need for the courses in drawing, painting, and ceramics.

HU122 Drawing I (3,1,3)
This course includes instruction in basic drawing techniques, including shading, perspective and the proportions of the human face and figure. Studio work will provide the student with drawing experiences using a variety of subjects and materials.

HU123 Drawing II (3,1,3)
This course provides the student with additional drawing experiences with instruction in portraits, the figure, composition, and developing self-expression.

HU125 Painting I (3,1,3) Studio
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 (3,1,3) Studio
This course includes composition and color theory. Prerequisite: HU125.

HU130 Ceramics I (3,1,3) Studio
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.

HU131 Ceramics II (3,1,3) Studio
This course places emphasis on further development of hand built forms or learning the basic techniques of throwing on the potter's wheel and exploring different decorating and glazing techniques. Prerequisite: HU130.

HU191 Choir (1,0,2)
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. Opportunity is also provided to perform with small vocal ensembles whose members are selected from choir personnel.

HU192 Choir (1,0,2)
A continuation of HU191.

HU193 Special Ensemble (1,0,2)
These groups are appropriate for musicians who enjoy performing in small select vocal ensembles. Participants will be selected after successfully auditioning with the music director. Each ensemble will meet approximately twice a week and the rehearsal schedule will be arranged sometime after the first week of each semester. These ensembles may include women's, men's and/or mixed singing groups.

HU194 Special Ensemble (1,0,1)
A continuation of HU193.

HU195 Jazz Band (1,0,2)
This group is made up of instrumentalists having previous band experience. The class offers instrumental musicians the opportunity to continue their education on their particular instrument in the jazz medium. Pep band personnel are selected from this group.

HU196 Stage Band (1,0,1)
A continuation of HU195.

HU200 Humanities I (4,4,0)
The purpose of this course is to develop the student's understanding of the artistic, literary and philosophical nature of man. Viewed historically, selected topics integrate material from the fields of art, literature, music, philosophy and religion.
H201 Humanities II (4,4,0)
Continuation of H200. Emphasis on the modern historical development of thought in art, literature, music, philosophy and religion.

H215 Music Literature (3,3,0)
A comprehensive course in which selected works by major composers, past and present, are studied. Recordings of various musical forms, including the symphony, concerto, tone poem, opera and chamber music, will be used in the class to build a basic listening repertory. The fundamentals of music, including meter signatures, accidentals, treble and bass clefs, note and rest values, and circles of fifths, will be introduced. Students will be expected to attend various concerts throughout the semester.

H220 Philosophy (3,3,0)
Designed to acquaint the student with some fundamental questions concerning the nature of man and the way in which these questions have been dealt with by the most profound thinkers of the past and present.

H225 Art for the Elementary Teacher (2,1,2) Lecture and Studio
This course combines instruction in the philosophy of teaching arts and crafts to children, with studio work in a variety of materials and techniques suitable for their use.

H227 Painting III (3,1,3) Studio
This course places emphasis on exploration of traditional or experimental painting techniques. Prerequisite: H215.

H228 Painting IV (3,1,3) Studio
This course places emphasis on development of individual expression. Prerequisite: H227.

H232 Ceramics III (3,1,3) Studio
This course places emphasis on making more complex hand built or wheel thrown forms and learning kiln firing procedures. Prerequisite: H213.

H233 Ceramics IV (3,1,3) Studio
This course places emphasis on refining forms and developing an understanding of raw materials and glaze formulation. Prerequisite: H232.

Language Arts

LA100 Freshman English I (3,3,0)
The purpose of this course is to introduce the student to the nature and function of the English language. The student will attain a basic competency in oral and written communication.

LA101 Freshman English II (3,3,0)
The purpose of this course is to develop the student's ability to analyze the various processes of formal and informal communication and to improve the ability to recognize and utilize effective argumentative and expository prose. Prerequisite: LA100 or by consent of instructor.

LA160 Journalism (3,3,0)
An introduction course which includes the basic techniques of writing, the principles of effective news writing, a survey of newsroom organization and practical experience provided through laboratory sessions. (Normally offered only at the prison extensions.)

LA161 Journalism Lab I (1,0,2)
This course provides practical experience on the prison newspaper, Hilltop News.

LA162 Journalism Lab II (1,0,2)
Advanced practical experience on the prison newspaper, Hilltop News.

LA200 American Thought and Literature (3,3,0)
This course introduces the student to American literature through the "thematic" approach. The student, while required to know the traditional historical framework, actually reads modern literature as well as the older literature, guiding his/her reading according to the recurring themes, problems, and "continuing causes" which have concerned Americans from the beginning to the present day.

LA201 American Thought and Literature (3,3,0)
This is a survey of American literature arranged according to thematic concerns (recurring themes, problems, "causes"), and which emphasizes writing of the twentieth century.

LA210 Speech (3,2,1)
Speech 210 is an introductory course in public speaking, designed mainly to provide practice in speaking with interest and purpose before an audience. Through presenting a series of brief talks before peers, the student will become familiar with the basic principles of speech organization, preparation and delivery.

LA212 Oral Interpretation (3,3,1)
Through analyzing and reading aloud selected prose, poetry and drama, the student will improve his/her own understanding of these works and increase his/her ability to communicate with others. The course will relate interpretative reading to the other areas of speech: public address, television, theatre, speech improvement, and the teaching of literature.

LA220 English Literature from the Beginning to 1798 (3,3,0)
This is a systematic study of English literature which stresses the principle authors and their works. Reading and discussion will include representative writings of the period from the beginning to the end of the eighteenth century, and will also survey current critical approaches.

LA221 English Literature from 1798 to Present (3,3,0)
This is a systematic study of English literature which emphasizes the principle authors of the nineteenth and twentieth centuries. Reading and discussion will include representative works and will also review current critical attitudes.

LA230 Short Story (3,3,0)
This is a study of the strengths and limitations of the short story, which the student learns to read with delight and understanding. Prerequisites: In general, this course should be open to students who are willing to work at a sophomore level.

LA240 The Novel (3,3,0)
This is a study of the novel with dual intent: to increase the benefits one receives from reading, through systematic discussion of each novel; and to better understand how the "more than casual" reader approaches fiction through study of the several schools of literary criticism.

LA250 Creative Writing (3,1,2)
The purpose of this course is to allow the student to sharpen his/her ability to
use the English language in expressing creative thought in any or all of the traditional genres. The student will be encouraged to greater achievement in types of writing he/she has already tried and will be expected to attempt work in new areas. A workshop atmosphere with common exchange of ideas will prevail.

**LA260 Drama (3,3,0)**
This course is an introduction to drama as a literary form, and requires the student to read representative writings of the period from classical times to the present.

**LA261 Drama (3,1,2) Drama as a Performing Art**
Students are involved in the producing, acting, staging and directing of plays.

**LA270 Poetry (3,3,0)**
The course compares contemporary and classic examples of poetry to historically durable examples of structure and content.

**LA280 A Survey of Black American Literature (3,3,0)**
A chronological survey of Black American writing from 1760 to the present with emphasis on twentieth century examples of poetry, fiction, drama and autobiography.

**LA290 Children's Literature (3,3,0)**
This 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.

**Law Enforcement**

**LE110 Introduction to Criminal Justice (3,3,0)**
A course designed to provide the student with a broad overview of the history and scope of the American Criminal Justice System. Prerequisites: None.

**LE120 Police Administration and Operations (3,3,0)**
For persons pursuing careers in criminal justice or those already employed within the system. This course explores the evolution of administrative theory with special emphasis on its impact and application at the operational level of law enforcement agencies. Prerequisites: Introduction to Criminal Justice.

**LE130 Criminal Investigation (3,3,0)**
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. Prerequisites: Introduction to Criminal Justice.

**LE210 American Criminal Law (2,3,0)**
For persons seeking employment in the criminal justice system. The course includes the historical development and philosophy of criminal law, including legal definitions, concepts, and their application to the criminal justice system.

**LE220 Juvenile Delinquency (3,3,0)**
For persons interested in or already employed within the criminal justice system. This introductory course includes: theories of delinquency causation, examination of the family relationship and juvenile delinquency, the juvenile justice system, and delinquency prevention programs. Prerequisites: Introduction to Criminal Justice.

**Mathematics**

**MA100 Elementary Algebra (3,3,0)**
This course is a review of the properties of the basic number systems, using the tools of beginning algebra. Additional topics include first degree equations and inequalities, special products and factoring, graphs and linear systems, radicals and quadratic equations. Prerequisite: None.

**MA102 Trigonometry (3,3,0)**
The right triangle is studied to introduce the students to the trigonometric functions. Further topics include trigonometric identities, additional formulas, law of sines, law of cosines, complex numbers and DeMoivre's Theorem. Prerequisites: one and one half years of high school algebra and one year of high school geometry.

**MA104 Intermediate Algebra (3,3,0)**
This course will provide students with the algebraic skills, including manipulation and proofs necessary for the study of college algebra and analytic geometry. Topics covered include 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. Prerequisite: MA100 or equivalent.

**MA151 Math for Elementary Teachers (3,3,0)**
This course will provide the elementary teacher with the necessary background to teach mathematics in the elementary school. Such subjects as the origin of systems of numeration, sets, systems of whole numbers, bases other than ten, systems of integers, rational and real numbers will be discussed.

**MA159 College Algebra (3,3,0)**
Topics include the quadratic equation in two variables, sequences and series, complex numbers, DeMoivre's theorem, synthetic division, mathematical induction, matrices, combinations and permutations. Students must have taken trigonometry or be currently enrolled in trigonometry (MA102).

**MA160 Analytic Geometry (3,3,0)**
This course covers the straight line, the circle conics, algebraic curves, transcendental curves, parametric equations, planes and lines, and quadratic surfaces. Prerequisite: MA159 or equivalent.

**MA190 Elementary Statistics (3,3,0)**
This course is designed to introduce students to basic statistical techniques. Topics studied include mean, standard deviation, frequency, probability, binomial distribution, the normal curve, sample means, confidence limits, hypothesis testing, chi-square, linear correlation and regression. Each topic is introduced with examples and problems. Practice in the use of appropriate tables.
will be sufficient to insure confidence in their use. Prerequisite: one year of high school algebra.

**MA250 Calculus I (4,4,0)**
This course covers functions and continuity, limits differentiation, applications, integration, and the definite integral with applications. Prerequisite: MA160.

**MA281 Calculus II (4,4,0)**
This course covers logarithms and exponentials, arc length, polynomials, partial fractions, Taylor’s series, special methods of integration, and partial differentiation. Prerequisite: MA250 or equivalent.

**natural sciences**

**NS100 Biological Science (4,3,2)**
This course provides a basic general education in the major biological sciences (biochemistry, botany, ecology, genetics and zoology) and also a basis for the Individual to relate to his total environment. It presents an opportunity for the student to evaluate his or her own interest and potential in a biological science.

**NS101 Physical Science (4,3,2)**
The purpose of this course is to provide a basic general education in the major science areas (astronomy, geology, physics, and chemistry) so that the student will better be able to understand and evaluate the results of scientific and technological achievement and their impact upon society. It also provides a basis for the student to evaluate his or her own interest and potential in physical science.

THE ABOVE COURSES ARE DESIGNED FOR STUDENTS WHOSE CAREER PLANS DO NOT REQUIRE ANY FURTHER SCIENCE COURSES BEYOND THE NATURAL SCIENCE SEQUENCE, OR ELSE WHOSE HIGH SCHOOL BACKGROUNDS INCLUDED MINIMAL SCIENCE PREPARATION. OTHER STUDENTS SHOULD SELECT FROM THE BIOLOGICAL AND PHYSICAL SCIENCE COURSES LISTED BELOW IN ORDER TO FULFILL THE SCIENCE REQUIREMENTS AT MONCALM COMMUNITY COLLEGE.

**NS102 Physical Geography (3,3,0) (Earth Science)**
A study of the earth-sun relationship, climatic factors on the earth, the geographic grid, land forms, rocks, and minerals. Opportunity will also be provided to gain skills in map reading. The course will also include the study of the earth’s natural resources and the part played by people in the depletion of these vital materials.

**NS103 Anatomy and Physiology I (4,3,2)**
This course introduces the structural organizations and gross functional roles of the major components of the human body. The concept of the dependence of one system on another and the contribution of each system to the total well-being of the individual will be emphasized. Lab includes some dissection and basic physiology experiments.

**NS105 Introductory Chemistry (4,3,2)**
This course is for students entering nursing, dental hygiene, home economics, other allied health science fields and for non-science majors. Students will become familiar with basic principles of chemistry as applied to the health sciences and with nuclear, organic and biochemistry.

**NS200 Botany (4,3,2) Fall Semester**
A survey of the plant kingdom from the simplest to the more complex. Studies of structure, classification, and ecological relationships as well as economic values of the plant kingdom, shall be considered. Students will have an opportunity to submit a collection from the local flora and special attention will be given to taxonomic principles and collection procedures along with the use of keys.

**NS203 Anatomy & Physiology II (4,3,2)**
A study of cellular anatomy and physiology of the major body systems in more detail than NS103. Topics include basic chemistry, metabolism, an expanded discussion of renal function, fluid and electrolyte balance, acid-base balance, the immune system and stress. It includes more clinical applications. Lab includes more extensive physiology and dissection experiments.

**NS205 Zoology (4,3,2) Spring Semester**
A general survey of the animal kingdom including comparative studies of the structure, function, and behavior of representatives of animal groups. Laboratory work includes dissection of representative animals from each phylum.

**NS208 Nature Study (4,2,3)**
A field course which provides students with a background of information enabling them to go into the out-of-doors with a degree of confidence knowing they will be able to recognize, and know something about, many of the common plants and animals found in the local area. The laboratory used is the out-of-doors and the purpose of the course is to aid students to better understand the environment in which they find themselves.

**NS220 College Chemistry (4,4,3) Fall Semester**
Fundamental theories, principles, and problems of chemistry will be emphasized. Prerequisites: One year of high school algebra, NS101 or permission from the instructor.

**NS221 College Chemistry (4,4,3) Spring Semester**
A continuation of NS220. Organic and biochemistry will be introduced and the last five weeks will cover qualitative analysis.

**NS230 Introductory Physics I (4,3,2)**
This course is for students interested in the life sciences: i.e., biology, medical technology, pre-med., pre-dent., etc., covering concepts of light, force and motion, and energy as they apply to biological mechanism and instrumentation. Prerequisites: high school algebra. College algebra or trigonometry taken concurrently.

**NS231 Introductory Physics II (4,3,2)**
This course is a continuation of NS230 and covers fluids, elasticity of matter and membranes, sound, electromagnetism, quantum theory, and radioactivity. Prerequisite: NS230.

**office education**

**OE100 Beginning Typing (3,1,3) Fall & Spring Semesters**
This is an introduction to and mastery of the typewriting keyboard. Personal and business letters, elementary tabulation, simple outlines, and manuscript writing are included.

**OE101 Intermediate Typing (3,1,3) Fall & Spring Semesters**
The writing of business letters with practice in proofreading, tabulation, special communication forms and reports, application and employment procedures. Prerequisite: OE100 or equivalent.
OE102 Machine Shorthand I (4,2,3)
A course which introduces the theory and operation of the Stenograph Shorthand Machine. This course is designed to develop a knowledge of Stenographs, computer-compatible theory, machine dexterity, fluent reading ability and the ability to take dictation. Prerequisite: OE100.

OE103 Beginning Shorthand (3,1,3) Fall Semester
A course in the elementary principles of Gregg Shorthand. Prerequisite: OE100 or equivalent.

OE104 Intermediate Shorthand (3,1,3) Fall & Spring Semesters
Intensive training in theory of shorthand, the development of shorthand outlines, and development of the ability to take new matter dictation. Prerequisite: OE100 & OE103.

OE117 Clerical Accounting (3,2,1) Fall Semester
This course, designed primarily for students on a secretarial/clerical program, covers the basic terminology and fundamental principles of accounting. Most of the emphasis is on the practical business application of the materials covered, with major consideration given to the preparation of accounting statements, balance sheet and income statement.

OE120 Business Mathematics (3,3,0) Fall & Spring Semesters
This course reviews fundamental arithmetic processes and their business and consumer applications, and includes cash and trade discounts, mark-ups, depreciation, inventory, valuation, interest calculations, payroll deduction, metric system, statistics, and probability.

OE122 Financial Mathematics (3,3,0)
This course covers simple and compound interest, ordinary and deferred annuities and perpetuities, amortization and depreciation, bonds and insurance.

OE129 Business Correspondence I (3,3,0) Fall Semester
The basic communication skills are developed through a review of language structure. Attention is given to grammar, English for business use, vocabulary, punctuation, capitalization, and numbers. Prerequisite: OE100.

OE130 Business Correspondence II (3,3,0) Spring Semester
A study of effective correspondence in business. Prerequisite: OE100, OE129.

OE131 Report Writing (3,3,0)
The student is introduced to the what and why of business reports, problems and planning, research, organizing information, constructing and writing a report in an acceptable manner.

OE202 Advanced Typing (3,1,3) Spring Semester
Continued speed-building techniques; advanced production typewriting techniques; skill in business letters, tabulations, manuscript writing, legal documents, and business forms. Prerequisite: OE101 or equivalent.

OE203 Advanced Shorthand (4,3,2) Spring Semester
Further development of the ability to write new matter dictation with increasing emphasis on speed and accuracy in transcription. Prerequisite: OE101 and OE104.

OE204 Dictation and Transcription
This course stresses development of skills in typing, shorthand, and English grammar that are necessary for efficient transcription as well as the development of shorthand vocabulary in medical, legal, and technical terms.

OE205 Legal Terminology - Dictation and Transcription (3,3,1)
Advanced Gregg Shorthand gives students an opportunity to increase shorthand speed. In addition, students will learn the special terminology of legal dictation and the special transcription forms used in legal offices. Prerequisites: OE100 and OE104.

OE206 Legal Office Procedures (3,3,1)
Students will complete approximately 60 projects which include such diverse items as general office duties, noncourt documents, and court documents. Realistic written and oral input from a variety of records containing pressures that require the student to organize work and set priorities is provided. Two to four simulations are provided for practical job experience and training. Prerequisites: OE101 or equivalent.

OE207 Medical Terminology - Dictation and Transcription (3,3,1)
Advanced Gregg medical Shorthand is designed to help students develop competency in working with medical correspondence and professional records. Also covered are major medical office procedures, routines, and activities that relate to the semi-technical responsibilities of a medical secretary. Prerequisites: OE100 and OE104.

OE208 Medical Office Procedures (3,3,1)
Students will complete approximately 60 projects learning to perform the duties of the medical office assistant under realistic conditions. The student has input from oral and written sources, access to a variety of realistic records, and with a realistic set of procedures that require the student to organize the work setting priorities. Two to four simulations are provided for practical job experience and training. Prerequisites: OE101 or equivalent.

OE220 Voice Transcription (3,1,3) Spring Semester
Development of transcription skill is stressed with the operation of belt-type and disc-type transcribers. Emphasis is placed on typing skills, the correct use of grammar and punctuation for efficient transcription, and the skill of dictating. Prerequisite: OE101.

OE225 Word Processing (4,2,3)
A course which introduces basic concepts and the emergence of word processing into the modern office. Spelling, grammar, punctuation, vocabulary and transcription skills are drawn together in practical application on automated typewriters. New career paths which have emerged as a result of word processing are also covered. Prerequisites: OE101 and OE220.

OE230 Typing and Office Practice (3,1,3) Spring Semester
A course in which subject matter and skill development are drawn together in practical application. Prerequisite: OE101.

OE240 Business Machines (4,1,3) Fall & Spring Semesters
A study of four (4) types of business machines with a dual intent: to develop computational speed and accuracy. Addition, subtraction, multiplication, and division will be mastered on the full keyboard, electronic display, and electronic printer. Preparation of information storage cards on the keypunch using raw data is included. Prerequisite: OE120 or equivalent.

OE290 Field Experience (3 credits)
A course consisting of a carefully planned cooperative work experience in the legal/medical office. To receive credit for the course, the student must meet the
following requirements: (1) Acquire approved work experience, (2) Show evidence of satisfactory progress through employee reports and instructor visits at the office site, (3) Complete a minimum of 96 clock hours during the semester. (Permission of coordinator required.) Prerequisites: OE206 or OE208.

physical education

PE101 Golf (1,0,2)
This course is designed to teach the fundamental techniques of golf.

PE102 Bowling (1,0,2)
This course is designed to teach the fundamentals of bowling, which will include equipment selection, stance, approach, delivery, scoring and rules.

PE103 Personalized Body Conditioning (1,0,2)
This is a course involving supervised lifting of weights and body conditioning. Two tracks are possible: track one is for weightlifting; track two is a personalized conditioning program for athletes and others.

PE104 Archery (1,0,2)
This course is designed to teach the fundamentals of archery. Fundamentals covered include equipment selection, safety procedures, archery games and rounds, and shooting techniques.

PE107 Cross Country Skiing (1,0,2)
The student will learn the fundamental principles of cross country skiing. This will include proper equipment selection, use and maintenance. The primary learning process will be via skiing in the field.

PE108 Social Dancing (1,0,2)
This course will teach the student basic steps in modern social dancing (swing, fox trot, cha-cha, waltz, disco, etc.) and the courtesies necessary for developing poise and confidence on the dance floor.

PE109 Folk Dancing (1,0,2)
A general course designed to develop skills and techniques in the various country and folk dances.

PE110 Introduction to Physical Fitness (1,1,0)
This course will provide the student with a generalized overview of physical fitness. The course will bring together terms often seen in print separately but seldom explained in relationship to each other, words such as cardiovascular, aerobics, stress, cholesterol, nutrition, lifetime sports and others. Students will assess their own fitness and develop individualized lifelong plans for improved health.

PE111 Karate (1,0,2)
This course is designed to teach the student the basic kicks, punches, and blocks of karate.

PE112 Karate II (1,0,2)
A continuation of PE111. Students completing this course will be encouraged to attempt the tests for their lower degree belts.

PE115 Personal Self-Defense (1,0,2)
This course is designed to teach the student basic methods of self-defense as well as avoiding personal dangers. Karate is the primary method used for the self-defense portion of the class.

PE116 Racquetball (1,0,2)
This course is designed to teach the student the fundamental skills needed to play racquetball or handball for fun and physical conditioning.

PE118 Bicycling (1,0,2)
This course is designed to teach the student how to select, adjust, maintain, and use equipment properly. The student will also learn safety and riding techniques. Students are expected to log 150 to 200 miles during the semester.

PE119 Beginning Tennis (1,0,2)
This course is designed to teach the basic skills of tennis, including serve, forehand and backhand ground strokes. Students will also learn the rules and strategy of the game. A class tournament will be held during the last week of class.

PE120 Intermediate Tennis (1,0,2)
This course is designed to further refine the skills (ground strokes, serving, volleying) and knowledge (rules, strategies, and techniques of participation) of the beginning tennis player.

PE121 Sports Officiating (1,0,2)
This course presents the rules of major sports, officiating techniques, relationship with players and school officials and game administration. Major emphasis is to stimulate students into becoming registered officials with the state association.

PE122 Beginning Skiing (1,0,2)
This course teaches the basic ski maneuvers. Students will be instructed through wide-stance parallel turns. This course includes information on ski maintenance and waxing, a study of different types of skis and bindings and offers a basic knowledge of ski equipment.

PE123 Intermediate Skiing (1,0,2)
This course includes all intermediate ski maneuvers with special emphasis on parallel skiing plus an introduction to ski racing, including a study of different types of courses and styles. Ski maintenance and technical information on skis and bindings will be studied.

PE124 Advanced Skiing (1,0,2)
Fundamentals of ski instruction and advanced ski techniques. This course will consist of the theory of ski mechanics, theory of teaching skiing, theory of basic ski maneuvers, practice teaching and advanced ski techniques.

PE130 Beginning Swimming (1,0,2)
This course will cover the backstroke, breaststroke, butterfly, sidestroke, crawl and human stroke. The course will also include safety, rescue and drowproofing.

PE131 Intermediate Swimming (1,0,2)
This course is designed to improve the swimmer's skill in the basic swimming strokes. Water safety, diving, water games, and elementary teaching techniques will also be covered.

PE133 Advanced Lifesaving and Water Safety (1,0,2)
This course will train the student to work as a lifeguard in those situations where a Red Cross Advanced Lifesaving and Water Safety Certificate is required.
PE134 Water Safety Instructors Certification (1,0,2)
This course will train the student to work as a Red Cross certified swimming instructor. Basic stroke evaluation as well as teaching techniques and water safety will be covered.

PE135 Skin and Scuba Diving (2,1,2)
This course is designed to teach the student those skills needed to become a safe scuba diver. Students successfully completing the course will be encouraged to take certification tests.

PE140 Gymnastics (1,0,2)
This course will cover the basic features of gymnastics. Women will concentrate on the balance beam, uneven parallels, vaulting and floor exercise. Men will work primarily with the rings, high bar, vaulting, pommel horse, parallel bars and floor exercise.

PE205 Emergency Health Care (2,2,0)
The course covers first aid for wounds, shock, burns, poisoning, etc., as well as CPR. Students successfully completing the course will qualify for the Red Cross Standard First Aid certification.

practical nursing

NUR100 Nursing Skills I (4,3,2)
This course provides the nursing student with the information and skills necessary to build a foundation for efficient bedside nursing. Students not only gain skill in basic nursing procedures they are to perform, but also increase their ability to communicate with patients and members of the health team.

NUR101 Nursing Skills II (2,1,2)
This course provides the nursing student with the knowledge and ability to perform sterile procedures, assist the doctor with more technical procedures, and administer first aid and medications. Prerequisite courses: NUR100, NUR115, NS207.

NUR110 Food in Health and Disease (2,2,0)
Basic nutrition facts are presented with their relationship to health. The student becomes familiar with food nutrients, good nutrition, and variations of diet therapy.

NUR115 Clinical Practicum I (3,0,9)
Clinical experience is provided so the student can apply the basic knowledge and skills essential to basic bedside care in the actual practice setting. Student assignments, supervision, and evaluation are carried out by the instructor and the student is expected to begin the process of applying the classroom theory to meet the basic needs of the patient. The first 5 weeks of this course is clinical lab and the remaining 11 weeks of the semester is spent in 4 area hospitals.

NUR116 Clinical Practicum II (11, 0, 22)
Clinical experience is provided to further the development of the student as a practitioner of practical nursing. As advanced procedures are learned the student will have the opportunity to perform them in the hospital setting. Skills which require use of sterile technique and assisting with more technical procedures will be emphasized. To develop a concept of the total nursing process, assessment, planning, and implementing total care of geriatric, pediatric, medical, surgical, obstetrical, and CCU-ICU patients. Prerequisites: C or better grade in NUR115.

NUR117 Clinical Practicum III (6,0,24)
Each student will gain experience in several clinical areas. The subject matter learned in the prerequisite courses will be coordinated into practical application of meeting the patients' respective needs. Each student will participate in the total process of administration of drugs to patients. Prerequisites: NUR100, NUR101, NUR115, NUR116.

NUR120 Concepts of Interpersonal Relationships (2,2,0)
An introduction to psychosocial aspects of patient care for the beginning nursing student. A study of basic human relations skills intended to produce awareness in the student of the effects of various behaviors on self and others. Emphasis is on patient, colleague, and authority relationship within the health care delivery system.

NUR125 Nursing Seminar (1,1,0)
Current trends in nursing related to education, nurse practice acts, and professional organizations will be the focus of this course.

NUR140 Pediatric Nursing (3,3,0)
The developmental processes of the human being are studied with emphasis on early childhood growth and development and the child-parent relationships. Nursing skills essential to the care of children and the study of the common childhood diseases conditions are also presented.

NUR145 Maternal and Child Health (2,2,0)
This course teaches the student facts about pregnancy which provide a background for understanding the care, treatment and possible complications of the mother before, during and following delivery. Care of the newborn infant is included. Prerequisite courses: NUR100, NUR115, NS207.

NUR150 Introduction to Medical Surgical Nursing (2,2,0)
An introduction to nursing aspects related to medical and surgical conditions. The fundamental processes of health and illness including concepts basic to the care of patients will be studied.

NUR151 Medical-Surgical Nursing (4,4,0)
This course presents the more common medical and surgical conditions and the treatment involved in providing nursing care. The course is intended to present the concept of assessing and meeting the total needs of the patient and a return to normal functioning life. Prerequisite courses: NUR100, NUR115, NUR120, NS207, and NUR140.

NUR160 Pharmacology (2,4,0)
This course offers instruction in pharmacology and safety factors essential to dosages and drug administration. Upon completion of the course, the graduate will be able to participate appropriately in the total process involved in the administration of a drug to a patient, including preparing, observing, recording, and reporting the effects of the drug. In addition, a program on substance abuse is included. Prerequisite courses: NUR100, NUR101, NUR115, NUR118, NUR150, NUR151.
Basic Concepts of Pharmacology and the Administration of Medicines (4,4,2)
(Open only to Licensed Practical Nurses.)
This course offers advanced instruction in the field of pharmacology and safety factors essential to dosage and drug administration. The course is offered with the approval of the National Association for Practical Nurse Education and Services, Inc. (NAPNES). The student must take a National Pre-Pharmacology test and achieve on a final test a specified percentage to be issued a certificate from NAPNES. Thirty-two (32) hours of supervised clinical practicum will be arranged with the student's employer so that practical application of classroom instruction will be experienced. (68 contact hours of instruction, 32 clock hours of clinical practicum arranged.)

Residential Construction Technology

RC110 Construction Methods and Materials I (3,2,1) Fall Semester
This course is designed primarily to supplement RC122, 123, 124, and 125 in that it is intended to broaden the scope of instruction gained in these courses. The course includes field trips to various construction sites (residential and commercial), a true building factory, modular home factory, solar heating and wind power installations in the area, and various points of interest relative to the construction industry. Lectures by guest speakers will be included along with basic mathematics.

RC111 Construction Methods and Materials II (3,2,1) Spring Semester
This course is designed to supplement RC126, 127, 128, and 129 and is intended to broaden the scope of instruction gained in these courses. The course includes guest speakers from plywood, siding, ceiling tile, and pole construction factory representatives. Field trips to various construction sites are included.

RC112 Introduction to Residential Weatherization (2,1,1)
This course is designed to provide students with the basic skills necessary to evaluate, estimate, and perform the work necessary to weatherize a residential building. Prerequisites: None.

RC115 Architectural Blueprint Reading (2,1,1) Fall Semester
A lecture/laboratory course designed to teach students the art of reading construction blueprints as they relate to residential and commercial construction.

RC122 Residential Foundations, Tools and Equipment (3,3,4) Fall Semester
This course is designed to familiarize students with the tools and equipment used by carpenters and contractors as they work at their trade. Layout and construction of foundations are covered in classroom and a laboratory situation. Prerequisites: There are no prescribed prerequisites for this course; however, high school shop and/or construction is helpful.

RC123 Residential Framing/Walls and Roof (3,3,4) Fall Semester
This course includes layout and framing of a residential or commercial building, including a study of the materials from which a cost estimate can be done. Roof framing sheathing, and covering against the weather is also included. There are no prerequisites for this course; however, high school shop and/or construction is helpful.

RC124 Residential Siding and Soffits (3,3,4) Fall Semester
This course provides students with training in the selection, bidding and installation of various types of siding and soffit materials. Installation of rain carrying equipment is also covered. Prerequisites: There are no prerequisites for this course; however, high school wood shop and/or construction is helpful.

RC125 Residential Insulation, Staircases & Gutters (3,3,4) Fall Semester
This course is intended to encompass various types of insulation material, vapor barriers, moisture condensation, ventilation and staircases. Prerequisites: There are no prescribed prerequisites for this course; however, high school shop and/or construction is helpful.

RC126 Residential Mechanical and Electrical Installation (3,3,4) Spring Semester
An introductory course in mechanical and electrical fundamentals consisting of the planning and scheduling of electrical elements, plumbing, sanitation, heating, and ventilating equipment as it relates to the design and erection of residential structures. There are no prerequisites for this course; however, high school wood shop and/or construction is helpful.

RC127 Residential Interior Wall and Ceiling Finishing (3,3,4) Spring Semester
This course consists of the study of interior finishing materials currently used in residential construction including dry wall, paneling and acoustical ceilings. Students will perform actual installations of plaster board on walls and ceilings as well as work with paneling and acoustical materials. There are no prerequisites for this course; however, high school wood shop and/or construction is helpful.

RC128 Residential Interior Finishing (3,3,4) Spring Semester
In this course students will learn the procedures for completing interior finishes. Topics will include the sealing and taping and finishing of dry wall, detailing panel installations and working with tile, brick and hardwoods as they are used in home interiors. There are no prerequisites for this course; however, high school wood shop and/or construction is helpful.

RC129 Residential Interior Trim, Painting and Finishing (3,3,4) Spring Semester
In this course students will learn how to properly prepare a surface for finishing, select the proper materials for the job to be done, and will select and install various types of trim molding. A knowledge of the different types of sealers, stains, varnishes and paints used in interior finish operations will be stressed. There are no prerequisites for this course; however, high school wood shop and/or construction is helpful.

RC130 Electrical House Wiring (2,1,1) Fall Semester
A course in residential house wiring technique and wiring codes. Instruction will be practical in nature with students doing wiring exercises in a laboratory situation.

RC140 Use of the Framing Square (1,1,1) Fall Semester
A practical course consisting of the theory and application of the use of the carpenter's framing square. Topics covered include common, hip, valleys and jack rafter; roof types and pitches; and rafter and stairway layout.

RC150 Formica Countertopping (1,1,1) Spring Semester
A laboratory/lecture course covering the installation of plastic laminates and the tools used for successful installation.

RC161 Basic Block Laying and Brick Laying (2,1,1) Fall Semester
A laboratory/lecture course covering the following topics: building corners,
swiping mortar, joint reinforcing, jointing of joints, laying of a line, buttering head joints, laying headers, rowlocks and soldiers. The students will gain classroom theory and laboratory experience in the above mentioned topics.

RC170 Fireplaces and Arches (2,1,1) Spring Semester
A laboratory/lecture course covering the following topics: basic arch construction, basic fireplace and chimney construction, fireplace construction with sheet metal forms and fire brick. The student will gain classroom theory and laboratory experience in the above mentioned topics.

RC280 Basic Plumbing (2,1,1) Spring Semester
A laboratory/lecture course concerning the following topics: plumbing codes, installation of fixtures, sweating hard copper joints, flaring copper tubing, gluing plastic pipe, and cement plumbing innovations.

RC292 Residential Heating (2,2,0) Spring Semester
Topics covered include forced air heating, hot water heating, electric heating, and solar heating. Students will gain experience through a combination of laboratory and lecture presentations.

social sciences

SS110 Introduction to Social Science I (4,4,0) (Formerly SS101)
This course is designed to introduce the student to the interdisciplinary approach to the study of society and human behavior. Methodology—the development of skills necessary to study and research in the social sciences—is emphasized. Attention is given to the study of power, its use and distribution, as an overall framework for examining the nature of our society's strengths and weaknesses. Materials will be drawn primarily from economics and political science. Special emphasis will be given to the rights and responsibilities of citizenship and the form and function of government at the national, state, and local level. (This course will satisfy the state requirement for political science.)

SS111 Introduction to Social Science II (4,4,0) (Formerly SS100)
This course is a continuation of SS110. Completion of SS111 (or SS100) is recommended before enrolling in SS111, but is not required. Materials will be drawn from history, anthropology, sociology and psychology as the study of society and human nature continues emphasizing selective aspects of culture and contemporary social problems.

SS120 Michigan History (3,3,0)
This course is designed to present the beginning student with a broad overview of the history of the Wolverine state. Several themes (immigration, exploration, technology, mobility, abundance, exploitation) will be explored, especially as they relate to the broader picture of national history—indeed our study of Michigan might serve as a case study of all America. Several important overlapping periods of Michigan history will be 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. In addition, every effort will be made to focus on local aspects of the state's history, as they relate to themes and periods above.

SS140 Introduction to Corrections (3,3,0)
An examination of the total correction process from law enforcement through the administration of justice, probation, prisons and correctional institutions. (Normally offered only at the prison extensions.)

SS145 Corrections Practicum (4,4,0)
This course incorporates several aspects of the corrections process including the role of the practitioner, social and psychological aspects of the client, and other important information related to correctional work. (Available only through the Corrections Department.)

SS150 Contemporary World Geography (3,3,0)
This course introduces the student to the nature and scope of the field of geography. World regions are studied. Analysis of geographic characteristics of selected regions and the relationship of natural environment, cultural background, economic conditions and world issues to national and regional problems are studied. Prerequisites: None.

SS200 Contemporary Problems (1,1,0)
This is a series providing for study and examination of problems and concerns for which, hopefully, solutions can be found. Such areas of concern may include, but are not limited to, environment, ethics, personal identity, politics, and drugs.

SS201 Contemporary Problems (1,1,0)
A continuation of SS200.

SS215 Principles of Economics (3,3,0)
This is a one-semester survey course in introductory economics. Although this course provides exposure to both macroeconomics and microeconomics, greater attention is given to macroeconomics, which is related to issues of national economic policy. Studies include foundations of economic analysis, the public economy, national income, stabilization, growth, employment, and taxes.

SS220 General Psychology (3,3,0)
This course is designed to familiarize the beginning student with the basic concepts and methods, used by psychologists to study human behavior. Among the subjects covered are 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 are taught using a modified Keller Plan approach; other sections follow a more traditional classroom lecture-discussion format.

SS221 Child Psychology (3,3,0)
Students in this course study psychological and experimental findings as they apply to understanding and influencing children's growth and development. Emphasis is placed upon such basic concerns as the effects of heredity and environment, the processes of maturation, intellectual growth and development, and childhood anxiety. In on-campus sections of this course, students pursue learning objectives at their own pace on their own time, with an individualized schedule of assignments, due dates, and meetings with the instructor.

SS230 Sociology (3,3,0)
This course is designed to familiarize the beginning student with the basic concepts and methods used by sociologists to study society. Among the topics covered are culture, social structure, social class, institutions, demography,
deviance, and social change. Emphasis is placed upon acquainting the student with the sociological perspective of human behavior and our modes of social organization. Daytime, on-campus sections of this course are taught using a modified Keller Plan approach; other sections follow a more traditional classroom lecture-discussion format.

SS235 Social Problems (3,3.0)
Students in this course study the sociological approach to social problems. Subjects covered include mental illness, crime, poverty, family and community disintegration, violence, ecology, and current events. On-campus sections of this course follow a format of regularly scheduled classroom meetings for lectures, discussions, and testing.

SS240 Political Science (3,3.0)
An introduction to the institutions and functions of the national government. Special emphasis will be placed upon the evolution of the present national governmental system, and also upon the need to probe and define the problems of American government and politics in terms of changing times and conditions. This course is designed to satisfy the political science requirements of all curricula as well as the state requirements for political science.

SS250 U.S. History to 1865 (3,3.0)
A study of the history of the United States from the period of exploration to the close of the Civil War. Special emphasis will be placed upon the rise of our political and social institutions; the influence of the frontier, the conflicts between individualism, sectionalism, and nationalism; and the implications and consequences of disunion in the Civil War.

SS251 U.S. History from 1865 to the Present (3,3.0)
This course is a continuation of SS250. A survey of America's political, economic, and diplomatic history from the close of the Civil War to the "Great Society" will be made. Special emphasis will be placed upon the Reconstruction of the South, the industrial transition, the Progressive movement, the world wars, the domestic wars, the emergence of the U.S. into a position of world leadership and the responsibility of this maturity.

SS260 Cultural Anthropology (3,3.0)
In this course students will study different cultures, particularly preliterate ones. Subjects studied will include 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. On campus sections of this course follow a format of regularly scheduled classroom meetings for lectures, discussions, and testing.

student development

SD100 Human Potential (1,0.1)
Structured small group activities. Attention will be given to increasing personal acceptance and understanding of self and others.

SD110 Career Development (1,0.1)
An overview of career/life style planning. Values, skills, interviews, occupational information, resumes, interest inventories, decision making and placement are topics that are covered in this course.

SD120 Dealing With Stress (1,0.1)
This course is designed to introduce the student to the topic of stress and how it affects behavior and to help the student identify alternative methods of dealing with stress.

SD130 Women's Awareness (1,0.1)
This course is designed to offer women new skills for improving self awareness and understanding and to increase their ability to plan and set goals. Such topics as women in history, stereotyping in our society, career options and family relationships will be discussed.

SD140 Reading for Fun and Profit (1,1.0)
This course is designed to help students develop a keener appreciation of reading: (1) as fun—a leisure time activity which is not only entertaining, but also thought provoking; and, (2) for profit—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 one's value to others in society. Students study a selection of reading material and meet periodically with each other and the instructor to discuss, interpret, and evaluate that material. Prerequisites: None - recommended reading level - reading ability.

SD150 Reading Development I (1,0.1)
The purpose of this course is to assist students in the development and improvement of reading skills. In a lab format, students will receive testing to identify reading skill levels, programmed materials to improve reading skill levels, and individual assistance from a reading specialist as needed. A grade of S will be used to indicate satisfactory completion of the course.

SD151 Reading Development II (1,0.1)
This course is designed for students who have successfully completed SD150 and wish to develop more sophisticated reading skills.

SD152 Reading Development III (1,0.1)
This course is designed for students who have successfully completed SD150 and wish to develop more sophisticated reading skills.

SD153 Reading Development IV (1,0.1)
This course is designed for students who have successfully completed SD150 and wish to develop more sophisticated reading skills.

SD158 Efficient Reading (1,0.1)
This course is designed to enable students to develop faster and more flexible reading rates, as well as improve comprehension and vocabulary skills. Basic techniques covered will be reading in thought units, varying rates to purpose, identification of main ideas, and relationship patterns, and vocabulary development through use of context. Individual growth in rate and comprehension will be measured by the use of timed pre and post tests. Prerequisites: None. Average or better reading skills recommended.

SD160 Developmental Mathematics I (1,0.1)
This course is recommended to students not intending to enroll in courses requiring advanced math proficiency, but who wish to develop basic arithmetic skills. Emphasis is placed on computations with whole numbers, fractions, decimals, percentages, and the Metric System. In a lab format, students work individually to complete units for which a specific weakness has been diagnosed. A grade of S will be used to indicate satisfactory completion of the course.
SD161 Developmental Mathematics II (1,0,1)
This course is available to students who have successfully completed SD160 and would like to continue developing basic arithmetic skills.

SD162 Developmental Mathematics III (1,0,1)
This course is recommended to students intending to specialize in Business, Natural Science, Mathematics, Automotive, Secretarial, Residential Construction, or Nursing programs. In addition to computations with whole numbers, fractions, decimals, percentages and the Metric System, students will receive instruction in consumer applications of basic mathematics, exponential notation, square roots, signed numbers, plane geometry, and solving equations.

SD163 Developmental Mathematics IV (1,0,1)
This course is available to students who have successfully completed SD162 and would like to continue developing their math skills.

SD170 Basic Writing Skills (1,0,2)
This course is designed to provide the student with the skills necessary to write concise, correctly punctuated sentences using Standard English. In a lab format, students learn to write complete sentences utilizing the common sentence patterns employed in English. Major aspects of the course will be: grammar as it relates to punctuation and clarity, spelling, and sentence combining. Basic Writing Skills may be taken concurrently with, or in preparation for LA100. Prerequisites: None.

SD250 Travel Seminar (1,0,0)
This course provides the student with a chance to learn about a variety of subjects through organized travel experiences to points of interest throughout the world. A group tour will be formed to be conducted by various members of the faculty having expertise in the particular location or topic being investigated. Prerequisites: None.

Trade-Techncial Education

VE100 Vocational Communication Skills (3,3,0) Fall Semester
A course to develop reading, writing and speaking skills. Emphasis is placed on precision, clarity and organization of written and oral communications. Methods and techniques of applying for jobs will be included.

VE102 Technical Writing and Speaking (2,2,0) Spring Semester
A study of the nature of concise writing of technical papers, reports and correspondence demanded of the technician is made, providing ample practice assignments in the student's area of study. Topics covered include: Effective organization, style, mechanics, tables and figures, contents and techniques of report writing, formal reports, figures, contents and special letters, memos, the letter of application, the bibliography, abbreviations, spelling and others. This course also emphasizes the value and necessity for effective verbal communications. Persuasive oral presentations are a part of the course.

VE104 Shop Drawing (2,1,2)
This course is designed to enable students to develop skill in the production of a working drawing. Instruction involving line work, projection, dimensioning and identification is the major emphasis of the course. Offered only at the prison extensions in Ionia.

VE105 Architectural Drafting and Design (4,1,5)
This course will provide the fundamentals in architectural design. The student, upon completion of this course, will have a complete set of drawings for a house he has designed to his liking, and in keeping with standard architectural standards. Prerequisites: Satisfactory completion of VE104, or exam given by instructor to determine drafting expertise. Offered only at the prison extensions in Ionia.

VE106 Blueprint Reading (2,2,0)
This course is designed to provide basic instruction in the understanding, interpretation, and utilization of blueprints. Instruction is provided in a manner such that the student may concentrate on blueprints unique to a specific trade or specialty.

VE107 Advanced Blueprint Reading (2,2,0)
This is a course developed to provide additional information and knowledge in understanding blueprints, beyond that presented in Blueprint Reading. Instruction will be in interpretation and utilization of blueprints. Study topics will involve terminology, representation, symbol systems and specialized areas.

VE110 Shop Mathematics (3,2,1)
This course includes a review of fractions, decimals, simple computations, measurements (including the Metric System), and applied shop problems.

VE112 Technical Math (3,3,0)
This course is presented in terms of application normally encountered in industry and the laboratory by the technician and consists of simple arithmetic and algebraic equations, the language of algebra, positive and negative numbers, factoring, fractions, exponents, powers, roots, radicals, equations, formulas, and their application to industry. Prerequisites: VE110 or equivalent.

VE125 Precision Measurement and Blueprint Reading (1,1,0)
This course is designed to provide students with the necessary skills to set up machine shop operations accurately, by working from production blueprints. Students will learn the basics of measuring with standard scales, micrometers and verniers, as well as blueprint reading skills. Prerequisites: None.

VE130 Introductory Supervision (2,2,0)
The course will explore the job of the supervisor and the tools of his trade, people. Special emphasis will be on the relationships and practical arts involved in obtaining a common objective through human relations. Prerequisites: The student should be active in supervising or preparing for supervisory responsibility.

VE150 Metallurgy (2,2,0)
This course is a study of the properties, classifications, production, and application of steel as it relates to the designer and die-maker. The course includes the study of heat treatment of metals and various tests to determine physical properties of metal. Prerequisites: None.

VE220 Basic Machine Operations (3,2,2)
This course covers the theory and practice in the operation of typical machine tools as well as the use of bench tools and layout equipment. The course is designed to provide practical knowledge of machine processes rather than machine shop skill. Prerequisites: None.
**VE221 Advanced Machine Operations (3,2,2)**
This course covers advanced operations on grinders, mills, presses and lathes. Students will set up and perform machining operations using typical machine shop equipment. They will be assigned special projects to insure a full understanding of the operation of this equipment. Prerequisite: VE220.

**VE250 Basic Electricity (3,2,2)**
The purpose of this course is to give a student a basic knowledge of electrical components, AC and DC circuits, and electrical measuring instruments. Other topics include schematic symbols, power, capacitance, inductance, impedance, amperage, electromagnetism, transformers and motors. This course emphasizes a "hands on" approach with the use of modern components and equipment.

**VE251 Maintenance of Electrical Equipment (3,3,0)**
A study of the theory and operation of electrical machinery and related equipment found in industry. The course will cover AC and DC motors, generators, controls and distribution systems. Troubleshooting and the preventive maintenance of electrical systems will also be covered.

**VE253 Hydraulics and Fluid Mechanics (3,3,0)**
This course includes applied physics, hydraulic principles and formulas, fluid characteristics and basic circuits and theory. In practice the units of the hydraulic system are disassembled, inspected, and tested. The piping, tubing, hose and common trouble sources in hydraulic systems are covered through laboratory demonstrations and experiments on specialized fluid power equipment.

**VE260 Manufacturing Processes (2,2,0)**
A study of the methods and processes used in manufacturing a product is studied. Individual and group tours of industry along with a survey of technical literature is the basis for the term paper required. Prerequisites: None.

**VTE290 Field Experience (3 credit hours)**
A supervised work experience course for students interested in investigating and obtaining "on the job" experience in their chosen field. Students may officially register for the course after arranging for a work station and work experience that has been approved by a counselor. Students must complete a minimum of 75 clock hours of work for each semester hour of credit granted. Prerequisite: Grade point average of 5.00 with at least 15 semester hours of instruction completed at Montclair Community College, and approval by the Director of Occupational Programs.

**VTE291 Field Experience (3 credit hours)**
A continuation of Field Experience VTE290 providing further work experience in the student's chosen field or a second work experience. Prerequisite: VTE290 and approval by the Director of Occupational Programs.

**Welding Technology**

**WE100 Welding Fundamentals and Practice (11,4,12)**
This course is designed specifically to provide basic skills, fundamental knowledge, and practical capability in the welding field. A major share of the course is devoted to actual welding practice designed to master the techniques for making welds in all positions with a wide variety of manual processes. Instruction is given in oxyacetylene welding, brazing, cast iron welding, pipe welding, silver soldering and flame cutting. Lecture, discussion, and test and study guide assignments provide the essential background material needed by the welder.

**WE101 Advanced Welding (11,4,12)**
This course incorporates theory and practice in improved mastery of welding techniques, use of processes, join design, weld symbols, and inspection and testing of welds.

**WE102 Advanced Welding Laboratory I (3,0,4)**
Major emphasis in this advanced laboratory course is directed toward modifying manipulative techniques to produce welds in all positions which meet American Welding Society Standards for certification. The use of the largest practical diameter electrodes will be stressed and comparative analysis of electrode selection of optimum welding economy will be expected from each student. Early completion of certification requirements will enable the student to develop ability to make process comparisons and economic feasibility studies.

**WE103 Advanced Welding Laboratory II (3,0,4)**
A continuation of WE102.

**WE104 Advanced Welding Laboratory III (3,0,4)**
A continuation of WE103.

**WE105 Beginning Welding (2,1,2)**
For the person who always wanted to try welding but didn't know where to start. A survey course covering the step-by-step fundamentals of Oxy-Acetylene and Arc welding processes. Safety procedures and practices of gas welding are emphasized.

**WE106 Basic Design Fundamentals in Welding (2,1,2)**
A running mate with WE100. During this second eight-week course, the students have an opportunity to put their new found knowledge to practical application making minor repairs on various projects brought from home, lawn mower handles, furniture, etc.

**WE107 Welding Techniques and Joint Preparation (3,1,3)**
This course is designed to give the person who has a basic understanding of welding a chance to brush up on their welding skills and pick up some proper technique, rod selection and learn the basics of out-of-position welding. (Projects from home are encouraged.)

**WE108 Oxy-Acetylene Fabrication (3,1,3)**
A study of the five basic joint designs utilizing the oxy-acetylene and arc process with emphasis on the 1,2,3 and 4 f positions.

**WE110 Related Welding Skills (3,1,3)**
This course covers welding theory and practice in oxyacetylene cutting, welding
and brazing. Electric arc welding theory and practice with mild steel electrodes in flat and vertical positions to meet visual inspection requirements as they would apply in automotive areas.

**WE120 Welding and Fabrication II (3,1,3)**
For the returning student, this course will let the student pick up where he left off. Continuing on the 1,2,3 and 4 G weldments, testing welds by means of destructive and non-destructive methods will be used.

**WE121 Advanced Welding (3,1,3)**
This course consists of qualification type weldments in accordance with A.W.S. welding code, using S.M.A.W. process. Also included in this course is a study in T.I.G. and M.I.G. procedure. Prerequisites: WE102, 103 or 104.

**WE122 Related Welding Skills (3,1,3)**
Designed to cater the needs of students whose curriculum calls for a related course in welding. With automotive in mind, this course covers the areas in oxy-acylene flame cutting.

**WE116 Metal Sculpture (2,1,2)**
A learning adventure that lets you control the metamorphic process. This course deals with design, fabrication and quality weldments, with a relaxed informal approach. Prerequisites: WE100.

**Directed Study**

**XY299 Directed Studies (1 or 2 credit hours)**
Directed Study courses are usually thought of in connection with advanced students or those who have exhausted regular college offerings. The average student pursuing an associate degree would not find time for this type of credit. The concept does not apply to remedial studies.

The directed study cannot be used near the end of a semester to fill requirements. It must be planned in advance. Careful attention must be given to the description of the work proposed because there is no other course outline or description on file to document the experience.

A student interested in Directed Study must contact an instructor who will sponsor the proposed activities. That teacher will complete the written plan on proper forms and will seek approval from an instructional administrator before any work begins. The student must enroll in an appropriately labeled section of Directed Studies 299.

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Fitch, Frank, Ph.D.
Fox, Jesse, M.A.
Fox, Nancy, M.A.
Fox, Richard, M.A.
Hood, Herbert, M.B.A.
Hummel, Marilyn, M.S.N.
LeGree, Lawrence, M.S.
Luck, James, M.A.
Morford, Leslie, M.A.
Moutsos, Peter, M.B.A.
Nelson, Dennis, M.A.
Pastoor, John, B.A.
Rose, Ruth, R.N., M.S.N.
Smith, Kenneth, M.A.
Swart, Marion, M.S.
Walden, Joanne, M.A.
Wylie, Louis, B.S.

C.O.E.
Language Arts
Residential Construction
Social Science
Counselor
Mathematics
Aviation
Art
Automotive Mechanics
Business Studies
Practical Nursing
Automotive Mechanics
Counselor
Social Science
Business Studies
Social Science
Language Arts
Practical Nursing
Natural Sciences
Secretarial Sciences
Aviation
1980-1983 SEMESTER SCHEDULE

1980-1981

FALL 1980
August 25 & 26  
August 28  
September 1  
November 27 & 28  
December 20

SPRING 1981
January 7 & 8  
January 9  
April 6-11  
April 17  
May 8  
May 8  
May 12

1981-1982

FALL 1981
August 24 & 25  
August 27  
September 7  
November 26 & 27  
December 21

SPRING 1982
January 7 & 8  
January 11  
April 5-10  
May 7  
May 7  
May 11

1982-1983

FALL 1982
August 23 & 24  
August 26  
September 6  
November 25 & 26  
December 20

SPRING 1983
January 13 & 14  
January 17  
March 28 - April 2  
May 13  
May 13  
May 17

The provisions of this publication are not to be regarded as a contract between the student and Montcalm Community College. The college reserves the right to change any provision or requirement when such action will serve the interests of the college or its students. Failure to read this program guide does not excuse students from the requirements described herein.

All students who plan to transfer to a four-year college or university should consult with an MCC counselor before signing up for classes. The program suggestions which are presented in this guide could differ from one four-year college or university to another four-year college or university.