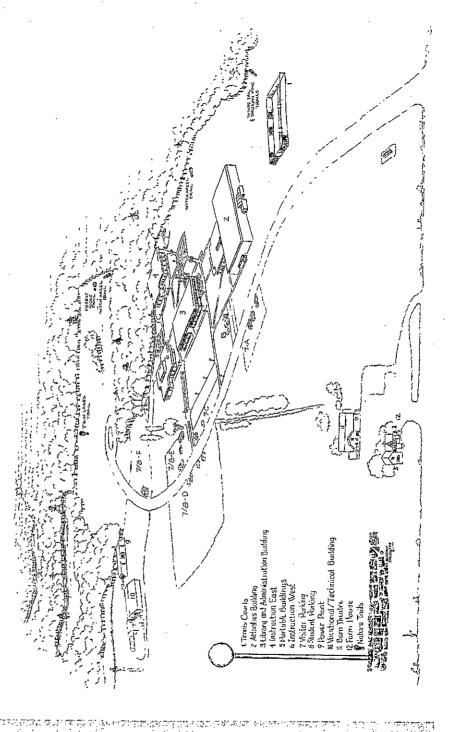


# CONTENTS

GENERAL INFORMATION	
Historical Review	
The Educational Plan	
Instructional Facilities	
Admission to the College	ì
Expenses	
Academic Regulations	ć
Student Life	7.7
SERVICES FOR STUDENTS AND COMMUNITY	1.0
Financial Aid	٠,
Student Development and Community Services	4-
Consumer Education Program	40
COPE (College Opportunity—Prison Extension)	20
Learning Resources Center	21
INSTRUCTIONAL INFORMATION	Z
Degrees Offered	7
Associate in Arts and Sciences	4
Associate in Applied Arts and Sciences	24
Associate in General Studies	Z
Academic/Liberal Arts	4
Apprentice Training	24
Apprentice Training	2
Automotive Maintenance Technology Aviation Maintenance Technology	2t
Rusinger Studios	28
Business Studies	30
Mid-Management	31
Secretarial Sciences	33
Practical Nursing	35
Residential Construction Technology	36
Welding Technology	37
Course Descriptions	38
Directory of Personnel	74



# College Calendar

### FALL SEMESTER-1978

### SPRING SEMESTER-1979

August 24	Last Day to Register	January 10	Last Day to Register
_	, .	,	,
August 24-25	Faculty Conferences	January 9-10	Faculty Conferences
August 28	First Day of Classes	January 12	First Day of Classes
September 4	Labor Day	March 10-18	Spring Recess
November 23-26	Thanksgiving Recess	March 19	Classes Resume
November 27	Classes Resume	April 13	Good Friday Recess
December 20	Last Day of Classes	May 11	Last Day of Classes
December 26	Grades Due	May 14	Grades Due
		May 16	Faculty Conference
		May 11	Graduation

#### FALL SEMESTER-1979

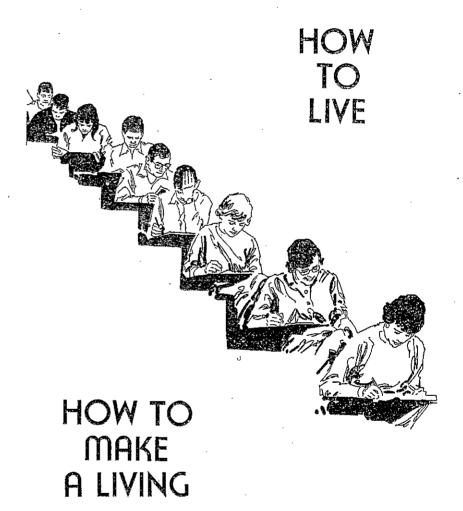
### SPRING SEMESTER-1980

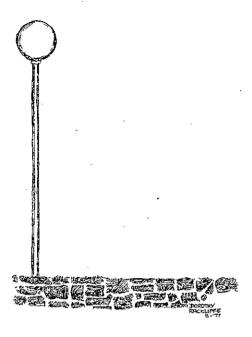
August 23	Last Day to Register	Jan
August 23-24	Faculty Conference	Jani
August 27	First Day of Classes	Jan
September 3	Labor Day	Mar
November 22-25	Thanksgiving Recess	Mar
November 26	Classes Resume	Apri
December 19	Last Day of Classes	May
December 24	Grades Due	May
		May

nuary 9 Last Day to Register nuary 10-11 Faculty Conference First Day of Classes nuary 11 rch 8-16 Spring Recess rch 17 Classes Resume ril 4 Good Friday Recess Last Day of Classes y 9 y 12 Grades Due Faculty Conference May 9 Graduation

The information contained in this catalog is subject to change. The catalog cannot be considered as an agreement of contract between students and Montcalm Community College or its administrators.

# AT MCC STUDENTS LEARN





# **FOREWORD**

This catalog is provided as one of the planning tools for persons seeking postsecondary educational opportunities. Other available tools in the form of the career education library, counseling services, and the catalogs of other colleges are located on the Montcalm Community College campus in the Student Service area. Accept our invitation to use them all.

Office of the President

# 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 Montcalm Community College staff on February 1, 1966, was a Dean of Vocational/Technical Studies. The first full-time programs of Montcalm Community College 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 Montcalm Community College.

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 community service activities are now directed by the Dean of Student and 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.

# The Educational Plan

Mission: The primary mission of Montcalm Community College is to meet the educational needs of its post-secondary constituents.

# **EDUCATIONAL OBJECTIVES**

Montcalm Community College subscribes fully to the following institutional objectives:

- To provide vocational and technical study leading to occupational competence at the semi-professional and skilled levels; also to assist in upgrading the skills of unemployed persons.
- To provide academic study at the freshman and sophomore levels transferable to senior institutions and acceptable toward a baccalaureate degree.
- To provide assistance for all students through social, vocational, and educational counseling and guidance.
- 4. To provide general education for those who study primarily to become more knowledgeable about their cultural, social and scientific environment.
- To provide adult and continuing education, both through the regular curriculum and through study designed to meet specific objectives.
- To provide a center for community service through exhibits, lectures, concerts, and similar cultural activities; also, to provide facilities in which community groups may carry on similar projects.
- Through an organized program of student activities, to provide for growth in social skills and the development of responsible community citizenship.

Being aware that the above objectives describe a comprehensive community college, the staff and trustees of Montcalm Community College are utilizing them as guidelines in the development of this college.

However, to describe the objectives of Montcalm Community College solely in such general terms is stating only one aspect of the goals. The important purposes are better defined in terms of the people who will participate in the educational program, the instructors and students—the community learners mentioned above. Only to the extent that the educational needs of students are met will the objectives of Montcalm Community College be realized.

In establishing the programs, certain assumptions have been made regarding these needs:

- At least 50% of the student body will request programs in the vocational/technical fields.
- At least 10% of the enrolled students will successfully transfer to senior institutions to complete work on a baccalaureate degree, and some of these will be in technical programs at Montcalm Community College.
- All students—youth and adult, academic and vocational/technical, transfer and non-transfer—will expect to understand a great deal about today's complex society after completing study at this institution.
- 4. All students will anticipate a quality collegiate program of studies—including skillful teaching, opportunities for creative thinking, and the challenge to become self-directive in their academic life.
- Each student at Montcalm Community College expects that the chief outcome of his educational experience at this institution will be the skill, mental awareness, and persistent desire to become a lifetime learner.

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

Montcalm Community College holds full accreditation with North Central Association.

Almost from the moment the first president began his work with Montcalm Community College, 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 Pendergraft of the State University of Northern Iowa as the Consultant/Examiner for this college.

To expedite the transfer of Montcalm Community College 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 Montcalm Community College.

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 Montcalm Community College credits for possible transfer where they are appropriate to a student's program.

Montcalm Community College 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 Montcalm Community College appeared before a committee of the NCA Commission on Institutions of Higher Education. Shortly, thereafter, MCC was awarded full accreditation by NCA.

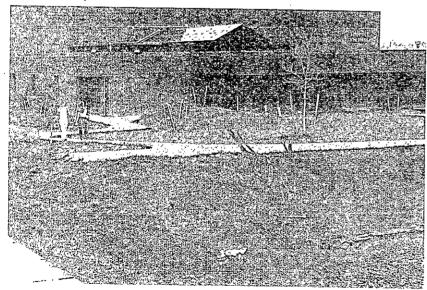
Montcalm Community College holds full membership in the North Central Association of Colleges and Secondary Schools, the American Association of Community and Junior Colleges, the North Central Council of Community and Junior Colleges, the Michigan Community College Association, the Association of Community College Trustees, and the Association of Governing Boards.

#### **EDUCATIONAL PHILOSOPHY**

Montcalm Community College has a basic educational philosophy of which the student should be aware. The college is committed to the following premises:

1. That setting personal goals is a lifelong process, and success in life often depends upon fulfilling those goals which one has set for himself. Also, that goal-setting is often a shaping and re-shaping process in which the student is an active participant who must find a greater awareness of himself in society. Further, that while the short time spent at Montcalm Community College does not fulfill many lifetime goals, the daily close contact between instructor and learner helps establish goals and plan how to achieve them.

- 2. That all educational pursuits are of equal dignity. As Governor George Romney remarked at the Montcalm Community College groundbreaking ceremonies on September 26, 1966, "All work is good, whether it is done with the head or the hands." The college foresees that its student body will be about equally divided between the academic and vocational/technical divisions and anticipates the same high level of accomplishment in both. Further, it is believed that a person whose major emphasis lies in one division would benefit from educational experiences in the other.
- 3. That General Education, as presented by Montcalm Community College and described later in this catalog, is an effective means of providing for knowledgeable citizenship through the understanding of our physical, social and cultural world. Further, that the General Education approach is also effective in providing the basic groundwork for upper division collegiate study after transfer to senior institutions.
- 4. That stimulating, exciting and challenging teaching is vital to learning.
- That instruction at Montcalm Community College must provide the basis for continuous lifelong learning.
- That high standards of moral and spiritual character are an essential attribute for personal well-being.



The MCC Activities Building, completed in summer, 1976

# 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 Montcalm 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 speed-reading laboratory.

Early planning for instructional facilities at Montcalm Community College 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 organization offices and lounge. Also included in this building project were outdoor tennis courts and a softball diamond.

# Admission to the 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 Dean of Student and Community Services.

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

# **ADMISSIONS PROCEDURE**

The following procedure is followed by all students enrolling for the first time at Montcalm Community College.

- Submit an application (available at your high school office or the college Admissions Office). Include a check for the \$5 admission fee.
- 2. Request that your high school office forward one copy of your transcript of grades and standardized test results to the Admissions Office.
- The American College Test (ACT) is recommended but not required of students entering the college. Students who anticipate later transferring to four-year institutions should continue to register for the ACT.
- Students transferring from other post-secondary schools should also have a transcript of college work sent to the Registrar,

Students making last-minute plans to attend Montcalm Community College may enroll on a tentative basis. It will not be possible, however, to grant official credit for courses completed unless all admissions requirements are met.

# POLICY AGAINST DISCRIMINATION

It is the policy of Montcalm Community College that no person shall, on the basis of sex, race, religion, color, national origin, age, or handicap be excluded from participation in, be 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 1X 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:

- 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.
- 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.
- 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.
- 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.
- The residence of a resident alien shall be determined in the same manner as a United States resident.
- 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 Montcalm Community College Business Office.

#### TUITION

Resident of Montcalm Community College District Michigan Non-Resident Students
Out-of-State Students

\$13 per credit hour \$19 per credit hour \$30 per credit hour

#### **FEES**

Application for Admission (paid only once) \$5
Class Fee \$2 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.

# PAYMENT OF TUITION AND FEES

- 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

- 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 Montcalm Community College 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.

FEES ARE NOT REFUNDABLE.

# 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

Montcalm Community College operates on the basis of two semesters per year. The first semester begins during the last week of August and is completed prior to Christmas. The second semester opens in 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 5.00 grade point average on a 12.00 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 5.00 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 Montcalm Community College. However, 24 credits of the total presented for graduation must be earned at Montcalm Community College, 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 at the admission counseling interview 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 Dean of the appropriate division of the college or the Dean of Student and Community 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.

# **VETERANS**

Montcalm Community College has been approved for study under the "G.I. Bill" by the Veterans Administration.

Applications for entitlement to G.I. Bill benefits and information regarding study for ex-servicemen and women at Montcalm Community College are available at the Student Services Office,

# **GRADING SYSTEM**

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

Grade		Honor Point Value
A+		
.A ·		12
A-		11
B+		10
В		9
В.		8
C+		7
C		6
C-		5
D+	•	4
D	•	3
D-		2
Ē	Failure	1
w .	Withdrew while passing?	0
F	Withdrew while failing	
i	former to	
v ·	Incomplete Audit  Not computed in GPA.	
Š		
N	Satisfactory completion	
(A	Preceding a grade indicates credit is not	
	recommended for transfer-terminal credit only	

<sup>\*</sup>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 warranted in writing by the instructor to the Registrar.
- 3. An "\" mark shall not be averaged with other grades to establish a grade point average

#### HONORS

Each semester a Dean's Honor List will include those students enrolled for at least 12 semester hours and who have no "Incompletes" recorded for that semester. Students on this list will have attained a Grade Point Average from 9,00 through 9,99.

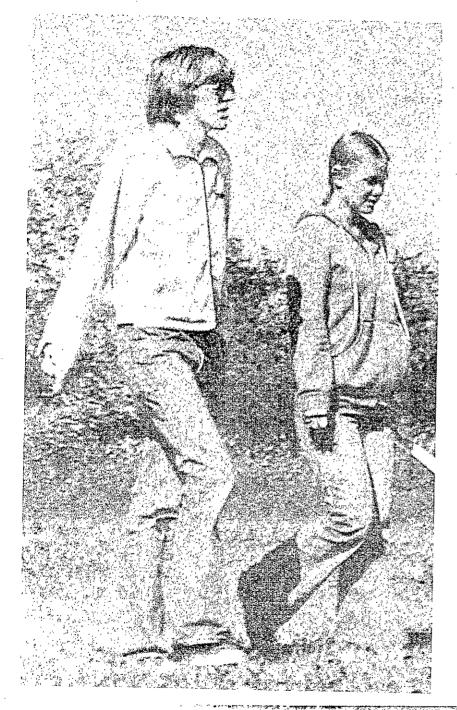
The President's Honor List will include those students who fulfill the above requirements and whose GPA for that semester is 10.00 or higher and meet the above conditions.

The Dean's Scholars will include only those students who have a cumulative GPA from 9.00 through 9.99 and have completed at least 24 semester hours and having no Incompletes for their total period of enrollment. The President's Scholars will be those students with a cumulative GPA of 10,00 or higher and who meet the above conditions,

#### ACADEMIC PROBATION AND DISMISSAL

All students attending Montcalm Community College will be subject to the following grade point regulations:

- 1. Students who attain less than a 1.00 Grade Point Average (D- average) for their first 15 hours at Montcalm Community College will be dismissed. Dismissed students may refer to item 5 below.
- 2. Students who attain less than a 4.00 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 5.00 cumulative Grade Point Average (C average) will be placed on academic probation.
- 4. Students on probation who achieve less than a 5.00 Grade Point Average will be dismissed. Dismissed students may refer to the item below.
- 5. Students who have been dismissed may accept the dismissal or appeal to the Dean of Student and Community Services for special consideration.
- 6. Students dismissed for academic reasons either from Montcalm Community College or any other college, may be required to wait for a full semester before re-entering the
- 7. Students transferring into Montcalm Community College shall be subject to all regulations stated above from the beginning of their enrollment.



# 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 body elects representatives to the Student Senate and students actively participate in the maintenance of the discipline that is essential in an academic community, and share in the foundation of other MCC policies,

### **ORGANIZATIONS**

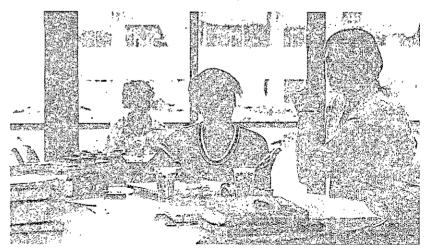
The following extracurricular activities are normally available to interested students. It is common for new groups and organizations to be formed each year, and for some to become inactive, depending upon current student interest.

Archery Choir Stage Band Bridge Club Drama Student Senate Art Club Intramurals Veterans Club Cheerleading Ski 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 Montcalm Community College 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.



# SERVICES FOR STUDENTS AND COMMUNITY

# Financial Aid

The financial aid policy of Montcalm Community College reflects the desire of the college for a student body of the highest possible promise. No student should fail to apply for admission to the college because of financial considerations.

In general, the college attempts to aid students with the most need first, recognizing both the needs and resources of MCC and the needs of the individual applicant. Montcalm Community College is a member of the College Scholarship Service Assembly and subscribes to the principles of financial aid of the organization. Before any financial assistance can be given to a student, a Confidential Statement must be filled out and sent to the College Scholarship Service so a needs analysis can be determined.

MCC believes in the self-help concept in financing the college education and assumes every family will make all reasonable sacrifices in financing their son's or daughter's education before applying to the college for assistance. The college awards the package form of financial aid, usually combining scholarships with grants, job and/or loans to meet each student's need.

# **BASIC GRANT PROGRAM**

The Basic Grant Program is one of the major new programs authorized by the Higher Education Amendments of 1972. The intent of this program is that every eligible student be entitled to Federal Grant assistance as a matter of right. To determine eligibility for this program, the student must fill out an Application for Determination of Basic Grant Eligibility. This form is readily available at colleges, high schools, public libraries and some other public offices.

#### SUPPLEMENTAL EDUCATIONAL 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.

#### WORK/STUDY

Priority in making this Federal program's award is given to those students having "greatest financial need." A number of on-campus jobs are available to students enrolled and carrying at least six credit hours.

#### LOANS

The college has been approved by the Michigan Higher Educational Assistance Authority for participation in the financial aids program sponsored by the Michigan Legislature. Through this program, loans to individuals for higher education purposes are guaranteed by the legislature which pays the interest charges during the time of college attendance. Several local Montcalm area banks are participants in the Authority and application for the MHEAA loans should be made directly with them. High school counselors and the Montcalm Community College Financial Aid Officer have information regarding member banks.

In addition, the college is under the loan provisions of the National Direct Student Loan program. The National Direct Student Loan is a continuation of the National Defense Student Loan Program authorized by Title II of the National Defense Act of 1958. To be eligible for this loan, a student must demonstrate financial need through the college scholarship service and carry at least six credit hours.

# BOARD OF TRUSTEES SCHOLARSHIPS AND ASSISTANTSHIPS

- A minimum of two full-tuition and fees scholarships and one per each fifty graduates
  or fraction thereof over 100 are awarded per area high school to students who have
  demonstrated outstanding academic and citizenship ability during their high school
  years.
- Two full-tuition and fees scholarships, one to a student pursuing a vocational curriculum and one to a student pursuing an academic program, are presented to students from each of seven area high schools.
- One full-tuition and fees Basic Education Scholarship per area high school is awarded to students having a less than satisfactory academic record and desire to attempt college level work.
- Twenty full-tuition athletic scholarships are awarded to students; no more than ten of which shall be for students of either sex.
- 5. Two full-tuition and fees Adult High School Scholarships are awarded to students in each of the high schools in the Montcalm Community College District having a high school completion program for adults. The Scholarship is for seven semester credit hours to be used the following school year. Scholarship recipients are selected by the Area High School Community Education Director.
- 6. Seven full-tuition Performing Arts-Music Scholarships are awarded to students.
- 7. Ten full-tuition Assistantships are awarded to resident, full-time students.
- Thirty full-tuition Instructional Scholarships are awarded to full-time resident MCC students.
- Persons who are residents of the MCC district, and who are sixty years of age or older, may enroll in college credit classes without paying any tuition. Only the minimal fees will be charged.

# LOCAL AND MICHIGAN COMPETITIVE SCHOLARSHIPS

The Michigan Higher Educational Assistance Authority program also provides for a program of scholarships (Michigan Competitive) for which the college has been declared a participating institution. Students taking the qualifying examination may designate Montcalm Community College as the institution at which their scholarships will be used.

A number of local scholarships are offered each college year. Some of these scholarships do not require a Confidential Statement to be on file. Contact the Financial Aid Office to inquire about these scholarships. Groups showing particular interest in helping area students attend Montcalm Community College include:

> Alvce Ann Beckmeyer Scholarship Farm Bureau Ferris Township Scholarship Greenville Federation of Women Greenville Chamber of Commerce Greenville Lions Club Greenville Junior Chamber of Commerce Ore-Ida Foods, Inc. Sidney Sportsmen's Club Southside Child Study Club Stan and Marion Kemp Scholarship Stanton American Legion United Memorial Hospital Guild VFW Lester J. Sitts Post 5065 and Auxiliary Academic Scholarship

Many new local scholarships are made available each year.



Photo - Greenville Daily News

# Student Development and Community Services

The college student development services are designed to aid students and community members in planning realistic constructive lives. Community services are based upon the philosophy of lifelong learning. These two services work from one common office providing the opportunities described below.

#### COUNSELING

The counseling staff looks forward to discussing with students the wide range of questions that probe all their lives: questions that tend to tilt life for us socially, personally or academically. Counselors are available for personal counseling and it is best to schedule an appointment.

#### PROGRAM ADVISEMENT

Students may plan each semester's program with the assistance of the counseling staff, however, each student should become familiar with his/her curriculum requirements, Students planning to transfer should review the graduation requirements, not only of Montcalm Community College but also of their intended transfer institution. Students are encouraged to discuss their program and occupational/educational goals with the counseling staff and members of the college faculty.

# CAREER INFORMATION, LIBRARY, AND TESTING

Montcalm Community College recognizes the fact that the people who wish to continue their education may have questions about their abilities or about the educational or occupational avenues open to them. In response to this need the college makes available a variety of testing instruments, a well-stocked career information library, and the assistance of trained counselors.

#### STUDENT DEVELOPMENT CLASSES

Classes emphasizing self-awareness and personal growth are offered. The current offerings are SD100 Human Potential and SD110 Career Planning. Course descriptions are given on page 71.

#### TUTORING

Tutoring is available for students who, for a variety of reasons, find themselves in need of supplemental assistance. Veterans should also keep in mind that their G.I. Bill benefits will allow tutoring in addition to their regular financial entitlements. Students may contact a counselor about these services or may be referred by an instructor.

#### PLACEMENT

Students interested in finding employment should register in the Office of Student Services. We maintain a file of career placement information and a list of all students who are seeking either part-time or full-time employment.

A library of college catalogs is maintained in the Office of Student Services to assist students in planning proper transfer to four-year institutions. Our counseling staff will also assist in the planning of transfers to other colleges or training schools.

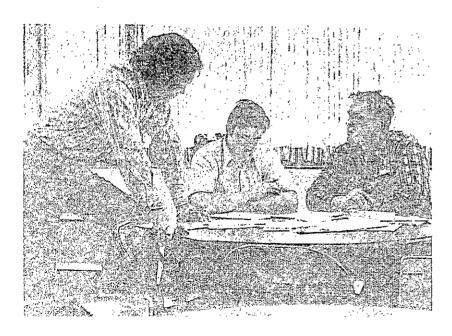
# SHORT COURSES AND CULTURAL ACTIVITIES

Short courses, conferences, workshops, cultural enrichment activities, exhibits and a community chorus are offered by Montcalm Community College. Other activities include services to senior citizens, C.E.T.A. training, and liaison with community agencies and organizations.

#### CAMPUS TOURS AND THE USE OF COLLEGE FACILITIES

Campus tours and the use of college facilities are encouraged. These activities are scheduled through the Office of Student and Community Services.

Use of the Activities Building is scheduled through the Director of Special Programs.



# Consumer Education Program

The Consumer Education Program is designed for persons with special needs, its main thrust is to provide information for persons regarding "life-living" skills. The program presents ideas, theories and practical experiences for the consumer in the marketolace

Consumer Education utilizes the community as its laboratory, and sessions are geared to the individual and the environment he/she lives in. Persons in the program are expected to reflect upon past experiences in the marketplace and to evaluate them in the light of present knowledge and behaviors of consumers.

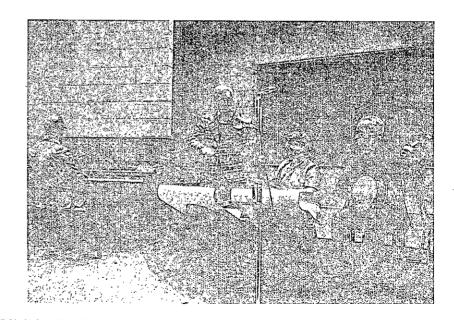
Broadcast and print media serve as the textbook for the individual in this program. All materials are designed to fill relevant needs of the participants and participant input is most important in the planning of the consumer sessions.

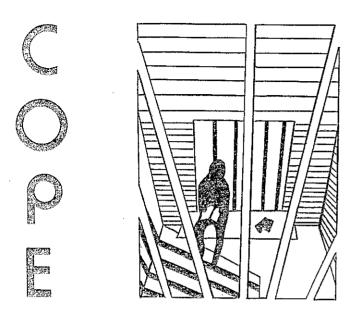
#### INFORMATION AND REFERRAL

The information and referral service is an important part of the Consumer Education Program. A vertical file of current consumer information has been established as well as an area agency directory. The materials that have been developed are available for public use and this service is free for the asking.

#### NEWSLETTER

The Consumer Education Program publishes and distributes a monthly newsletter. The newsletter contains information from many sources, as well as local announcements concerning the community. It is available to persons participating in the Consumer Education Program as well as other individuals who may request it.





# College Opportunity - Prison Extensions

Many MCC 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 students make up nearly one third 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, and library assistance.

Regular college faculty and part-time teachers from area institutions currently staff over 130 classes per year at the Reformatory, Michigan Training Unit and the Riverside Correctional Facility. The COPE schedule of courses enables students to pursue an Associate Degree or one of several vocational/technical programs.

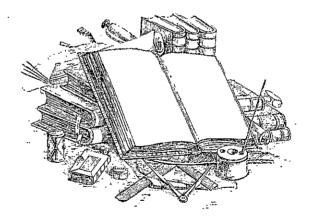
The goal of the COPE staff is to live up to the meaning implied in the acronym, to help these men cope with the difficult futures they face,

# 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 1966. At the present time, the materials collection includes 19,000 volumes of books, more than 200 periodicals, a number of 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.



# INSTRUCTIONAL INFORMATION

Montcalm Community College programs offer several alternatives.

- Two years of study which are transferable to four-year colleges and continued study toward a bachelors degree.
- Specialized career training which provides for immediate entry into a specific occupation. Credits earned in two-year occupational programs are transferable to some college four-year degree programs.
- 3. Courses for personal enrichment and career development.

# General Education

A group of inter-disciplinary general education courses provide insight into the areas of communication, natural science, social science, and the humanities. MCC expects that all graduates in degree programs be proficient in these areas. This general education requirement will better equip graduates to be intelligent citizens of a complex world, to continue learning beyond completion of the degree, and to proceed through advanced study toward additional degrees.

# Degrees Offered

# Associate in Arts and Sciences

The following courses are required for all students pursuing the Degree of Associate in Arts and Sciences:

				Credit
Course Title		Course No.	Semesters	Hours
Freshman English I and II	•	LA100-101	2	6
*Biological and Physical Science		NS100-101	2	8
Social Science Land II		SS100-101	2	8
Humanities I and II		HU200-201	2	8
**Contemporary Problems		SS200-201	2	2
Total General Education Credits				32

<sup>\*</sup>Students with significant science backgrounds may take alternate science courses. See the counselor concerning the science requirements for your program.

In addition to the above required general education courses, the student may complete the degree requirements of twenty-eight additional hours by selecting elective courses from the academic or vocational/technical areas. Sixty (60) semester credit hours are required for graduation.

# Associate in Applied Arts and Sciences

The Degree of Associate in Applied Arts & Sciences differs from the Associate in Arts & Sciences in two major ways:

- 1. Fewer general education courses are required.
- Program requirements are clearly defined and total minimum credit hours vary with the program.

### General Education Requirements

Course Title	Course No.	Semesters	Credit Hours
Freshman English I and II	LA100-101	2	6
*Social Science I and II	SS100-101	2	8
**Contemporary Problems	SS200	1 ·	1
Minimum General Education Credit Hours			15

<sup>\*</sup>Student may elect to substitute one of the following for SS100: NS100 or 101, HU200 or 201.

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 outlines on the following pages.

# Associate in General Studies

This degree will provide students the opportunity to be directly involved in planning their curriculum, by allowing them to choose courses which will meet their individual needs. Dependent 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 sixty semester hours of credit in academic, vocational/technical or community education. Of the sixty hours fifteen must be academic credits from at least three academic disciplines (HU, LA, MA, NS or SS). SS101 or SS240 must be included in the academic work.

<sup>\*\*</sup>Students may substitute SD100 or SD110. See a counselor.

<sup>\*\*</sup>Students may substitute SD100 or SD110. See a counselor.

# Programs of study

The programs of study on the following pages are the basis for awarding of the Degree or Certificate and should be carefully reviewed and understood.

Academic/Liberal Arts Apprentice Training Automotive Maintenance Technology Aviation Maintenance Technology **Business Studies** Mid-Management Secretarial Science

Practical Nursing Residential Construction Technology Welding Technology

# Academic Liberal Arts

A broad Liberal Arts curriculum provides the opportunity to complete the equivalent of two years of study toward a four-year college degree. In addition to taking the humanities, language arts, mathematics, natural science and social sciences, students wishing to concentrate in human services, corrections, social services and education should meet with a counselor to select the proper specialized courses. Students with aspirations toward a bachelors degree should discuss course selections with counselors to insure maximum transfer of credits to a four-year college.

Required Co.	urses		
LA100	3	SS101	4
LA101	3	HU200	4
NS100	4	HU201	4
NS101	4 .	SS200	1
SS100	4	SS201	1
			22

# Apprentice Training

Admission into the apprenticeship training program is gained by way of employment and/or sponsorship by the employer and contingent upon the development of a training agreement between the employer, employee and the United States Bureau of Apprenticeship and Training, Montcalm Community College coordinates the training plan and provides the related instruction.

The semester in apprentice related instruction is 17 weeks in length with the trainee usually taking two 2-credit hour courses per semester. A competency examination may result in waiver of a required course. Official transcripts may also be used.

Entrance requirements are established by the employer in accordance with existing Bureau of Apprenticeship Training standards. Continuation of the training program is contingent upon employment status and/or related instruction level of achievement.

Apprenticeship training is presently established for the Tool & Die Maker and Machinery Repairman Trades. Other apprenticeship trades may be pursued providing suitable training plans are established,

In addition, students may receive an Applied Arts and Sciences Degree or an Associates in General Studies Degree by meeting the requirements described on page 23.

# RELATED INSTRUCTIONAL COURSE OF STUDY (Total Clock Hours - 672)

	(	Clock		——————————————————————————————————————	ock
Courses	1	lours	Courses	Ho	ours
AP100	Machine Tool Operations Theor	v 42	AP130	Metallurgy & Heat Treatment	36
AP105-106	Blueprint Reading	72	AP135-138	Tool & Die Design (Sht. Metal)	or
AP110-113	Shop Mathematics	138	AP140-143	Tool & Die Design (Plas. Mold)	168
AP115	Strength of Mat. & Hydraulics	42	AP145	Use of Machinist's Handbook	42
AP120	Shop Drawing	36	AP150	Social Economics	30
AP125	Welding Theory and Practices	48	AP155	Safety & First Aid	18

# Automotive Maintenance Technology

The Automotive Maintenance Mechanics curriculum provides for the development of the skill and knowledge essential in the performance of the inspection, diagnosis, repair and adjustments of automotive vehicles and diesel engines. A thorough understanding of the technical principles of operation and maintenance procedures of the modern automobile, its components and accessories is developed through classroom study and intensified live laboratory experience. Included in the program is a study of the diesel engine and its special properties with the emphasis on maintenance, servicing, diagnosis and repair of diesel component parts and accessories. Laboratory instruction is performed on modern equipment and live training units. Students are required to provide basic hand tools for utilization in the laboratory.

In addition, students may receive an Applied Arts and Sciences Degree or an Associates in General Studies Degree by meeting the requirements described on page 23.

FIRST	YEAR				
		Credit			Credit
First Sen	nester	Hours	Second S	Semester	Hours
AM130	Automotive and Diesel Engines,		AM131	Automotive Fuel, Ignition a	nd
	Clutches and Manual Transmission	ns 11		Emission Control Systems	11
VE110	Shop Mathematics	3	AM120	Automotive Chassis	
VE250	Basic Electricity	_3_		Electrical Systems	3
		17	VE253	Hydraulics & Fluid Power	3
					17

SECO	ND YEAR				
		Credit			Credit
Third Se	mester	Hours	Fourth S	cmester	Hours
AM230	Automotive Chassis and		AM235	Diesel Engines and Auxiliary	
	Automatic Transmissions	17		Systems	11
AM232	Parts Management	2	AM233	Service Management	2
WE110	Related Welding Skills	3	AM231	Automotive Air Conditioning	
		16		Systems	3
		,,		•	16

NOTE: The Automotive Program is presently under study. When new course titles and descriptions are approved they will be made available as an addition to the catalog.

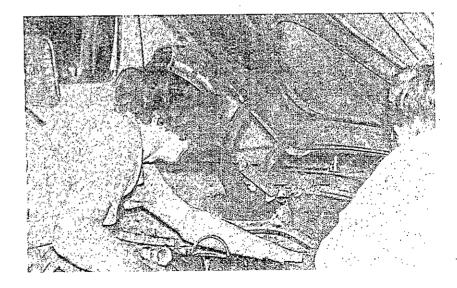
# Automotive Maintenance Technology

Two-Year Certificate of Achievement (71 credit hours required)

FIRST	LEMIT				Credit
		Credit			
First Semi	ester	Hours	Second S	Semester	Hours
	Automotive and Diesel Engines,		AM131	Automotive Fuel, Ignition as	nd
	Clutches and Manual Transmissio	ns 11		Emission Control Systems	11
	Shop Mathematics	3	AM120	Automotive Chassis and	
	Basic Electricity	3		Electrical Systems	3
1 4200	200,0 2,021,,	17	VE253	Hydraulics & Fluid Power	<u>. 3</u> 17

SECO	ND YEAR	,			*
Third Se	mester	Credit Hours	Fourth S	emester	Credit Hours .
AM232 VE100 WE110	Automotive Chassis and Autom Transmissions Parts Management Vocational Communications Related Welding Skills	11 2 3 3 19	AM235 AM233 AM231 VE102	Diesel Engines and Auxiliary Systems Service Management Automotive Air Conditioning Systems Technical Writing and Speaki	3

NOTE: The Automotive Program is presently under study. When new course titles and descriptions are approved they will be made available as an addition to the catalog.



# Aviation Maintenance Technology (89 credit hours required)

The Aviation Maintenance Technician Program is designed to provide the skill and knowledge necessary to meet the requirements for the Federal Aviation Administration mechanics licenses with the Airframe and Powerplant (A & P) Ratings, This 72-week program of studies is structured to provide the required 1900 clock hours of classroom and laboratory training in compliance with FAA regulations. Enrollment in this program is limited and selection of qualified students may be based upon academic record, background of experience, and/or proficiency examination. The required courses are presented here in a suggested schedule form and beginning students should follow this schedule if possible. A certificate is awarded upon successful completion of the program. A mechanics license is awarded upon successful completion of FAA tests.

In addition, students may receive an Applied Arts and Sciences Degree or an Associates in General Studies Degree by meeting the requirements described on page 23.

# FIRST YEAR

First Ser Clo	. 1 44	Credit Hours		Semester	Credit Hours
AV101 AV105 AV102 AV103	30 Introduction to Aviation 75 Basic Science 75 Airframe Nonmetal Structures 150 Airframe Sheet Metal Structure		AV111 AV112	60 Airframe Assem. & Rigging 150 Hydraulic & Pneum Systems	3
AV104 AV116 AV117	60 Aircraft Welding 45 Materials & Processes I 60 Materials & Processes II 495	3 2 2 20	AV113 AV114 AV115	105 Airfraft Electrical § 120 Aircraft Instru. & C 75 Aircraft Fuel System 510	Controls 5

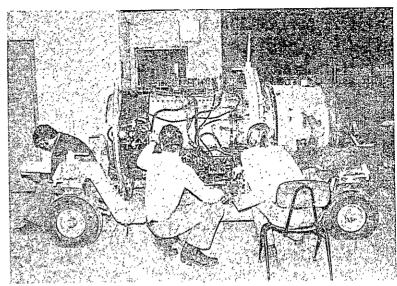
# SECOND YEAR

		,			
Third Semester Clock Hrs.		Credit Hours	Fourth S Clo	Semester ock Hrs.	Credit Hours
AV202	120 Engine Electrical Systems	5 3 5 3	AV212	45 Aircraft Drawing 120 Aircraft Recip. Eng 90 Aircraft Eng. Ign. S 120 Eng. Fuel & Induct	ystems 4
	375	16	AV214	60 Turbine Engines	3 19

### SECOND YEAR

Summer Semester (12 week session)

С	" lock Hrs.	Credit Hours
AV215	90 Aircraft Propellers	4
	105 Aircraft Servicing	5
AV217	45 Weight and Balance	2
AV218	30 FAA Review	_2
	270	13



Aviation students studying the fuel feed system of a jet engine.

# AVIATION MAINTENANCE TECHNOLOGY



Aviation students working on a jet engine

# **Business Studies** Mid-Management

Job entry into the environment of business is continually requiring a higher level of preparation. These curriculums are prepared to provide the necessary qualifications for entrance above the lowest managerial levels and for advancement toward the highest managerial levels. The student is provided with the necessary business skills as well as the theoretical and practical applications of business and industrial management. It is possible for the student to concentrate in the following areas: accounting, finance, manufacturing and retailing. It is important that a student meet with a counselor to plan the proper sequences of courses for each of the above areas.

In addition, students may receive an Applied Arts and Sciences Degree or an Associates in General Studies Degree by meeting the requirements described on page 23.

# REQUIRED COURSES FOR EACH CONCENTRATION

		Hours
BE115	Accounting (	4
BE116	Accounting II	4
BE120	Business Math	3
BE200	Business Law I	3
BE237	Management	3
		17

# Accounting

(62 credit hours required)\*

REQUIR	RED ACCOUNTING COURSES	Credit Hours			Credit Hours
BE100	Beginning Typing	3	BE246	Tax Accounting	3
BE201	Business Law II	3	BE250	Personnel Relations	3
BE215	Cost Accounting [	3	LA210	Speech	3
BE216	Cost Accounting It	3	SS215	Principles of Economics	3
BE240	Business Machines	4	SS220	General Psychology	3_
					21

<sup>\*</sup>It is important that a student wishing to concentrate in the above area meet with a counselor. These courses must be taken in the proper sequence.

# Finance

(62 credit hours required)\*

prou	ED FINANCE COURSES	Credit Hours	BUSINE	SS ELECTIVES	Credit Hours
RECOUR					127
BE135	Introduction to Business	3	BE100	Beginning Typing	(3)
BE201	Business Law II	3	BE103	Beginning Shorthand	(4)
BE238	Money and Banking	3	BE240	Business Machines	(4)
BE252	Financial Principles	3	BE280	Introduction to Electronic	
BE253	Principles of Investment	3		Data Processing	(3)
BE268	Credits and Collections	3			10
5-2200		18			
			A total o	of 10 credit hours are required	from this

\*It is important that a student wishing to concentrate in the above area meet with a counselor. These courses must be taken in the proper sequence.

SENER	AL EDUCATION ELECTIVES	
.A210	Speech	(3)
S215	Principles of Economics	(3)

A total of 3 credit hours are required from this

Political Science

# Manufacturing

(62 credit hours required)\*

		Credit
REQUIR	ED MANUFACTURING COURSE	Hours
BE135	Introduction to Business	3
BE236	Production Management	3
BE250	Personnel Relations	3
BE255	Purchasing	3
BE273	Industrial Relations	3
BE278	Production and Quality Control	3
		18

*It is important that a student wishing to concer	trate in the
above area meet with a counselor. These cours	es must be
taken in the proper sequence.	

	•	Credit
BUSINE	SS ELECTIVÉS	Hours
BE100	Beginning Typing	(3)
BE103	Beginning Shorthand	(4)
BE240	Business Machines	(4)
BE280	Introduction to Electronic	
	Data Processing	(3)
		10

A total of 10 credit hours are required from this group.

GENER	AL EDUCATION ELECTIVES	
LA210	Speech	(3)
SS215	Principles of Economics	(3)
SS240	Political Science	(3)
		-3

A total of 3 credit hours are required from this group.

# Retailing

# (65 credit hours required)\*

REQUI	RED RETAILING COURSES	Credit Hours
BE135	Introduction to Business	3
BE233	Merchandising (	3
BE234	Merchandising II	3
BE248	Advertising	3
BE250	Personnel Relations	3
BE265	Sales Management	3
BE268	Credits and Collections	3
		21

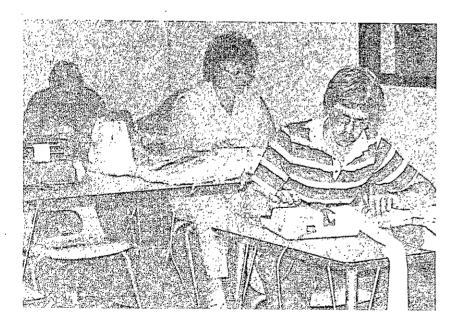
\*It is important that a student wishing to concentrate in the above area meet with a counselor. These courses must be taken in the proper sequence.

BUSINE	ESS ELECTIVES	Credit Hours
BE100	Beginning Typing	(3)
BE103	Beginning Shorthand	(4)
BE240	Business Machines	(4)
BE280	Introduction to Electronic	, ,
	Data Processing	(3)
		10

A total of 10 credit hours are required from

GENERA	L EDUCATION ELECTIVES
LA210	Speech
SS215	Principles of Economics
SS240	Political Science

A total of 3 credit hours are required from this



# Secretorial Sciences



# **Executive Secretary** (66 credit hours required)

The graduate of the Executive Secretarial Science curriculum will have (1) a knowledge of business technology, and (2) a skill in dictation and accurate transcription of business letters and reports. The graduate is prepared to be employed as a stenographer or a secretary. Stenographers are primarily responsible for taking dictation and transcribing letters, memoranda or reports. The secretary, in addition to taking dictation and transcribing, is responsible for meeting office callers, screening telephone calls, and assisting the executive. An Associate Degree will be awarded upon successful completion of this program.

In addition, students may receive an Applied Arts and Sciences Degree or an Associates in General Studies Degree by meeting the requirements described on page 23.

		Credit			Credit
BEOLIE	ED BUSINESS COURSES	Hours	REQUIR	RED BUSINESS COURSES	Hours
BE101	Intermediate Typing	3	BE130	Business Correspondence 11	. 3
BE202	Advanced Typing	3	8E230	Typing & Office Practice	3
*BE104	Intermediate Shorthand	4	BE117	Clerical Accounting	3
BE203	Advanced Shorthand	4	BE200	Business Law	3
BE120	Business Math	3	BE240	Business Machines	4
BE135	Introduction to Business	3	BE250	Personnel Relations	3
BE129	Business Correspondence 1	3	BE280	Introduction to Electronic D Processing	ata 3

\*Students without high school typing and shorthand must take BE100 and BE103 before placement in

		Credit
RELATE	D COURSES	Hours
VE290	Field Experience Co-Op !	3
VE291	Field Experience Co-Op 11	3
	or	6

Academic and Business electives from LA210,

SS215, LA160, BE237, BE255, or BE220.



# Stenographer (33 credit hours required)

This curriculum is planned for the high school graduate who has majored in business and desires advanced studies to perfect skills, but who can spend only one year in college. A student who had little or no previous business training and can spend only one year in college may also wish to follow this curriculum. This is a one-year certificate program.

Upon completion of this one-year intensive business program, a certificate of achievement will be awarded.

In addition, students may receive an Applied Arts and Sciences Degree or an Associates in General Studies Degree by meeting the requirements described on page 23.

BE104         Intermediate Shorthand         4         BE203         Advanced Shorthand         4           BE120         Business Mathematics         3         BE130         Business Correspondence II         3           BE117         Clerical Accounting         3         BE230         Typing & Office Practice         3           BE200         Business Law         3         BE240         Business Machines         4	BE120 BE117	Intermediate Typing Intermediate Shorthand Business Mathematics Clerical Accounting	3 3 3	BE130 BE230	Advanced Typing Advanced Shorthand Business Correspondence II Typing & Office Practice	Credit Hours 3 4 3 3 4 17
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# Clerk-Tupist

# (31 credit hours required)

The demand for skilled and well-qualified personnel is rapidly expanding. The objective of the Clerk-Typist curriculum is to prepare persons of any age for employment in a variety of office occupations which include the development of skills in the use of all office machinery and the knowledge needed to carry on routine office functions. Previous training in typing is desirable. A certificate will be awarded upon successful completion of the program requirements. A student wishing to continue training may apply credits earned toward the Secretarial or Management programs.

In addition, students may receive an Applied Arts and Sciences Degree or an Associates in General Studies Degree by meeting the requirements described on page 23.

First Ser	nester	Credit Hours	Second S	Semester	Credit Hours
BE101	Intermediate Typing	3	BE202	Advanced Typing	3
B£120	Business Mathematics	3	BE130	Business Correspondence 11	3
BE117	Clerical Accounting	3	BE230	Typing & Office Practice	3
8E135	Introduction to Business	3	BE250	Personnel Relations	3
BE129	Business Correspondence I	3	BE240	Business Machines	4
		15		•	16

# Practical Nursing

(51 credit hours required)

After completion of this forty-one week program, students are eligible to take the Michigan Board of Nursing Examinations to become licensed to practice. This program is conducted with the approval of the Michigan Board of Nursing.

Montcalm Community College is affiliated with four area hospitals. They are United Memorial Hospital in Greenville, Carson City Hospital in Carson City, Kelsey Memorial Hospital in Lakeview, and Ionia County Memorial Hospital in Ionia.

# Requirements:

- All applicants must be high school graduates, or the equivalent. Applicants without high school diplomas must pass the GED test, equivalent to the 12th grade level.
- Applicants are required to take the PSB Test which is scheduled through the Director of Nursing Office.
- All applicants must schedule a personal interview with the Director of Nursing or a member of the nursing staff.
- 4. All students admitted to the program will be required to submit a physical examination.

In addition, students may receive an Applied Arts and Sciences Degree or an Associates in General Studies Degree by meeting the requirements described on page 23.

Fall Seme	ester	Credit Hours		Semester	Credit Hours
PN100	Nursing Skills (	4	PN200	Maternal and Child Health	2.
PN115 .	Clinical Practicum !	3	PN210	Nursing Skills II	2
PN110	Food in Health and Disease	2	PN215	Clinical Practicum II.	12
PN120	Personal & Environmental Health	. 2	PN220	Medical-Surgical Nursing	4
PN130	Body Structure and Function	7	PN225	Mental Health	1
PN140	Human Growth & Behavior	_3_	_		21
		21		·	

		Credit	
Summer	Semester	Hours	
PN230 PN240	Pharmacology Ciinical Practicum, III	. <u>7</u>	
		9	

# Residential Construction Technology

The Construction Technology Program is designed to provide the student with trade entry skills and to upgrade those presently in the occupation. The instruction is practical in nature, supplemented with theoretical lecture sessions. The program is intended to be terminal, in that it provides training for job placement, the do-it-vourself home builder. and the hobby builder.

In addition, students may receive an Applied Arts and Sciences Degree or an Associates in General Studies Degree by meeting the requirements described on page 23.

		Credit		-	Credit
Fall Semeste	r	Hours	Spring S	emester	Hours
RC120 Cd	instruction I	12	RC121	Construction 11	12
RC110 Cc	instruction Methods & M	laterials 1 3	RC111	Construction Methods &	
Elective from	n RC161, RC130, RC115	5, RC140 2		Materials II	3
		17	Elective	from RC290, RC292, RC150.	
			RC170	×	2
					17

CONSTR	OCHOM RECHNOLOGY ELECTIVES				
		Credit			Credit
Fall Seme	ester	Hours	Spring S	Semester	Hours
RC161	Basic Block Laying & Brick Laying	2	RC290	Basic Plumbing	2
RC130	Electrical House Wiring	2	RC292	Residential Heating	2
RC115	Architectural Blueprint Reading	2	RC150	Countertopping	1
RC140	Use of The Framing Square	1	RC170	Fireplace Construction	2



Residential Construction program in action

# Welding Technology

(37 credit hours required)

Welding is a skill which is essential to many industries. This program stresses the development of techniques and understanding of quality weldments. Effects of heat and stress on welded materials are studied and practiced in the laboratory. The student may develop sufficient skill for AWS Certification and receive the Certificate of Achievement upon successful completion of program requirements which follow.

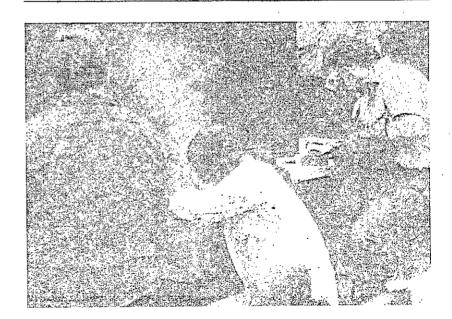
In addition, students may receive an Applied Arts and Sciences Degree or an Associates in General Studies Degree by meeting the requirements described on page 23.

First Sen	,	Credit Hours	( Second S	Semester	Credit Hours
*WE100	Welding Fundamentals & Practices	s 11	*WE101	Advanced Welding	11
VE110	Shop Mathematics	3	VÈ100	Vocational Communications	3
VE104	Shop Drawing	2	VE102	Technical Writing & Speaking	2
VE253	Hydrautics & Fluid Mechanics	_3_	VE106	Blueprint Reading	
	•	19	•	•	18

The student may elect to enroll in one or more advanced special welding courses to accomplish a greater in-depth study of a special technique or skill. The student may elect from the following:

WE102	Advanced Welding Laboratory 1	(3)
WE103	Advanced Welding Laboratory II	(3)
WE104	Advanced Welding Laboratory [1]	(3)

\*In lieu of WE100, WE110 a student may enroll in WE102, WE103, WE104 and WE110 and repeat these courses until necessary skills are developed and required credit hours are met.



# Course Descriptions



The following alphabetical list of courses will be offered by Montcalm Community College. each course appearing on schedules at least once in two years. Most will be offered more frequently. The Course Schedules specify class offerings, times and locations.

Numbers in the parenthesis ( ) which follow course titles represent the total credits. hours of lecture/demonstration, and hours of laboratory in that order. (For example, (4,2,2) represents four semester hours of credit given for the course, two of the four hours will be lecture/demonstration, and two of the four hours will be laboratory-type classes.) In some cases the instructor may designate additional hours of laboratory.

# Allied Health

The following courses have been developed by Montcalm Community College to meet specific community needs. The college offers these courses when adequate student interest and enrollment exists.

# Courses for Persons Employed in the Operating Room

#### AH100 Introduction to ORT (1,1,0,) 16 contact hours

This course will provide the student with background information regarding technician functions, the background of surgical practice, a brief history of how surgery has evolved over the centuries, correct usage of medical terminology, and units of weights and measures. Emphasis will focus on the student code of behavior and will include ethical, moral, and legal responsibilities.

### AH101 Body Structure and Function (4,4,0) 64 contact hours

The student will acquire a broad foundation in regard to basic understanding of body structure and functions. Each system will be studied independently and the interrelationships of the body systems will be emphasized. (Students having completed PN130 in the Practical Nurse Program will not be required to take this course.)

### AH102 Microbiology (2,2,0) 32 contact hours

This course will provide the learner with a firm understanding of microbiology so that a clear appreciation of the relationship of micro-organisms with the maintenance of health and the prevention of disease will be maintained. especially as it applies to the practice of operating room technology. The trainee will learn that infection control requires constant vigilance and interdepartmental cooperation. A thorough understanding of the principles involved in sterilization procedures will be developed.

### AH103 Surgical Principles & 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

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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 PN 130, AH 102, and AH 103.

# Courses for Adult Foster Care Home Operators and Employees

#### AH120 Adult Foster Care Training I (2.2.0)

A course designed to assist adult foster care providers to meet the rules and regulations of the Department of Social Services effective in 1976. Attention will be given to these specific areas: Department of Mental Health philosophy of A.F.C.; home management and administration; client programming; health care; needs of the aging; needs of the chronically ill; needs of the mentally ill; and needs of the mentally retarded.

STUDENTS SHOULD HAVE COMPLETED AH120 ADULT FOSTER CARE TRAINING I (2, 2, 0) AS PREREQUISITE FOR THE FOLLOWING ONE CREDIT COURSES.

#### AH130 Care of the Older Adult (1.1.0)

A course designed to assist adult foster care providers in dealing with the problems associated with caring for the elderly resident. Attention will be given to these specific areas:

- 1. Physiological and psychological characteristics of the aging process.
- 2. Medical aspects of the aging process.
- Sources of stress for the elderly resident.
- Interpersonal communication.
- Death and dying.
- Information and referral.
- In-home programs.
- The attitude of the homeowner as it relates to the emotional and psychological problems of the resident.

#### AH140 Mental Retardation (1,1,0)

This course is designed especially for those persons involved in providing services to mentally retarded individuals residing in group homes or foster care homes. The major thrust of this course is planning for normalization achievement and concepts of behavior modification.

#### AH150 Emergency Health Care (1,1,0)

The Emergency Health Care course is designed to meet the specific emergency health needs that the adult foster care provider may be confronted with. The course content will include a general introduction to First Aid principles and philosophy and emergency care for: 1) fainting and loss of consciousness, 2) convulsions, 3) heart disease and cardiovascular accidents, 4) choking, 5) medication overdose and poisoning, 6) psychotic episodes, 7) controlling heavy bleeding, signs and prevention of shock, 8) CPR technique and 9) cuts, burns, foreign bodies and fractures.

### AH160 Administration—Small Facilities (1.1.0)

This course is offered to further develop the AFC provider's knowledge of normalization. Methods of letting the foster care resident obtain an existence as close to normal as possible will be presented.

#### 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.

### AH 190 Mental Illness (1.1.0)

This course is intended to expose the AFC Provider to additional knowledge regarding the concept of mental illness. Four major content areas are explored via lecture and small group discussion. These are behavior and symptons of mental illness. medications, crisis intervention, and improving daily living skills.

# AH200 Behavioral Management (1.1.0)

This course focuses on a presentation of behavior management material. Concepts are listed in a suggested order of occurrence. Films, review exercises, hand out material, and dialogue or problem solving items will be part of the teaching strategies used. The substance of this course is the behavior of the student in relation to the behavioral principles and the behavioral situations presented.

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

# FP 101 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.

# 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.

# 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.

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# 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 comfortabe 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, 20 contact

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.

# 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 "adoption" problems and develop sensitivity in recognizing and managing the feelings of children who have differential ties to the family.

#### 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.

# 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, 36 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 view, scale drawing, phantom outlines, structural steel shapes, mechanical accessories, A.S.A. symbols, systems of drill sizes and gear formulas.

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

# 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, pulley and gear, applied mechanics and strength of materials, speed 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 Material and Hydraulics (2 credit hours, 42 clock hours)

Areas covered by this course are simple stresses, shear, riveted joints, stresses in thin-walled cylinders-weld torsion, seam-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 as: lettering, instrument usage, technical terms, applied geometry, free hand sketching, orthographic auxiliaries 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 techniques and processes used to fabricate metal products by welding. Laboratory experiences include oxyactylene welding and cutting, soldering and brazing, shielding metal-arc welding, inert-gas-shielded (mig-tig), 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 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 - Sheet Metal 1 (2 credit hours, 42 clock hours)

This course covers instruction on die design standards, solid and spring stripper drop through blanking die, inverted type blanking die, compound blank and pierce die, composite section blanking, solid forming dies, single and multiple pressure pad forming dies, and progressive type dies such as pierce, blank, notch, countersink, cutoff and form.

- AP136 Tool and Die Design Sheet Metal II (2 credit hours, 42 clock hours) A continuation of AP135.
- AP137 Tool and Die Design Sheet Metal III (2 credit hours, 42 clock hours) A continuation of AP136.
- AP138 Tool and Die Design Sheet Metal IV (2 credit hours, 42 clock hours) A continuation of AP137.

#### AP140 Tool and Die Design - Plastic Mold 1 (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 Machinists 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 gages, uses of iron and steel-heat treat and hardness, 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 human 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

# AM120 Automotive Chassis Electrical Systems (3,3,0)

This course is designed to furnish the student the necessary technical knowledge and the practical experience to diagnose and repair chassis electrical problems. Special emphasis will be placed on lighting circuits, horn circuits, directional signal circuits, power accessory systems, heating circuits, and all warning systems circuits.

# AM130 Automotive and Diesel Engines, Clutches and Manual Transmissions (11,4,12)

This course covers instruction in theory, laboratory procedures, diagnosis and operations for automotive and Diesel engines, clutches and manual transmissions. Shop work consists of the overhaul or rebuilding of engines. clutches and manual transmissions. All popular engines are covered, including the study of the gas turbine and the Wankel engine,

# AM131 Automotive Fuel, Ignition and Emission Control Systems (11,4,12)

This course is designed to develop the student's abilities as a diagnostician or tune-up man. Diagnosis is stressed on actual problems. The student receives an in-depth study of fuel, carburetion, starting, charging, standard ignition, electronic ignition and emission control systems.

# AM230 Automotive Chassis and Automatic Transmissions (11,4,12)

This course covers front end alignment, brakes, steering, drive line, differentials and automatic transmissions. Laboratory experience involves diagnosis and repair on live late model units using latest methods on modern equipment.

# AM231 Automotive Air Conditioning Systems (3,1,2) Spring Semester

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The theory, servicing and diagnosis of automotive air conditioning units is covered in depth. Laboratory experiences are on live units using modern equipment in both areas. Advancements in emission controls are studied in depth as new systems are introduced.

# 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.

### AM235 Diesel Engines and Auxiliary Systems (11,4,12)

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, farm or heavy equipment fields. Special emphasis will be placed on the fuel injection systems, governors, and turbo-charger. Prerequisites: AM130, AM131, AM230, AM110, VE250, VE253, VE110, (VE100 or LA100) or qualified work experience.



# Aviation Mechanics Technology

# AV101 Introduction to Aviation (1,2,0)

An introductory course including aircraft nomenclature, theory of flight, and principles of aircraft maintenance and repair.

# AV102 Airframe Nonmetal Structures (3,2,3)

This course includes the study of the repair of wood structures, fabric coverings, and the application of aircraft finishes.

# AV103 Airframe Sheet Metal Structures (6,4,6)

This course includes the study of the repair of sheet metal structures; including various types of fasteners, plastics, honeycomb, and interior furnishings.

# AV104 Aircraft Welding (3,1,3)

This course is designed to provide the student with skills for soldering, brazing, 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.

# AV113 Aircraft Electrical Systems (4,3,4)

This course will provide the student with an understanding of aircraft electrical system operation and the repair of electrical system components. Prerequisite: AV105.

# 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 (2,1,2)

This course includes the study of nondestructive testing methods, heat-treating processes, aircraft hardware, and cleaning methods.

# 48 Instructional Information

# 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, It also includes the study of the causes of corrosion, its identification, removal, and the protection of parts from further erosion.

# 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 hand and power tools used in shaping and processing of metal.

# AV203 Engine Electrical Systems (5,4,4)

This course includes the 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. Prerequisite: 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 harness. Prerequisite: AV105.

# 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)

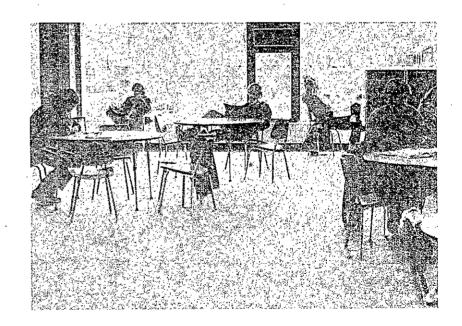
This course includes the study of the proper procedures for weighing an aircraft, finding the center of gravity and the movement of the center of gravity with changes in loading. Prerequisite: AV105.

# AV218 FAA Review (2,2,0)

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, airports, 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.



# **Business Studies**

### BE100 Beginning Typing (3,1,3) Fall & Spring Semesters

This is an introduction to and a mastery of the typewriting keyboard. Personal and business letters, elementary tabulation, simple outlines, and manuscript writing are included.

#### BE101 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: BE100 or equivalent.

#### BE103 Beginning Shorthand (3,1,3) Fall Semester

A course in the elementary principles of Gregg Shorthand, Prerequisite: BE100 or equivalent.

### BE104 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: BE101 & BE103.

### BE115 Accounting I (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.

# BE116 Accounting II (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 reasonably accurate financial reports. Prerequisite: BE115 or equivalent.

#### BE117 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.

#### BE120 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.

### BE129 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 BE100.

# BE130 Business Correspondence II (3,3,0) Spring Semester

A study of effective correspondence in business. Prerequisite: BE100, BE129.

### BE135 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.

#### BE200 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.

# BE201 Business Law II (3,3,0) Spring Semester

A continuation of BE200. Security devices, commercial paper and agency and employment are considered. Special emphasis is placed on corporate and partnership law.

# BE202 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: BE101 or equivalent.

#### BE203 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: BE101 and BE104.

# BE215 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 of and preparation of factory overhead, material, and labor costs in a form acceptable to AICPA will be taught. Prerequisite: BE116.

### BE216 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: BE215.

# BE220 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: BE101.

# BE230 Typing and Office Practice (3,1,3) Spring Semester

A course in which subject matter and skill development are drawn together in practical application.

#### BE233 Merchandising I (3,3,0) Fall Semester (even years)

This course is an introduction to marketing, with special emphasis upon retailing from the standpoint of both consumers and businessmen. The establishing, financing and organizing of merchandising institutions, as well as buying and selling procedures are covered.

#### BE234 Merchandising II (3,3,0) Spring Semester (odd years)

A continuation of BE233 with emphasis placed upon control of the operation. Prerequisite: 8E233 or equivalent.

### BE235 Small Business Management (3,3,0) Spring Semester

A study of the operation of small business, Included in the course are topics dealing with organization, financial structure, record keeping and promotion of small business. Also included are topics dealing with salesmanship, personnel relations, customer psychology and business law.

#### BE236 Production Management (3,3,0) Fall Semester (odd years)

The management functions as applied to the production of products. The inputs of capital, labor, design, and purchasing are covered with emphasis upon the process including all types of control. Prerequisite: MA159 or equivalent.

#### BE237 Management (3,1,2) Fall Semester

A study of management with three primary purposes: to cover in detail the managerial process, to understand the purposes of organizations and how they function, and to understand human behavior as it relates to organizations.

#### BE238 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.

# BE240 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 key-board, electronic display, and electronic printer. Preparation of information storage cards on the key-punch using raw data is included. Prerequisite: BE120 or equivalent.

#### BE246 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.

#### BE248 Advertising (3,3,0) Spring Semester

The role of advertising in society is investigated along with its institutions and media. The creation and planning of advertising is covered along with effective promotional activities.

# BE250 Personnel Relations (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.

#### BE252 Financial Principles (3.3.0) On Demand

Monetary and credit systems are covered extensively with emphasis placed on meeting the demand for funds, the factors affecting the supply of funds, and monetary and credit policies and problems.

#### BE253 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: BE135 or equivalent.

# BE255 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: BE237.

# BE265 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.

# BE268 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 dealer's and 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.

# BE273 Industrial Relations (3,3,0) Spring Semester (odd years)

The components of personnel problems, supervision skills, organization, manpower, and employment development are investigated. Incentives and management responsibilities are covered also.

# BE278 Production and Quality Control (3,3,0) Spring Semester (even years)

Organizing for production, intermittent and continuous production are studied, Control for job shops, repetitive production, continuous production, and automatic production along with mathematical methods for solving problems are covered. Prerequisite: BE236.

# BE280 Introduction to Electronic Data Processing (3,2,1) Fall Semester

This course provides 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.

# 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: FL 120 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,

# **Humonities**

# 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.

# HU120 Introduction to Art (2,1,2) Lecture and Studio

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

#### HU122 Drawing (3,1,3) Studio

This course explores traditional and experimental drawing techniques using a variety of subjects and materials.

# 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 places emphasis on 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 instrumental and/or vocal ensembles. Participants will be selected after audition with the director. Each ensemble will meet once per week with the director to rehearse and to set up rehearsal schedules. There will be vocal ensembles such as mixed ensemble, girl's ensemble and men's quartet. Following are the potential instrumental ensembles; brass choir, woodwind quintet, and trumpet trio.

#### HU194 Special Ensemble (1,0,2)

A continuation of HU193.

#### HU195 Stage Band (1,0,2)

This group is made up of instrumentalists having previous band experience. Rehearsals are held two times per week. The schedule will be arranged after the first class meeting.



#### HU196 Stage Band (1.0.1)

A continuation of HU195.

### HU200 Humanities 1 (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, philosophy, science and religion.

#### HU201 Humanities II (4.4.0)

Continuation of HU200. Emphasis on the modern historical development of thought in art, literature, music, philosophy, science and religion.

### HU225 Art for the Elementary Teacher (2,1,2) Lecture and Studio

This course combines instruction in the practice and philosophy of teaching arts and crafts to children, with studio work in a variety of materials and techniques suitable for their use.

#### HU227 Painting III (3.1.3) Studio

This course places emphasis on exploration of traditional or experimental painting techniques. Prerequisite: HU126.

# HU228 Painting IV (3,1,3) Studio

This course places emphasis on development of individual expression. Prerequisite: HU227.

#### HU232 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: HU131.

#### HU233 Ceramics IV (3.1.3) Studio

This course places emphasis on refining forms and developing an understanding of raw materials and glaze formulation. Prerequisite: HU232

# 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.

#### LA150 Speed Reading (1.0.2)

This course is designed to increase reading speed and comprehension. The laboratory exercises will be adopted to each individual. The course may be repeated as many times as is deemed necessary, but a maximum of two credits will be allowed."

# 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 th "thematic" approach. The student, while required to know the tradition. historical framework, actually reads modern literature as well as the olde literature, guiding his/her reading according to the recurring themes, problem and "continuing causes" which have concerned Americans from the beginning t the present day.

# LA201 American Thought and Literature (3,3,0)

This is a survey of American literature arranged according to thematic concer (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 provide practice in speaking with interest and purpose before an audience Through presenting a series of brief talks before peers, the student will becor familiar with the basic principles of speech organization, preparation a delivery.

# LA212 Oral Interpretation (3,3,1)

Through analyzing and reading aloud selected prose, poetry and drama, to student will improve his/her own understanding of these works and incre his/her ability to communicate with others. The course will relate interpretat reading to the other areas of speech: public address, television, theatre, spee improvement, and the teaching of literature.

# LA220 English Literature from the Beginnings to 1798 (3,3,0)

This is a systematic study of English literature which stresses the princi authors and their works. Reading and discussion will include representawritings of the period from the beginning to the end of the eighteenth centu 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

# 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.

# LA295 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.

# **Mathematics**



MA100 Elementary Algebra (3,2,1)

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 (3,2,1)

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 (3,2,1)

This course will provide students with the algebraic skills, includin manipulation and proofs necessary for the study of college algebra and analyti geometry. Topics covered include the usual topics through quadratics plus th exponential and logarithmic functions, the binomial theorem, sequence systems of equations, complex numbers, permutations and combinations with  $\boldsymbol{\epsilon}$ introduction to probability. Prerequisite: MA100 or equivalent.

MA151 Math for Elementary Teachers (3,2,1) Fall Semester

This course will provide the elementary teacher with the necessary backgroun to teach mathematics in the elementary school. Such subjects as the origin systems of numeration, sets, systems of whole numbers, bases other than te systems of integers, rational and real numbers will be discussed.

MA159 College Algebra (3,2,1) Fall Semester

Topics include the quadratic equation in two variables, sequences and seri complex numbers, DeMoivre's theorem, synthetic division, mathematical ind tion, matrices, combinations and permutations. Students must have tal trigonometry or be currently enrolled in trigomometry (MA102).

MA160 Analytic Geometry (3,2,1) Spring Semester

This course covers the straight line, the circle conics, algebraic cur transcendental curves, parametric equations, planes and lines, and quadr surfaces, Prerequisite: MA159 or equivalent,

# MA190 Elementary Statistics (3,2,1)

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, hypotheses 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 (4,3,1) Fall Semester

This course covers functions and continuity, limits differentiation, applications, integration, and the definite integral with applications. Prerequisite: MA160.

# MA251 Calculus II (4.3.1)

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.

# NS102 Physical Geography (3,3,0) (Earth Science)

A study of the earth-sun relationships, 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.

### NS200 Botany (4,3,2) Fall Semester

A survey of the plant kingdom from the simplest to the more complex. Studies of structure, classification, physiology 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 kevs.

### NS205 Zoology (4,3,3) Spring Semester

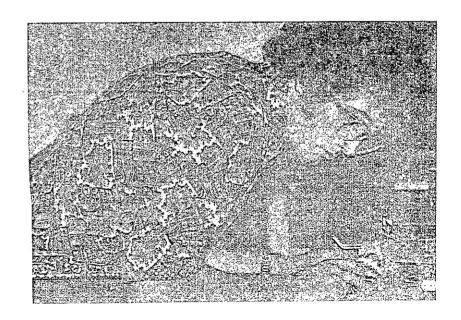
A general survey of the animal kingdom including comparative studies of the structure, function, and behavior of representatives of animal groups, Laboratory work includes dissection of representative animals from each phylum.

#### Human Anatomy and Physiology (4,3,2) Spring Semester NS207

An elementary course in human anatomy and physiology with emphasis on normal function and common disorders.

#### 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.



# N\$220 General Chemistry (4.3,4) Fall Semester

Fundamental theories, principles, and problems of chemistry will be emphasized, Prerequisite: One year of high school algebra, NS101 or permission from the instructor.

### NS221 General Chemistry (4,3,4)

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.

# 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. The fundamentals covered 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 Modern Ballroom Dancing (1,0,2)

This course will teach the student basic steps in modern social dancing Iswing. foxtrot, cha-cha, weltz, 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.

#### PF111 Karate I (1.0.2)

This course is designed to teach the student the basic kicks, punches, and block: 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.

# PE114 Beginning Western Horsemanship (2,1,1)

This course is designed to teach the student the basic principles of western horsemanship. Western horsemanship will be covered from horse care and preparation through riding and ring etiquette.

# PE115 Personal Self-Defense (1,0,2)

This course is designed to teach the student basic methods of self-defense as wel 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.

# PE117 Beginning Trampoline (1,0,2)

This course is designed to teach the basic skills and safety procedures for recreational use of the trampoline.

# PE118 Bicycling (1,0,2)

This course is designed to teach the student how to select, adjust, maintain, an use equipment properly. The student will also learn safety and riding technique Students are expected to log 150 to 200 miles during the semester.

# PE119 Beginning Tennis (1,0,2)

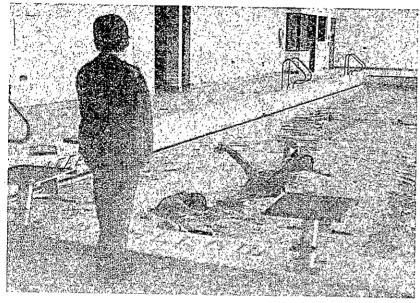
This course is designed to teach the basic skills of tennis including serve forehand and backhand ground strokes. Students will also learn the rules an strategy of the game. A class tournament will be held during the last week of class.

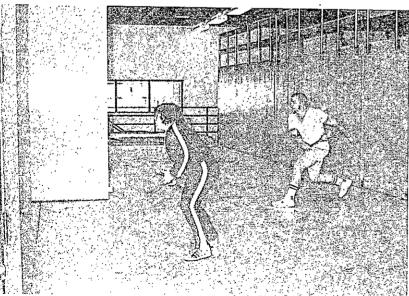
# Intermediate Tennis (1,0,2)

This course is designed to further refine the skills (ground strokes, servin volleying) and knowledge (rules, strategies, and techniques of participation) ( 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 drownproofing.

### 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 lifequard 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

# PN100 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.

# PN110 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.

# PN115 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. This course begins 5 weeks following the start of the semester for a total of 9 hours each week for 11 weeks.

# PN120 Personal and Environmental Health (2,2,0)

The person as a nurse is studied in this course. The course explores self understanding concepts and facts from nursing history and education which have evolved the present role of a member of the nursing profession. The student will be introduced to preventive medicine, health laws, organizations, the community health team and each member's role in meeting the total needs of its citizens.

# PN130 Body Structure and Function (7,7,0)

This course introduces the student to the study of the human body structure, dynamics and functions, and disease. The concept of the dependence of one system on another, and the contributions of each system to the total well-being of the individual will be emphasized. Sixteen contact hours will be spent studying the 10 most common diseases seen in local hospitals.

# PN140 Human Growth and Behavior (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 disease conditions are also presented.

# PN200 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: PN100, PN115, PN130.

# PN210 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: PN100, PN115, PN130,

# PN215 Clinical Practicum (1 (12.0.24)

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, will be the goals. Students will be assigned the care of geriatric, pediatric, medical, surgical, obstetrical, and CCU-ICU patients. Prerequisites: PN115 or equivalency.

### PN220 Medical-Surgical Nursing (4,4,0)

This course presents the more common medical and surgical conditions and the treatments 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: PN100, PN115, PN120, PN130, and PN140.

#### PN225 Mental Health (1.1.0)

This course in mental health is given to help students identify and meet the emotional needs of all patients in general hospital situations. The course also surveys concepts of the psychiatric patient and their applications to all interpersonal situations. At the completion of the course, the nursing student will be able to identify basic dynamics of human behavior and differentiate among patterns of behavior. The correlation between physical illness and emotional instability are learned as factors to consider in planning patient care. Prerequisite courses: PN100, PN115, PN130.

#### PN230 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: PN100, PN110, PN115, PN120, PN130, PN140, PN200, PN210, PN215, PN220, PN225,

#### PN240 Clinical Practicum III (7.0.25)

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: PN100, PN115, PN120, PN130, PN140, PN200, PN210, PN215, PN220, PN225.

### 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 Service, Inc. (NAPNES). The student must take a National Pre-Pharmacology test and achieve on a final test a specified percentile 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. (66 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 RC120 in that it is intended to broaden the scope of instruction gained in RC120. The course will include field trips to various construction sites (residential and commercial), a truss 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 RC121 and is intended to broaden the scope of instruction gained in RC121. The course includes guest speakers from plywood, siding, ceiling tile, and pole construction factory representatives. Field trips to various construction sites are included.

#### 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.

### RC120 Construction I (12.2.16) Fall Semester

A practical course involving full-scale construction of a residential building using modern materials and methods. This course will involve rough framing, exterior covering and closing against the weather.

#### RC121 Construction II (12,2,16) Spring Semester

A continuation of RC120 involving drywalling, plastering and interior finishing of a residential home. Pole construction is also covered.

# 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 (1,1/2,1/2) Fall Semester

A practical course consisting of the theory and application of the use of the carpenters framing square. Topics covered include common, hip, valleys and jack rafters; roof types and pitches; and rafter and stairway layout.

### RC150 Formica Countertopping (1,1/2,1/2) 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, tooling of joints, laying of a line, buttering head joints, laying headers, rowlocks and soldiers. The student will gain classroom theory and laboratory experience in the above mentioned topics.

# RC170 Fireplace Construction (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.

#### 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.

# Social Sciences

# SS100 Introduction to Social Science (4,4,0)

This course is designed to introduce the student to the interdisciplinary approach to the study of the development of human behavior. Emphasis will be placed upon those concepts and theories which have influenced people's thinking about their individual nature and social relationships, (Materials from the following disciplines will be utilized: history, anthropology, sociology, political science, psychology and economics.)

#### Introduction to Social Science (4,4,0) SS101

This course is a continuation of SS100. It is designed to study those patterns of behavior which have led to the creation of forces that have shaped modern society. Special emphasis will be given to the rights and responsibilities of citizenship and the form and function of government. Emphasis will also be given to specific problem areas which confront the contemporary world. (This course also satisfies the state requirements for political science.)

#### 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.)

#### 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.

# Contemporary Problems (1,1,0)

A continuation of SS200.

#### 70 Instructional Information

### \$\$215 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.

#### \$\$221 Child Psychology (3,3,0)

Students in this course study psychological theory 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.

#### \$\$235 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 movements, 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 about 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)

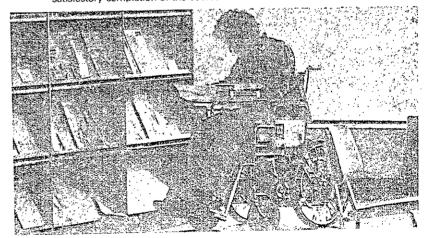
The purpose of this course is to introduce the student to the nature and function of positive self evaluation and life planning. The student, through small group exercises, will develop skills in value clarification, identifying motivational patterns, goal setting, and long range planning.

# SD110 Career Planning (1,0,1)

The purpose of this course is to introduce the student to the topic of career planning. Through interest and personality testing, group exercises, lectures and individual research, students will develop skills in career awareness, decision making and the use of occupational information sources.

# 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.



#### 72 Instructional Information

# 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 SD151 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 SD152 and wish to develop more sophisticated reading skills.

# Trade-Technical 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. Programmed instruction involving line work, projection, dimensioning and identification is the major emphasis of the course. (Normally offered only at the prision extensions in Ionia.)

# 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.

### 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, magnetism, electromagnetism, transformers and motors. This course emphasizes a "hands on" approach with the use of modern components and equipment.

#### 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.

### 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 Montcalm 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 1 (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.

#### WE110 Related Welding Skills (3.1,3)

This course covers welding theory and practice in oxy-acetylene 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.

# Directory of Personnel

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Social Science
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