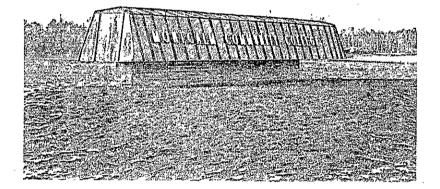


MONTCALM COMMUNITY COLLEGE SIDNEY MICHIGAN 48885 517 328 2111





1972 - 1973





CONTENTS

^ -0	
1	
2	The Educational Plan
5	Instructional Facilities
7	
13	Student Life
15	Student Services
17	Community Services
18	Admission to the College
19	Expenses
21	Financial Aid
23	Programs of Study
24	Academic Programs
27	Vocational/Technical Programs
40	Courses of Study
66	Directories
60	Calendar

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 as the result 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 committment 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. In the fall of 1971 over 53% of the registered credit hours reported were in vocational technical courses.

In August, 1966, the Learning Resources Director 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.

The position of Academic Dean became a part time position in January of 1968 and has been a full time position since the fall of 1968.

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 of 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 the Community Services Division.

The staff of Montcalm Community College has been involved in a program of self appraisal and institutional analysis designed to facilitate an examination by a team to be sent to the campus by the North Central Association of Colleges and Universities. It is currently expected that this visit will occur in the fall of 1972 and that the result should be full accreditation by the end of the 1972-73 academic year.

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



THE EDUCATIONAL PLAN

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 employed persons.
- To provide academic study at the freshman and sophomore levels transferable to senior institutions and acceptable toward a baccalaureate degree.
- 3. To provide assistance for all students through social, vocational, and educational counseling and guidance.
- To provide general education for those who study primarily to become more knowledgeable about their cultural, social, and scientific environment.
- 5. 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 activities in the Humanities; 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 are utilizing them as guidelines in the orderly 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 of 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 Montealm 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 institutional and personal objectives stated above 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

Almost from the moment the President began his work with Montealm Community College, the institution has aggressively followed the prescribed steps which will lead 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 Montealm.

To expedite the transfer of Montcalm students to four-year institutions during the normal period of five or more years before accreditation, Michigan public and private colleges and universities have 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 are designed primarily to promote occupational competency for students enrolled in the programs, certain State universities have agreed to appraise these Montcalm credits for possible transfer where they are appropriate to a student's degree program.

Montcalm Community College was awarded status as a Recognized Candidate for Accreditation by the North Central Association in April of 1969, in the minimum time possible. Under the policies of the Association, a Recognized Candidate has three years in which to complete all the requirements for full membership in the Association. Montcalm Community College has completed this extensive self-study which will need to be updated for a fall of 1972 visitation. Following this visitation, a decision will be rendered by the Association concerning the application for accreditation.

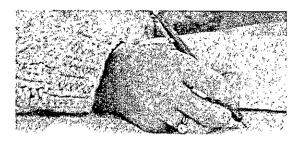
In sum, Montcalm Community College is moving, successfully and on schedule, toward full accreditation.

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

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.
- 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 forsees 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 a most 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.



INSTRUCTIONAL FACILITIES

The 1967-68 academic year became the time for transition from teaching classes in rented or borrowed facilities to full-scale, on-campus operation in buildings designed especially for Montcalm Community College. During the year, students and their instructors began using the Two-Story Academic building, the Vocational Shop building, and then the Learning Resources Center. Also completed was the Heating Plant/Service Building.

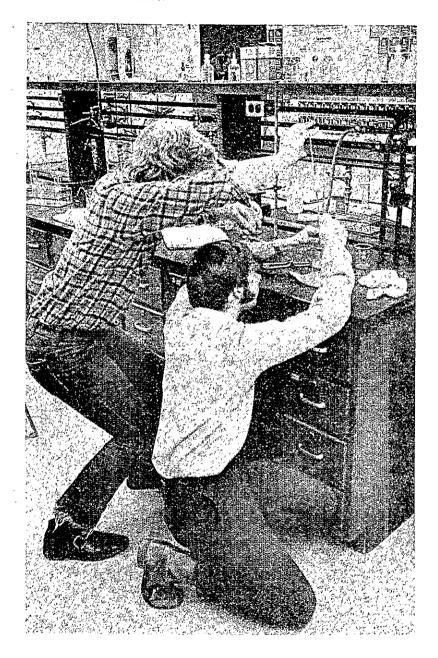
The Learning Resources Center is the central study area of the college and is an integral part of the educational program. The physical facilities provide individual study carrels, group seating, conference rooms, an electronic listening laboratory for both individual and group audio study, and a separate reading laboratory. The materials collection includes a carefully chosen and growing book collection of over 15,000 volumes, approximately 250 periodicals and newspapers, microfilm titles for back issues of needed journals, and several hundred disc and tape recordings.

In addition to regular classrooms, the Two-Story Academic facility features three demonstration/lecture rooms for the sciences, each accompanied by a well-equipped laboratory; and business secretarial wing with laboratories for business machines and shorthand transcription; the Practical Nursing facilities; and the Drafting and Design rooms.

Another addition to the campus is the One-Story Academic Building, first put into use on August 25, 1969. In addition to a number of regular classrooms, its special features include two lecture/demonstration halls seating nearly 100 and 140 persons respectively, with two small group seminar rooms immediately adjacent.

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 the Two-Story unit. During the 1966-67 year it became obvious that there was a rapidly growing need for instructional space related to the industrial/mechanical skills. Consequently, planning began in January, 1967, for the Vocational Shop Building which was ready for use by Automotive Mechanics. students in November, 1967. This facility was also prepared for the teaching of Welding, Industrial Technology and Apprenticeship beginning in January, 1968, and the 1971 addition doubled the floor space.

Other projects, as yet unannounced, are in the preliminary planning stages.



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 right after Labor Day and is completed by the Christmas holidays. 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 60-credit requirement for an Associate Degree and his 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 a 2.0 grade point average.

Those pursuing an Associate Degree must complete not only the required 60 semester credits but also the proper sequence of courses as herein presented, with an overall 2.0 grade point average. When physical education is offered, 62 credits will be required for graduation.

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 60 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 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 program.

Exceptions to specific program requirements will be made only by the Dean of the appropriate division of the College or the Dean of Students and/or his designated representative. Exceptions must be authorized in writing.

CLASS ATTENDANCE

It is the policy of Montcalm Community College that all students shall attend all classes in the courses for which they are registered. Absence from classes shall, in no way, relieve the student from completion of assigned work.

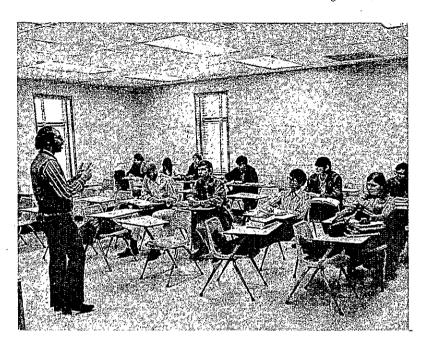
The matter of regular class attendance shall be resolved between each instructor and his students. Some absences—for reasons of illness, field trips, and other like occurrences—is unavoidable, and advance arrangements should be made for completion of work whenever possible.

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 Admissions Office.





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 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:

- a. An "l" mark shall be entered on the record when a course of study is incomplete at the termination of the scheduled semester.
- b. 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 Dean of Students.
- c. An "I" mark shall not be averaged with other grades to establish a grade point average (GPA).

GRADING SYSTEM

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

Grade	Definition	Honor Point Valu	ıe
A	Excellent performance	4	
В	Good, often above average performance	3	
С	Average performance	2	
D	Minimal passing performance	1	
E	Failure	0	
W	Withdrew while passing	0	
F	Withdrew while failing	0	
Ι -	Incomplete, with permission to complete requirements		
V	*Audit Status only		
(N)	Preceding a grade indicates credit is not recommended f	for	
",	transfer—terminal credit only.	2	

^{*}Audit applies to the situation where a person pays tuition for a course but is not necessarily required to complete assignments, outside reading or tests and examinations.

Audit credit will not be used to fulfill requirements for the G. I. Bill or the Selective Service system.

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

THE GRADE POINT AVERAGE

The grade point average is valuable both to the student and the College. It allows the student to assess his total academic performance as of any particular point in his study at Montcalm Community College. On the other hand, the College is able to evaluate an individual's performance against institutional grade requirements, admission standards of transfer colleges, eligibility requirements for interscholastic activities, and for other similar essential purposes.

Computation of the Grade Point Average is as follows:

Course	Grade	Honor Points	Credit Hours	Grade Point
X	Α	4	3	12
XX	В	3	4	12
Y	В	3	4	12
YY	С	2	i	2
Z	С	2	4	8
		Tot	als 16	46

To find the Grade Point Average: $46 \div 16 = 2.875 \text{ (GPA)}$

The cumulative grade point average for all work completed is the total number of grade points earned divided by the total of all semester credit hours for which a grade has been assigned (except W). This calculation must include semester credit hours for which the grade earned was E, even though no honor points are awarded for that grade.

Only those semester credit hours for which passing grades were received will be counted toward fulfillment of graduation requirements.

HONORS

Each semester a Dean's Honor List will be issued including the names of all students whose semester Grade Point Average exceeds 3.50. The President's Honor List will include those whose semester GPA is 4.00.

Distinguished Dean's Scholars will include those who have completed at least two semesters of study with a cumulative GPA exceeding 3.50. The President's Scholars will be those who have completed two or more semesters with a cumulative GPA of 4.00.

ACADEMIC PROBATION AND DISMISSAL

For Students pursuing an Associate Degree, College Transfer or Certificate, All students who hope to earn an Associate Degree or Certificate in either the academic or vocational/technical studies, or who hope to transfer to a four-year institution, will be subject to the following grade point regulations:

- Students who achieve less than a 1.00 GPA (D average) during their first semester at Montcalm Community College will be dismissed for academic reasons. Students dismissed may refer to item 5 below.
- Failure to achieve at least a 1.70 Grade Point Average at the end of the first semester will result in the student's being placed on academic probation.
- A student will continue on probation until his cumulative Grade Point Average has been raised to 2.0 or above.
- While on probation, a student must achieve a 2.0 Grade Point Average each semester. Failure to do so will result in academic dismissal.
- A student subject to academic dismissal may follow one of three courses of action:
 - He may accept the dismissal.
 - He may request assistance in the Counseling Center, primarily to explore the advisability of a change of curriculum. If such a change is decided upon, the counselor will make his recommendation in writing concerning the student's status. Written approval for continuing in a program will be sought from the Dean of the Division into which the student wishes to enter.

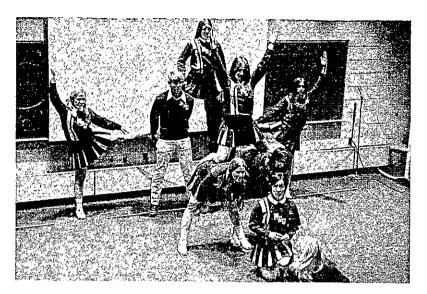
- A student dismissed from Montcalm Community College for academic reasons may appeal before the Dean of Students for special consideration.
- Students dismissed for academic reasons, either from Montcalm Community College or any other college, may be required to wait for a full semester before re-entering the College.
- Students transferring into Montcalm Community College shall be subject to all regulations stated above from the beginning of their enrollment.

DROPPING/ADDING CLASSES

In order to officially drop/add a class or classes, students must follow this procedure:

- Students must get a Drop/Add form from the Records Secretary (in Instructional Dean's Office) or from the Student Services Office. This form may be obtained beginning with the first day of classes,
- After the student has properly filled out the Drop/Add form, take the form to the instructor of the class you wish to drop/add for his signature and return the form to the Records Secretary. Deliver the form to the Business Office where any adjustments will be made in tuition and fees.
- It is important to officially drop/add in order that the student may not get an incorrect grade or be attending a class for which he will not get credit,
- Should it seem necessary for the student to drop all classes and withdraw from the College, the above procedure should be used so the transcript of classes taken will reflect a proper withdrawal.





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 Government, and students actively participate in the maintenance of the discipline that is essential in an academic community, and share in the formulation of other College policies.

The first obligation for responsibility falls upon the student himself. He must devote himself to his academic commitments. A normal load of course work at Montcalm Community College requires 12 to 20 hours of attendance in lectures, recitations, laboratories, or seminars each week. To this must be added the hours of preparation for classwork, to make a total work week averaging 48 hours. The student is obligated to plan his time carefully to meet the level of accomplishment expected in his course work.

The College is well aware that the degree of intellectual capacity, social awareness and cultural appreciation by which the graduating student differs from the entering freshman is a result not only of the student's academic or vocational program but also of all the influences and activities that the student experiences while a member of the College community. This participation may encompass involvement in activities directly relating to the formation of College policies, academic concerns, procedural patterns, and social programs. Theatrical and musical organizations, varied clubs and interest groups, and athletics add other dimensions to student development.

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

Intercollegiate Baseball

Bridge Club Cheerleading Intramurals Ski Club Stage Band

Choir Drama

Student Government

Folk-singing Intercollegiate Basketball Student Newspaper Veterans Club

STUDENT CONDUCT

Student life at Montcalm Community College is based on the broad principle of personal honor, and the College insists on high standards of honesty and considerate conduct from each of its students.

STUDENT CODE

Within the limitations which govern an ordered community, the College accords students 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 and 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 this Code may result in dismissal from the College.





STUDENT SERVICES

The College Student Services are designed to aid the student in planning well his college life. The Dean of Students Office is one which attempts to consider the needs, priorities, and possibilities of each person. Efforts are constantly made to assure each student of his rights and obligations.

COUNSELING

Students will plan each semester's program with the assistance of the counseling staff. However, each student should become familiar with his 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 vocational/technical goals with the counseling staff and members of the college faculty.

In addition to educational/vocational planning, the counseling staff looks forward to discussing with students the wide range of questions that probe all our lives: questions that tend to tilt life for us socially, personally, or academically.

TUTORING

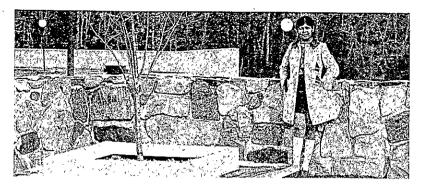
Those students who, for a variety of reasons, find themselves in need of supplemental instruction will find such aid available. This important function is funded by the College. Veterans should also keep in mind that their G. I. Bill benefits will allow for tutoring in addition to their regular financial entitlements.

PLACEMENT

The Dean of Students posts offers for summer and part-time employment. Students may register their names at his office for quick reference when job offers are discussed with prospective employers.

Placement for vocational/technical graduates is carried on chiefly between instructors and employers. A record of local industrial and business employment personnel is kept for job placement in the Montcalm area.

A library of college catalogs is available in the Dean of Students Office to assist counselors and students in planning proper transfer to four-year institutions.



AREA GUIDANCE CENTER

Montcalm Community College has been awarded a Title III grant under the Elementary Secondary Education Act for an Area Guidance Center.

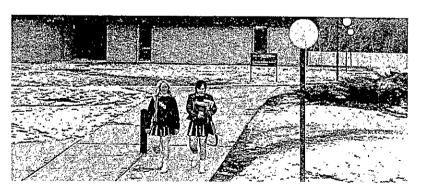
The center provides assistance in the areas of career planning and educational guidance for students at the college. Services are also available to any youth or adult in the community college service area.

Included in the services offered by the Center is an Occupational Library which contains some of the latest information on job opportunities, educational requirements and related information.

Another service available is that of interest or aptitude testing which can be utilized in helping with educational or career planning.

A full-time counselor is available at the Center to assist in career planning, administer and interpret tests, and provide information.

The Center is located in the Administration Building at the college. It is open daily Monday through Friday, evenings by appointment and on some Saturdays. Since the Center is funded by the Title III grant, the services are available at no cost to the individual.

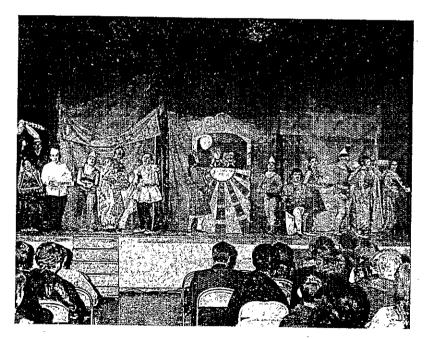


COMMUNITY SERVICES

The Community Services concept is based upon the LIFETIME learning philosophy; that it is possible to learn throughout a person's entire lifetime. Through its community services program, the community college offers a variety of services beyond its well-established degree and certificate programs. Community Services at Montcalm Community College provides for self-development and community improvement by offering non-credit short courses, off-campus credit courses, cultural enrichment activities, including a lecture/concert series, exhibits, community chorus, community theatre, etc. Other activities include a speaker's bureau, public forums on issues, conferences and workshops, student community volunteers and radio programs.

Community use of college facilities and campus tours are encouraged. These are to be scheduled through the Office of Community Services.

Community Services constitute a response of the community college to the needs of the community. The complexities of urbanization, minority group problems and racial tension, economic and technological changes, environmental decline, cultural and leisure time needs, and poverty are examples of some of the challenges facing communities. Community Services becomes the cutting edge whereby the community college attempts to meet the challenge of the changing community.



TUITION

EXPENSES

Resident of Montcalm Community College District: \$11.00 per credit hour. Michigan Non-Resident Students: \$16.00 per credit hour. Out-of-State Students: \$25.00 per credit hour.

PLEASE NOTE: 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 itself-changing rather

If a tuition change becomes necessary for the following academic year, all present students and new 1972-73 applicants will be notified immediately by letter. Residents and non-residents and out-of-state students are defined as follows: Resident Students

- Students now living with their parents or legal guardian, providing the parents or legal guardian reside within the boundaries of Montcalm Community College District.
- Students under 18 years of age whose parents are not living or for whom there is no legal guardian, providing they reside within the boundaries of Montcalm Community College District.
- Single students under 18 years of age who have resided within the boundaries of Montcalm Community College District for at least six months immediately prior to the first day of classes.
- Married students under 18 years of age who have resided within the boundaries of Montcalm Community College District for at least six months; immediately prior to the first day of classes.

Non-Resident Stridents

- Single students 18 years of age or over and married students who have not resided within the boundaries of Montcalm Community College District for at least six months prior to the first day of classes.
- Students under 18 years of age whose parents or legal guardians do not reside within the boundaries of Montcalm Community College District.

Michigan Residence Defined

. In determining the Michigan residence status the college will apply the following rules:

1. The residence of a student who is a minor follows that of his parents or legalguardian, except that a minor student who comes to this institution from another state or country cannot be registered as a resident of this state on the basis of having a resident of this state as guardian except by permission of the Board of the institution in each individual case. Six months after the parents of a minor leave the state, the minor becomes a non-resident student.

DMISSION TO THE COLLEGE

The College adheres to an "Open Door" admissions policy. This means that shidents may be admitted to academic or vocational/technical programs following Palliation from an accredited high school or after having completed successfully the General Educational Development test (G.E.D.). Under certain circumstances, students may also complete 12 hours of course work at M.C.C. before taking the

ADMISSIONS PROCEDURE

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

- Submit an application (available at your high school office or the College Dean of Students Office). Include a check for the \$5 registration fee.

 Request that your ligh school office forward one copy of your transcript of grades and standardized test results to the Dean of Students.

 Secure an M.C.C. physical examination form and have it completed by your family physician. Have him forward it to the Dean of Students.
- Taminy physician. Have him forward it to the Dean of Students.

 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.
- Male students: M.C.C. will need to know your Selective Service Board name and your own lottery muniter. Your admission, registration, and continuing strictlinent status will be reported to the proper Board by the College.

Students, transferring, from other post-secondary schools should also have a transcript of college work sent to the Dean of Students.

Students, who were enrolled in the previous semester or summer session need find re-apply, for admission. 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



A person who is at least 18 years of age at the time of registration in the institution and who has resided in this state six months next preceding the date of registration without being registered at a state-supported college or university during that period is deemed a resident of this state for the purpose of such registration.

The residence of a wife follows that of the husband, except that a woman conduct of the purpose of the residence of a wife follows that of the husband, except that a woman conduct of the purpose of

student who is a resident of this state although subsequently marrying a mon-resident student or other non-resident.

No person is deemed to have gained a residence in this state while a student

at any institution in this state. A person in the service of the United States, and his wife or minor children, who have met the six-month residence requirements in paragraph 2, may register as residents of this state.

An alien lawfully admitted for permanent residence in the United States and who has obtained his permanent visa; and his wife or minor children, who liave met the other requirements herein for residence, may register as residents of this state.

A full-time member of the "teaching staff," and a member of the teaching staff whose appointments require at least three contact hours of teaching each week in regularly assigned formal classes, and their dependents; may register as residents of this state.

Discretion to adjust individual cases within the spirit of these regulations is vested in an officer appointed by the Board of this institution.

In cases of dual residency, the residence from which the federal income tax results is filled shall determine residency.

YMENT OF TUITION AND FEES

Tinition and fees are due and payable in full on the day of registration.
Students unable to pay the tuition and fees should consult with the foliator. Student Financial Aids no less than three weeks prior to the altinent date concerning a loan.

No other credit arrangements can be made through the college. Refunds will be made only by check as follows:

Refunds will be made only by cheek as follows.
Refunds for students over 18 years of age will be made payable to the student and mailed to the address given by him except in paragraph b. below.
Students finder special scholarship and/or loan programs administered by Montealm Community College will receive no refund; the refund will be returned to the student and hot administered by the college will be refunded as in paragraph a above.

Tuition charges for college credit apprenticeship programs shall be made in idance with the residency requirements for all other students. The student dance with the residency requirements for an order students. The students for any decline high school students who may be enrolled.

Non-credit course fees shall be established and assessed for each course.

FINANCIAE ATS

The financial and policy of Montcalm Community College reflects the desire of the College for a cosmopolitan student body of the highest possible profines. No student should fail to apply for admission to the College because of financial

In general, the College attempts to aid needlest students first, recognizing both the needs and resources of the College and the needs of the individual applicants Monitealin Community College is a member of the College Scholarship Service. Assembly and subscribes to the principles of financial aid of that organization. All scholarships and other forms of assistance are awarded only to students who have demonstrated financial need using the Parent's Confidential Statement of the College Scholarship Servicer No awards are available solely for special talents such as music, athletics or specific academic achievement.

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

EDUCATIONAL OPPORTUNITY GRANTS

This Federal program of assistance is intended for students of great financial need. Grants range from \$200 and up per academic year depending on demonstrated need. They must be matched with assistance of an equal amount in a package which may include other grants, loans, or campus employment. These grants may be renewed each year of the undergraduate program if the individual. continues to qualify.

LOANS AND WORK/STUDY OPPORTUNITIES

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 MHEAA loans should be made directly with them. High School counselors and the Montcalm Community College counseling staff have information regarding member banks.

In addition, the College is under the loan provisions of the National Defense Education Act (NDEA). A special feature of these loans is the forgiveness of a portion of the debt for those preparing to enter certain professions.

Under the College Work-Study Program of the Federal Economic Opportunity Act, a number of on-campus part-time jobs are available to students enrolled full. time.

HOLARSHIPS AND GRANTS.

The MHEAA program also provides for a program of scholarships for which the College has been declared a participating institution. Students laking the qualifying examination may designate Montcalm Community College as the institution at which their scholarships will be tised.

A number of local scholarships are offered each college year. Groups showing afticular interest, in helping area students attend Montcalin Community College include:

Alvin M. Bentley Foundation

Farm Bureau

Ferris Township Scholarship

Greenville Federation of Women

Greenville Junior Chamber of Commerce

Greenville Lions Club

Sheridan Lions Club

Stan and Marion Kemp Scholarships

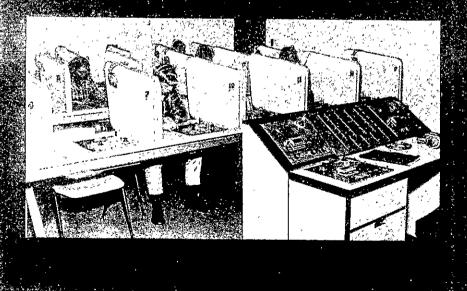
Stanton American Legion

Stanton Womens Club

United Memorial Hospital Guild

The College Board of Trustees also provides two full tuition scholarships to raduating high school students who have demonstrated outstanding academic and litzenship ability during their high school years and who have enrolled at the College. The students must be residents of the Montcalm Area Intermediate School.

Many new local scholarships are made available each year.



PROVIRAME OF STUDY

The programs of study officials at Montealin Continuity Cultipe are described below ender the general headings; Academic, Vocational/Technical and Besid Studies. These three needings are used here necause it is possible for a student to carn an Associate Degree within each grouping. The prospective student will note that this section of the patalog contains only groups of courses leading to certificates or degrees. A detailed description of each course follows in the next section of the Catalog.

M.C.C., as a Recognized Candidate, is currently involved in a self-study in preparation for qualifying for full North Central Accieditation. This self-study may result in some changes in degree requirements and courses offered. Supplementary announcements will be issued if changes do occur.

PLEASE NOTE. All courses listed in the three Programs of Study are identified by a departmental code (examples: LA, TD, etc.) and a course number Course descriptions appear in the pext section of this catalog with departmental codes as follows:

VCADEMIC

Foreign ! anguage	FL
Humanines	110
Language Arts	Υ.,
Wathematics	MΛ
Natural Science	NS
Physical Education	PE.
Social Science	SS

VOCATIONAL/TECHSICAL

Apprenticeship Training	ΔP
Automotive Mechanics	ΛM
Business Education	BE
Industrial Technology	Ti
Practical Nursing	PN
Welding Practices	WE
Vocational Education	VE
Aviation Mechanics	AV
Technical Drafting	TD
Architectural Trades	АΓ

ACADEMIC PROGRAMS

Montcalm Community College is dedicated to the idea of providing a variety of program offerings which are designed to allow the students to pursue studies appropriate for their needs and abilities.

The students who wish to pursue the Bachelor's Degree or beyond may begin their college education at Montealm Community College in a transfer program that is planned to meet specific requirements. For those who wish to prepare for more immediate employment the college offers programs in several occupational fields with technical programs that are designed to this end,

The College recognizes that the student may change his educational goals while attending Montcalm Community College. Counselors and instructors will work with the student in selecting a program that best meets his needs.

GENERAL EDUCATION PROGRAM

The heart of the academic program is the general education program which is required for those students earning the Associate Degree in Arts & Sciences.

Courses in the general education program are inter-disciplinary in nature and are designed to provide for the student a broad base of understanding in the areas of Communication, Natural Science, Social Science and the Humanities.

It is the goal of Montcalm Community College to equip the student to conduct himself as an intelligent citizen in a complex world. Equally important, it is expected that the General Education Curriculum will create a desire for graduates to continue learning beyond their graduation from Montcalm Community College.

DEGREE OF ASSOCIATE IN ARTS AND SCIENCES

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

esters 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Credits 6 8 8 8 2
	4

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.

TRANSFER PROGRAMS

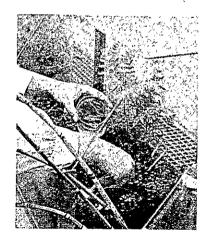
For the student who wishes to transfer to a four-year institution, Montcalm Community College offers up to two years of many four-year programs.

Listed here are a few of the programs which the student may start at Montcalm Community College and transfer to four-year institutions.

Accounting Mathematics Biology Medical Technology Business Administration Physical Education Chemistry Physics Economics Pre-Dentistry Elementary Education Pre-Law Engineering Pre-Medical English Pre-Optometry General Education Pre-Veterinarian History Psychology Humanities Public Administration Law Enforcement Secondary Education Liberal Arts Secretarial Practice Speech Zoology

The student who is planning to transfer to a four-year institution should plan carefully with a counselor and utilize the catalog of the college to which he plans to transfer. Careful planning is important so that he fulfills lower division requirements of that college.

It is advisable that the student work with the counseling staff throughout his career at Montcalm Community College to make sure that he is selecting the appropriate courses. It is the responsibility of the student to select these appropriate courses.



BASIC STUDIES

The Basic Studies program provides for certain students, who because of specific occupational or educational experiences or future goals require an individually structured course of study which is not yet offered in either the vocational/technical or academic programs of the College, to earn an Associate Degree. This curriculum must be approved by the Dean of Students Office.

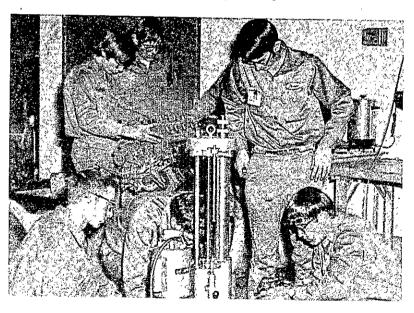
Degree Requirements include the following:

Man's Communication	LA100&101	Credit Hours 6
At least one of the following Man's Social World or Man's Physical World or Man's Creative World	General Education Requirements: SS100&101 NS100&101 HU200&201	8 8 8

General Academic electives to total four to six additional academic semester credit hours,

Optional Electives:

- 1. The remaining 40 to 42 semester hours may be selected from the vocational/technical courses offered by the college, or—
- An additional General Education Course (as listed above) and four to six academic electives plus additional vocational/technical electives to obtain the necessary sixty semester credit hours required for graduation.



VOCATIONAL/TECHNICAL PROGRAMS

Montcalm Community College has come into being during a dynamic era marked by exploration, research, and the rapid discovery of new knowledge. The information itself as well as the techniques for finding it have both been applied to increase the power of our society to produce and do work. These methods have become so refined and complicated that they have developed into a vast system of learnings, much of which must be completed in a classroom rather than on the job.

This College has a major responsibility in occupational education, both in preparing future workers and re-educating those already employed who must meet the challenge of new techniques of completely new jobs. Fully recognizing the need of young men and women to develop these skills, Montcalm Community College began its first full-time teaching during 1966-67 in several vocational/technical fields. Each program of study organized was backed by an advisory committee made up of those actually performing the work or serving in a direct supervisory capacity over those workers. Each committee made suggestions as to what should be learned and assisted in discovering the best methods for teaching it, and each will assume a continuing role in evaluating the success of the program. Every program is designed to meet the skilled employment needs of both Montcalm County and the larger industrial and business society.

DEFINITIONS:

Occupational education programs, at Montcalm Community College are organized under two general headings—Vocational and Technical. These terms are defined as follows:

Vocational: Courses which place their major emphasis upon skilled job performance. Designed to prepare the student for work as soon as possible, the vocational courses are often less than two years in length and require General Education courses which apply directly to the vocational skills being taught.

Technical: Courses which equip the student to work closely with professional workers—architects, engineers, physicians, etc. These programs of study emphasize the theory of the work as well as the job skill, stress ideas along with performance. Technical programs are usually of at least two years' duration and include a General Education requirement if they lead to an Associate Degree. There is also other academic study which is directly related to job performance.

Students should bear in mind that the programs of study listed below are designed to prepare them for employment, and courses have been selected to accomplish that task. No attention has been given to whether any program or course might be transferable to a four-year institution (with the exception of the General Education). Senior colleges and universities will be furnished with complete details, but the matter of transfer will be between the individual student and the receiving institution.

Brochures are available from the Office of the Dean of Vocational/Technical Studies or the Admissions Office which describe these programs in greater detail.

AIRCRAFT POWERPLANT MECHANICS

This curriculum is designed to meet the requirements of the Federal Aviation Administration for licensing of Aircraft Powerplant Mechanics. A minimum of 1150 clock hours are required in powerplant and related subjects before the Powerplant licensing examination can be taken. A thorough understanding of the aircraft and its powerplant will be covered through intensified classroom activities and demonstration. Maintenance and repair skills will be learned through the in depth use of live aircraft engines found on aircraft currently certified by FAA. Enrollment in this program is limited and selection of qualified candidates shall be screened by a selection committee. Selection is to be based on proficiency exams, academic record, and background of experience. A certificate will be awarded upon successful completion of the program.

AIRCRAF	Ţ	MECHANICS	CERT	TFIÇ/	١TE	PROGRAM
4	^					

Aviation Courses		Credit Hours
AV100	Introduction to Aviation	4
AV101.	Aircraft Servicing	4
AV110	Aircraft Powerplants I	11
AV111	Aircraft Powerplants II	11
AV210	Aircraft Powerplants III	11
AV211	Aircraft Powerplants IV	11
	•	52
Related Tec	hnical Courses	
VE102	Technical Writing & Speaking	2
VEII2	Technical Math I	3 -
VE120	Technical Physics	3
VE230	Mechanics & Strength of Materials	3
VE250	Electricity - Electronics	3
	Total Credit Hours	17 69

Students wishing to pursue the Associate Degree in Applied Arts & Sciences must elect to take 14 additional credit hours. These courses must be LA100, LA101-6 credit hours and 8 credit hours from SS100, SS101, or NS100, NS101, or HU200 or HU201.

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.

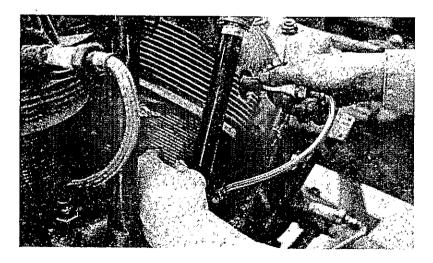
The semester in apprentice related instruction is 21 weeks in length with the trainee usually taking 2 -2 credit hour courses per semester. Credit for prior education may be granted based on competency examination or official transcript of transfer credit.

Entrance requirements are established by the employer in accordance with existing BAT 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.

TYPICAL RELATED INSTRUCTION SCHEDULE FOR TOOL AND DIE APPRENTICES MACHINE REPAIR APPRENTICES

Courses	Req. Clock Hrs.
Machine Tool Operations Theory AP/100	42
Blueprint Reading AP/105	72
Shop Mathematics AP/110	138
Strength of Materials and Hydraulics AP/115	42
Shop Drawing AP/120	36
Welding Theory and Practices AP/125	48
Metallurgy and Heat Treatment AP/130	36
Tool and Die Design AP/135, or	168
Tool and Dic Design-Plastic Mold Design AP/140	168
Use of Machinists Hand Book AP/145	42
Social Economics AP/150	18
Safety & First Aid AP/155	30
Total	672



AT110 AT111

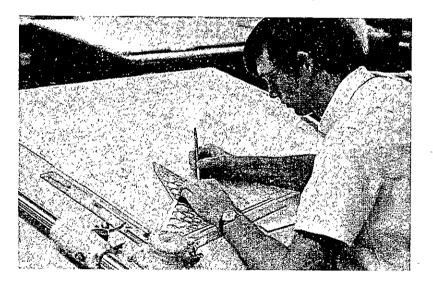
ARCHITECTURAL TECHNOLOGY AND CONSTRUCTION TRADES

The architectural trades program provides a broad experience into many fields related to planning and construction. Architectural drafting technicians are trained to think and talk about the problems of construction and to express solutions with the language of the drawing board. Students interested in the construction trades are exposed to a variety of trades, skills, and actual building experiences. The architectural student enters at any level of accomplishment and moves ahead to a place of experience and knowledge in accord with his or her desire and ability.

	RAL DRAFTING—ASSOCIATE DEGREE PROGRAM Drafting Courses Architectural Drafting I (Detailing)	Credit Hours 7
AT131	Architectural Drafting II (Residential Planning)	7
AT200	Architectural Drafting III (Mechanical Systems)	6
AT201	Architectural Drafting IV (Steel & Concrete Structures	6
AT110	Building Material & Construction Methods I	4
ATIII	Building Material & Construction Methods II	4
		34
	nical & General Education	
VE112	Technical Math I	3
AT150	Architectural Trades Math	3
BE237	Management	3
BE240	Business Machines	4
LA100	Man's Communication	3
LA101	Man's Communication	3
Academic Elec	ctives - NS100, NS101 or SS100, SS101, or HU200, HU2	
		22
Advanced Arc	hitectural Electives	
	al Problems Seminar	5
VE290 Field		3 to 9
	Experience	3 to 9
, 122) i 101d	Total Semester Hours	61
	Total Delitester Hours	91
ARCHITECTU	RAL CONSTRUCTION PROGRAM	
Architectural	Construction Courses (Associate Degree & Certificate)	
AT130	Architectural Drafting I (Detailing)	7
AT131	Architectural Drafting II (Residential Planning)	7
AT110	Ruilding Material & Construction Methods I	,

Building Material & Construction Methods I Building Material & Construction Methods II

Related Techn	nical & General Education (Associate Degree)		
VE112	Technical Math I	3	
AT150	Architectural Trades Mathematics		
LA100	Man's Communication	3 3 3	
LA101	Man's Communication	י	
	etives - SS100-101 or NS100-101 or HU200-201		
110adonno Dio	or	8	
Related Techr	nical & General Education (Certificate)		
VE112	Technical Math I	3	
AT150	Architectural Trades Mathematics		
VE100	Vocational Communications	3 3	
VE102 -	Technical Writing & Speaking	2	
	and		
Electives	•		
AT200	Advanced Architectural Drafting (Mechanical Systems)	7	
AT201	Advanced Architectural Drafting (Steel & Concrete Struct		7
AT210	Trades Crew Management I	4	,
AT211	Trades Crew Management II	4	-
VE290	Field Experience	3	
VE291 ·	Field Experience	3	
WE100	Related Welding Skills	3	
BE235	Small Business Management	3	
BE240	Business Machines	4	
AT202	Special Project Seminar	5	
	Total Semester Hours		60
	Jan. Odliotor Hours		υV



AUTOMOTIVE MECHANICS

The automotive maintenance mechanics curriculum provides for the development of the skill and knowledge essential in performing the inspection, diagnosis, repair or adjustments on automotive vehicles. A thorough understanding of the operating principles of the modern automobile, its components and accessories, are developed through classroom assignments, discussion, demonstration and field study. Technical skill is developed through intensive laboratory study and experience on live, up-to-date equipment and material. This is a two year certificate program.

Automotiv	e Courses (40 to 44 Semester Hours Required)	Credit Hours
AM110	Automotive Drawing & Blueprint Reading	3
AM130	Automotive Engines	11
AM131	Automotive Fuel & Ignition System	11 -
AM230	Automotive Chassis Systems	ÎÎ
AM231	Automotive Air Conditioning & Auxiliary Systems	4
*AM232	Automotive Parts Management	ż
*AM232	Automotive Service Management	2

Related Tech	nical & General Education (12 to 20 Semester Hours Requir	ed)
*AF100	Vocational Communications	3
*VE102	Technical Writing & Speaking	2
VE110	Shop Math (VE112 Technical Math may be substituted)	3
*VE120	Technical Physics	3
VE250	Electricity - Electronics	3
VE253	Hydraulics & Fluid Power	3
WE110	Related Welding Skills	3
VE290/291	Field Experience	3 to 6

NOTE: Students who wish to pursue the Associate Degree must enroll in the following courses:

LA100	Man's Communication	3
LA101	Man's Communication	3
and elect from NS100-101, or SS100-101, or HU200-201		8
	Total Hours Required	67

^{*}Courses may be waived for the student pursuing the Associate Degree. Prior permission from the Divisional Dean is required.

BUSINESS EDUCATION - CLERK - TYPIST

The demand for skilled and well qualified office personnel is rapidly expanding. The objective of the Clerical Office Practice - Clerk Typist curriculum is to prepare persons of any age for employment in a variety of office occupations. This one year certificate program is intended to prepare the student for 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 his training may apply credits earned toward the degree program in Secretarial or Management programs.

First Semester *BE100/BE101 Typing		Credit Hours
BE120	Business Math	4
BE117	Clerical Accounting	3
BE135	Introduction to Business	3
BE240	Business Machines	- 4
	•	16
Second Ser	mester	•
BE101/BE	202 Typing	3
BE130	Business Correspondence	3
**BE220	Voice Transcription	4
BE230	Typing and Office Practice	3
BE250	Personnel Relations	3
		16

^{*}BE100 and BE101 may be waived by a competency examination. An elective from the Academic or Business course offerings must be substituted.

BUSINESS EDUCATION - EXECUTIVE SECRETARY

The graduate of the Executive Secretarial Science curriculum will have (1) a knowledge of business technology; (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 completion of this program.

	Business Courses	Credit Hours
*BE101	Intermediate Typing	3
BE202	Advanced Typing	. 3
*BE104	Intermediate Shorthand	4
BE203	Advanced Shorthand	4
BE120	Business Math	4
BE135	Introduction to Business	3
BE130	Business Correspondence	3
BE230	Typing & Office Practice	3
BE117	Clerical Accounting	3
BE204	Dictation & Transcription	3
BE200	Business Law	3
BE240	Business Machines	3 1
BE250	Personnel Relations	4
BE280	Introduction to Electronic Data Processing	3
	and out to Electionic Data Processing	3

NOTE: Requirements continue on following page.

^{**}NOTE: Sales Management, BE265, may be substituted. Permission of instructor required.

Related Business Courses		Credit Hours
VE290	E290 Field Experience Co-op I	3.
VE291	Field Experience Co-op II	3
	or	

Academic & Business electives from LA210, SS215, LA160, BE237 or BE255

Academic Requirements	Credit Hours
LA100 Man's Communication	3
LA101 Man's Communication	3
SS100-101 or NS100-101 or HU200-201	8
Total Hours Required	66

^{*}Students without high school typing and shorthand must take BE100 and BE103 before placement in these courses.

BUSINESS EDUCATION - MID-MANAGEMENT IN RETAILING

Job entry into the environment of Business is continually requiring a higher level of preparation. This curriculum is prepared to provide the necessary qualifications for entrance above the lowest managerial levels and for advancement to 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.

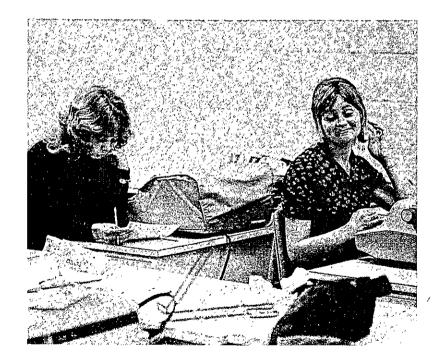
Management Courses (21 Semester Hours Required)	
Merchandising I	Credit Hours
Merchandising II	3
	3
Credits & Collections	3 -
Business Law	3
	3
Personnel Relations	3
	Merchandising I Merchandising II Sales Management Credits & Collections Business Law Advertising

Basic Business (21-28 Semester Hours Required)		Credit Hours
BE115	Accounting I	3
BE116	Accounting II	3
BE120	Business Math	4
BE131	Report Writing	3
BE135	Introduction to Business	3
BE237	Management	3
BE280	Introduction to Electronic Data Processing	3

Electives		Credit Hours
BE100	Beginning Typing	3
BE103	Beginning Shorthand	4
BE240	Business Machines	4
Other elec	tives may be chosen in Business Education of a 200 level.	

Academic C	ourses (14-20 Semester Hours Required)	Credit Hours
LA100	Man's Communication	3
LA101	Man's Communication	3 .
SS100	Man's Social World	4
SS101	Man's Social World	4
Electives		Credit Hours
LA210	Speech	3
SS215	Economics	3
SS216	Economics	3
SS240	Political Science	3

Total Credit Hours Required



INDUSTRIAL TECHNOLOGY

This curriculum provides the basic background of laboratory and related theory courses to acquaint the student with the technical needs of industry. Students are given training in machine tool operations and physical and metallurgical testing equipment. Mechanical courses are accompanied by courses in technical mathematics, drafting, physics, electronics, hydraulics, production problems and materials of industry.

Manufacture, sale and operation of mechanical equipment, machines and machine tools is a large and diversified industry with excellent opportunities for those with the proper aptitude and ability. A thorough technical training course accompanied by a good background of industrial experience is a real stepping stone to advancement. This is a two-year program with an Associate Degree awarded upon successful completion.

Required To	echnical Courses	Credit Hours
TD100	Technical Drafting I	4
TD110	Descriptive Geometry	4
TD130	Technical Drafting II	4
TD140	Jig and Fixture Detailing	4
IT110	Machine Operations I	9
IT111	Machine Operations II or	9
Approved e	quivalent training or cooperative industrial experience	34

Related Technical		Credit Hours
**VE112	Technical Math I	3
**VE113	Technical Math II	3
**VE114	Technical Math III	3
**VE115	Technical Math IV	3
VE220	Tool Room Operations	3
VE260	Manufacturing Processes	2
VE253	Hydraulics & Fluid Power	3
VE150	Metallurgy	2
VE120	Technical Physics	3
		25

^{**}Students with strong math background should substitute from MA159, MA160, MA200, MA250, or MA251 in lieu of Technical Math requirements.

Academic Electives		Credit Hours
LA100	Man's Communication	3
LA101	Man's Communication	3
NS100	Physical World or	4
SS100	Social World	. · ·
NS101	Physical World or	4
SS101	Social World	·
	•	14
	Total Hours Required	73

PRACTICAL NURSING

After completion of this forty-four week program students are qualified 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.

Montcaim Community College is affiliated with three area hospitals. They are United Memorial Hospital in Greenville, Carson City Hospital, and Kelsey Memorial Hospital in Lakeview. Each student will spend time at each hospital for specific clinical experience.

The student will also be exposed to public health nursing in cooperation with the Mid-Michigan District Health Department.

Requirements for Admission:

- Men and women applicants must be 17 years old. The usual maximum age is 55.
 All applicants will be considered individually.
- 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.
- All applicants are required to be in good physical and mental health, within
 normal weight for height and age. Physical, dental and x-ray examinations are
 done by own physician and dentist.
- 4. All applicants are required to take the PSB screening battery which is scheduled through the Dean of Students Office.
- All applicants must schedule a personal interview with the Director of Nursing or a member of the nursing staff.

First Semester (Pre-Clinical)		Credit Hours
PN100	Nursing Foundations	8
PN110	Food in Health and Disease	2
PN120	Personal and Environmental Health	2
PN130	The Living Body	7
PN140	Pediatrics	2

Clinical practice takes place the first semester. However, the main emphasis is on classroom studies.

Second Semester		Credit Hours
PN200	Maternal and Child Health	3
PN210	Rehabilitation Nursing	3
PN220	Nursing and Patient in Health and Disease	7

The student will have more clinical experience and fewer formal classes.

Summer		Credit Hours
PN230	Introduction to Medicines	4
PN240	Nursing of Adults and Children	4

The student will have full-time clinical experiences with a review of the total program during the last week. A post-graduate course follows:

Postgraduate PN235 Pharmacology Course for Licensed Practical Nurses 3

(Only licensed practical nurses are eligible to take this 66-hour course. The course is offered in the Fall semester in the evening hours. This post-graduate training is offered in cooperation with the Michigan Licensed Practical Nurse Association and the Department of Vocational Education. Upon successful completion of the course, standard certification will be issued.)

TECHNICAL DRAFTING & DESIGN

Drafting and Design Technology prepares the student for gainful employment in a tool design division of engineering with specialized training in jig and fixture design, sheet metal die design, and plastic mold design. The design program is preceeded by basic drafting techniques, advanced projection (descriptive geometry), and jig and fixture detailing. The program is designed to be terminal at the completion of two years at M.C.C. with the student having vocational skills to obtain gainful employment in engineering, or transferable to a four-year institution with the student pursuing a baccalaureate degree in teacher education, industrial technology, or industrial supervision. The student may choose to receive either a certificate or Associate Degree upon successful completion of the program, depending on the general education electives.

Technical Drafting Courses		Credit Hours
TD100	Technical Drafting I	4
TD110	Descriptive Geometry	4
TD130	Technical Drafting II	4
TD140	Jig & Fixture Detailing	. 4
TD200	Plastic Mold Design	4
TD210	Sheet Metal Die Design	4
TD230	Jig & Fixture Design .	4
TD240	Advanced Die Design	4
	C	32
Related Tech	nical Courses	Credit Hours
VE112	Technical Math I	3
VE113	Technical Math II	3
VE114	Technical Math III	, 3 3 3 2 3 3
VE220	Tool Room Operations	3
VE260	Manufacturing Processes	2
VE253	Hydraulics & Fluid Power	3
VE250	Electricity - Electronics	3
VE150	Metallurgy	2
		22
Academic Ele	ectives	Credit Hours
*LA100-101	Man's Communications	6
*NS100-101	Physical World or	8
*SS100-101	Social World	
	Total Hours Required	. 68

^{*}Required for the Associate Degree - Students electing to work toward the certificate should elect VE100, VE102 in lieu of the Academic electives.

WELDING PRACTICES

This one-year program is designed to train the student in Welding Techniques common in industry. The emphasis in the program is in the study of weldment nomenclature and in the development of certifiable weldments in all positions. Welding techniques needed to produce certifiable welds on all ferrous and non-ferrous metals are introduced and practiced using the most up-to-date welding equipment is stressed. Students may elect to transfer into the Industrial Technology Program upon completion of the one-year certificate program.

Technical Courses		Credit Hours
WE100	Welding Fundamentals & Practice	3
WE101	Welding Laboratory	3
WE102	Advanced Welding Laboratory I	3
WE103	Advanced Welding Laboratory II	3
WE104	Advanced Welding Laboratory III	3
	Minimum Credit Hours Required	15

Related Technical Courses		Credit Hours
VE100	Vocational Communications	3
VE102	Technical Writing & Speaking	2
VE250	Eelctricity - Electronics	3
VE253	Hydraulics & Fluid Mechanics	3
TD100	Technical Drafting I	4
VE110	Shop Math	3
		18



COURSES OF STUDY

In this section descriptions of all courses offered at Montcalm Community College are given. These are listed alphabetically.

Numbers in the parentheses () which follow course titles represent the total credits, hours of lecture/demonstration, and hours of laboratory in that order. For example, in the first course listed below, four semester hours of credit are 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 as being necessary.

ARCHITECTURAL TRADES

- AT110 Construction Methods and Materials I (4,2,2) Fall Semester

 This course relates materials used by the construction industry to the function they perform. The physical properties and applications of masonry, wood, steel and synthetics is related directly to assembly with consideration to local and federal codes.
- AT111 Construction Methods and Materials II (4,2,2) Spring Semester
 A lecture/laboratory experience in foundation work, carpentry, and framing,
 and the use of power tools. The student is exposed to actual materials either
 under simulated or real working conditions.
- AT130 Architectural Drafting I (Detailing) (7,4,8) Fall Semester

 This course begins with a review of standard drawing techniques and procedes through a logical sequence of structural detailing. Basic principles are presented in the use and rendering of modern materials and methods of construction.
- AT131 Architectural Drafting II (Residential Planning) (7,4,8) Spring Semester A continuing course in architectural and construction principles relating primarily to residential design. This course stresses such elements as modular coordinates, floor planning, utility placement, and exterior design for the draftsman, builder, or home owner. Prerequisite AT130 or by arrangement.
- AT150 Architectural Mathematics (3,3,0) Spring Semester
 This course is specifically designed to relate functionally with the
 mathematical computations required of the architectural draftsman and the
 construction technician. Lecture, demonstration, and practice with
 exemplary problems is given. Computation of material quantities, estimating
 and construction cost analysis is experienced by the student.

- AT200 Architectural Drafting III (Mechanical Systems) (6,4,5) Fall Semester
 This course primarily covers service systems of a habitable structure. The
 student designs and illustrates typical pre-fab and on-site service systems and
 makes correlated computations.
- AT201 Archtectural Drafting IV (6,4,5) (Steel & Concrete Structures) Spring Semester

 This course deals with the design systems in use for large, fireproof structures made primarily of concrete and steel. Knowledge and drawing technique is gained in floor systems, roof decks, curtain walls, and structural framing. Graphic and perspective illustration are a part of the students' final design project.
- AT202 Special Problems Seminar (5,2,4)

 A course for the advanced student who wishes to expand his or her architectural experience in a particular area of concentration. Projects and instruction are largely of an individual or small group nature. Opportunity is provided for independent study of methods and for the rendering of innovative and special design. Prerequisite: AT131.
- AT210 Trades Crew Management (4,2,2) Fail Semester

 A one or two semester course for the student who desires training and experience in the management of personnel. Experience is gained in planning, procurement, and the allocation of job responsibilities. This course is particularly applicable to the person with leadership and managerial inclination leading toward such job descriptions as contractor or group leader.
- AT211 Trades Crew Management II (4,2,2) Spring Semester Continuation of AT210.

AUTOMOTIVE MECHANICS

- AM110 Drawing and Blueprint Reading (3,1,2) Fall Semester

 This course reviews the basic fundamentals of all projections, lettering, sketching and dimensioning. A thorough study of blueprint reading as it relates to assembly, service parts replacement and service adjustments is covered.
- AM130 Automotive Engine (11,3,12) Fall Semester

 This course covers instruction in theory and laboratory procedures and operations necessary for automotive engine rebuilding. Shop work consists of the overhaul or rebuilding of representative models of all popular automotive engines.

- AM131 Automotive Fuel & Ignition Systems (11,3,12) Spring Semester
 This course is designed to develop the student's abilities as a diagnostician or
 tune-up man. Diagnosis is stressed on actual problems and analysis sheets are
 filled out for cost estimation and amount of work required for good engine
 performance. Students receive training on up-to-date test and analyzing
 equipment.
- AM230 Automotive Chassis Systems (11,3,12) Fall Semester
 Students cover terminology, nomenclature, evolution and theory of front end alignment, wheel balancing and brakes. Laboratory experience involves diagnosis and repair on live late model units using latest methods on modern equipment.
- AM231 Automotive Air Conditioning & Auxiliary Systems (4,2,2) Spring Semester
 This course deals with theory and servicing of auto air conditioning systems.
 Included in the course are topics dealing with auxiliary systems of the automobile such as power assist units. Students are given an opportunity to review units of instruction and/or concentrate on an area of specialty during the semester.
- AM232 Automotive Parts Management (2,2,0) Spring Semester

 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
 is 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) Spring Semester
 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.

AVIATION MECHANICS

AV100 Introduction to Aviation (4,2,2) Fall Semester

An introductory course covering basic principles and terminology of air frames, power plants, helicopters, and theory of flight. To include the use of aircraft drawings. The use of blueprint information and to draw sketches for repair and alterations.

AV101 Aircraft Servicing (4,2,2) Spring Semester

The primary objective of this course is to provide the student with experience for periodic inspection, routine and preventive maintenance, servicing and securing aircraft, cleaning and corrosion control, weight and balance checks of aircraft, and the privileges and limitations of the mechanic.

AVIIO Aircraft Powerplants I (11,4,12) Fall Semester

Fundamental principles of aircraft engines, including engine theory, materials and methods of construction, lubricants and lubrication systems, induction systems and superchargers, engine installation, disassembly and inspection of various types of aircraft engines. Radial engine will be 14-cylinder or larger. Laboratory work will include the inspection, testing repair or replacement of parts and reassembly of aircraft engines.

AVIII Aircraft Powerplants II (11,4,12) Spring Semester

A continuation of AV110. Fundamental principles of aircraft engines, maintenance, including engine theory, carburetors and fuel systems, induction systems and superchargers. General engine operating procedures, cruise controls and performance diagnosis. A comprehensive study of propeller theory and function, and operation. A wide range of types and size of propellers will be covered for operations, inspection, maintenance, and testing procedures.

AV210 Aircraft Powerplants III (11.4.12) Fall Semester

Operation and diagnostic testing of aircraft engines. Students will collect operating data and make performance calculations for powerplant conformity and airworthiness inspections. Inspection, testing and adjustments will be made to engine systems. Use of test equipment such as engine and ignition analysis will be emphasized.

AV211 Aircraft Powerplants IV (11,4,12) Spring Semester

A continuation of AV210. Included in this course will be the fundamental principles of jet engines, including the study of compressors, combustion chambers, turbines, fuel controls, fuel systems, lubrication, ignition. Disassembly, inspection and repair of turbine engines will be studied through laboratory use of live jet engines.

BUSINESS EDUCATION

- BE100 Beginning Typing (3,1,3) Fall and Spring Semester

 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 and Spring Semester

 The writing of business letters with practice in proofreading, tabulation, special communication forms and reports, application and employment procedures.
- BE103 Beginning Shorthand (4,3,2) Fall and Spring Semester
 A course in the elementary principles of Gregg Shorthand.
- BE104 Intermediate Shorthand (4,3,2) Fall and Spring Semester
 Intensive training in theory of shorthand, the development of shorthand outlines, and development of the ability to take new matter dictation.
- BE115 Accounting I (3,3,0) Fall and Spring Semester

 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 (3,3,0) Fall and Spring Semester
 The valuation of receivables and merchandise inventory, valuation of fixed assets and depreciation, accounting for taxes, payroll, property, and sales tax are covered. An introduction to corporation and cost accounting is included.
- BE117 Clerical Accounting (3,3,0) Fall and Spring 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 (4,4,0) Fail and Spring Semester

 This course reviews fundamental arithmetical processes and their business applications and includes cash and trade discounts, mark-ups, depreciation and interest, and payroll deduction.

- BE122 Financial Math (3,3,0) On Demand
 This course covers simple and compound interest; ordinary and deferred annuities, and perpetuities; amortization and depreciation; bonds and insurance.
- BE130 Business Correspondence (3,3,0) Spring Semester
 A study of effective correspondence in business. Prerequisite: BE100.
- BE131 Report Writing (3,3,0) Spring Semester
 The student is introduced to the what and why of business reports, problems
 and planning, research, organizing information, constructing and writing a
 report in an acceptable manner.
- BE135 Introduction to Business (3,3,0) Fail Semester

 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
 Law and Society, the Uniform Commercial Code are considered with
 emphasis placed on the law of contracts, sales, and real property. Case studies
 are used extensively.
- 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.
- 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.
- BE204 Dictation and Transcription (4,3,2) Fall and Spring Semester

 This course stresses development of skills in typing, shorthand, and English grammar that are necessary for efficient transcription as well as the development of shorthand vocabulary in medical, legal, and technical terms.
- BE220 Voice Transcription (4,2,3) Fall and Spring Semester

 Development of voice transcription skill is stressed with the operation of belt-type transcribers. Emphasis is placed on typing skills and technical English skills for efficient transcription.

- BE230 Typing and Office Practice (3,1,4) 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 of Odd Years The student is introduced to marketing with special emphasis upon retailing. Establishing, financing and organizing the new store and buying and selling with special attention given to promotion are major topics in the course.
- BE234 Merchandising II (3,3,0) Spring Semester of Odd Years A continuation of BE233 with emphasis placed upon control of the operation. Prerequisite: BE233 or equivalent.
- BE235 Small Business Management (3,3,0) Spring Semester Even Years 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) On Demand 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.
- BE237 Management (3,3,0) Fall Semester This course treats all activities in the field of business. Each facet of business, such as ownership, organization, marketing, physical factors, purchasing, production, personnel, finance, quantative control, and government regulations. The development and installation of a total information system for managerial decisions is investigated.
- 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 (4,2,4) Fall and Spring Semesters A course designed to train the student in the fundamental processes of key-driven calculators, adding-listing machines, rotary calculators, listing calculators, and ten-key machines.
- Advertising (3,3,0) Spring Semester 1973 and alternate years 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 demands for funds, the factors affecting the supply of funds, and monetary and credit policies and problems.
- BE253 Principles of Investment (3,3,0) 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.
- BE278 Production and Quality Control (3,3,0) On Demand 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.
- BE280 Introduction to Electronic Data Processing (3,2,2) Fall and Spring Semesters 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.

FOREIGN LANGUAGES

- FL120 Elementary French (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.
- FL121 Elementary French (4,4,0) A continuation of French 120. Prerequisite: 120 or equivalent.
- FL220 Intermediate French (4,4,0) Prerequisite: French 121 or successful completion of two years of high school French. Advanced conversation and readings emphasize vocabulary building, French syntax, aural comprehension and phonetics.
- Intermediate French (4,4,0) Prerequisite: French 220. A continuation of French 220 with emphasis on gaining greater fluency through advanced French conversation and enrichment reading from French literature and current periodicals.

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

FL230 Intermediate Spanish (4,4,0)

The second year of collegiate Spanish with greater emphasis upon conversation and reading of Spanish literature. Diction and vocabulary study will also continue. Prerequisite: at least two years of high school Spanish or LA195.

FL231 Intermediate Spanish (4,4,0) A continuation of FL230. Prerequisite: FL230.

HUMANITIES

HU191, Choir (1,1,0)
 Offers student, interested in the performing arts, an opportunity to further develop his 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.

HU200 Man's Creative World (4,4,0)

The purpose of this course is to develop the student's understanding of the artistic, literary and philosophical nature of man. Viewed historically, selected topics integrate material from the fields of art, literature, music, philosophy and religion.

HU201 Man's Creative World (4,4,0)

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

HU215 Music Literature (3,3,0)

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

HU220 Introduction to Philosophy (3,3,0)

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

INDUSTRIAL TECHNOLOGY

IT110 Machine Operations (9,3,12)

This course is machine shop orientation to familiarize the student with hand tools, operations, and basic machine tool processes, care of tools and equipment, and shop safety.

IT111 Machine Operations II (9,3,12)

This course is advanced operation on grinders, shapers, mills, presses, and lathes. The student will be trained to perform all operations required from the beginning to completion of the job. Prerequisite: IT110 or special arrangement.

LANGUAGE ARTS

LA100 Man's Communication (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 Man's Communication (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 his ability to recognize and utilize effective argumentative and expository prose. Second Semester. Prerequisite: LA100 or by examination.

LA150 Reading Lab (1.2.0)

This course is designed to increase reading speed and comprehension in addition to rectifying various deficiencies of the students. The laboratory exercises will be adapted to the needs of the 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.

LA161 Journalism Lab (1,0,2)
Practical experience on the College Newspaper, The Post.

LA162 Journalism Lab (1,0,2)

Advanced practical experience on the College Newspaper, *The Post*, emphasizing editorial and feature writing techniques. A maximum of two credits for LA161-162 will be allowed.

LA200 American Thought and Literature (3.3.0)

A survey of American Literature including complete works by several authors selected to represent major movements, both literary and historical, and many shorter pieces from each literary genre, with emphasis in the 20th Century.

LA201 American Thought and Literature (3.3.0)

A survey of American Literature from each literary genre, with emphasis on the literature and thought prior to the 20th Century.

LA210 Speech (3.3.0)

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

LA212 Oral Interpretation (3,3,0)

Through analyzing and reading aloud selected prose, poetry, and drama, the student will improve his own understanding of these works, and increase his ability to communicate to others. The course will relate interpretative reading to the other areas of speech: Public address, television, theatre, speech improvement, and the teaching of literature.

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

A systematic study of English Literature which stresses the principal authors and their works. Reading and discussion will include representative writings of the period from the beginnings to the end of the eighteenth century, and will also survey current critical approaches.

LA221 English Literature form 1798 to the present (3,3,0)

A systematic study of English Literature which emphasizes the principal authors of the nineteenth century and twentieth century. Reading and discussion will include representative works and will also review current critical attitudes.

LA230 Short Story (3,3,0) 1st Semester of Even Years

A study of the strengths and limitations of this genre in 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) 1st Semester of Odd Years

A study of the novel, with dual intent: Through systematic discussion of each novel to increase the rewards one receives from reading it and, through study of the several schools of literary criticism, to better understand how the "more than casual" reader approaches fiction.

LA250 Creative Writing (3,3,0)

The purpose of this course is to allow the student to sharpen his 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 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) 2nd Semester of the Odd Years

An introduction to drama as a literary form. The student will read representative writings of the period from classical times to the present.

LA270 Poetry (3,3,0) 2nd Semester of the Even Years

Contemporary and modern examples of poetry are compared to historically durable examples on points 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)

A survey of Literature for children in the elementary grades, aimed at developing techniques for using books with children, story telling, and the criteria for book selection.

Mathematics

MATHEMATICS

MA100 Basic Mathematics (3,3,0)

This course is designed to give a thorough review of the basic structure of arithmetic, with drill in the fundamental operations. The second half of the semester will be spent studying the Algebra of Real Number System, with application to everyday life.

MA102 Trigonometry (3,3,0) 2nd Semester of Even Years

The right triangle is studied to introduce the students to the trigonometric functions. Further topics include trigonometric identities, addition formulas, law of sines, law of cosines, complex numbers and DeMoivre's Theorem. Prerequisite: one and a half years of high school algebra and one year of high school geometry.

MA151 Math for Elementary Teachers (3.3.0) Fall Semester

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

MA152 Geometry for Elementary Teachers (3,3,0) Spring Semester

This material presents a survey of geometry; formal and informal, metric and non-metric, Euclidean and non-Euclidean. Topics include points, planes, parallels, congruence, measures and an introduction to vectors. Prerequisite: MA151 or equivalent.

MA159 College Algebra (3,3,0) Fall Semester

Topics covered include the quadratic equation, sequences and series, complex numbers, DeMoiver's theorem, synthetic division, mathematical induction, combinations and permutations. Prerequisite: Trigonometry.

MA160 Analytic Geometry (3,3,0) Spring Semester

The straight line, the circle conics, algebraic curves, transcendental curves, parametric equations, planes and lines, and quadratic surfaces. Prerequisite: MA159 or equivalent.

MA190 Elementary Statistics (3,3,0) 2nd Semester of Odd Years

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.

MA200 Man's Mathematical Methods (4,4,0) 1st Semester of Even Years

The purpose of this course is to develop the student's understanding of the
basic concepts of modern mathematics. The course will cover sets, functions,
relations, and mathematical systems—including groups, real number systems,

relations, and mathematical systems—including groups, real number systems, and quadratic equations. Prerequisites: Mathematical maturity equivalent to traditional high school geometry.

traditional fight solloof goomers

MA250 Calculus I (4,4,0) Fall Semester

Functions and continuity, limits differentiation, applications, integration and the definite integral with applications. Prerequisites: Analytic geometry or equivalent.

MA251 Calculus II (4,4,0)

Logarithms and exponentials, are length, polynomials, partial fractions, Taylor's series. Special methods of integration, partial differentiation. Prerequisite: Math 250 or equivalent.

MA290 Differential Equations (3,3,0) 1st Semester of Odd Years

Linear equations, the Bernoulii Equation, existence and uniqueness theorems, applications equations of first order and higher degree. Clarirauts equation, solution by power series, an introduction to Laplace transform, Strums theorem. Prerequisite: One year of Calculus.

NATURAL SCIENCES

NS100 Man's Physical World (4,3,2) Freshman Year

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. No prerequisite.

NS101 Man's Physical World (4,3,2) Freshman Year

This course is a follow-up to NS100, Man's Physical World. It 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. Like NS100, it presents an opportunity for the student to evaluate his or her own interest and potential in a biological science. Prerequisite: NS100 or permission of instructor.

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 and 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 man in the depletion of these vital materials.

NS200 Botany (4,3,2) First 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 keys. Prerequisite: NS100-101 or permission of the instructor.

NS205 Zoology (4,3,3) Second Semester

A general survey of the animal kingdom including comparative studies of the structure, function, and behavior of representatives of animal groups. The anatomy and physiology of the human will be emphasized in the study of mammals. Prerequisite: NS100 or permission of the instructor.

NS220 General Chemistry (4,3,4) First Semester

Fundamental theories, principles, and problems of chemistry will be emphasized. Prerequisite: One year of high school algebra; NS100 or permission from the instructor.

NS221 General Chemistry (4,3,4)

A continuation of NS220. Organic and biochemistry will be introduced the last half of the semester. Prerequisite: NS220.

NS222 Organic Chemistry (5.4,3)

The chemistry of carbon compounds and their derivatives with emphasis on nomenclature, fundamental principles, reactions, and reaction mechanisms.

NS223 Organic Chemistry (5,4,3)

A continuation of Chemistry NS222 and including stereochemistry and organic compounds of biological interest.

NS225 College Physics I (4,4,2)

An introductory course in mechanics, heat, and sound. This is a technical course designed for those majoring in engineering or science. Calculus should be taken concurrently.

NS226 College Physics II (4,4,2)

A continuation of NS225. Light, electricity and magnetism, and modern physics will be considered. Calculus should be taken concurrently.

PHYSICAL EDUCATION

PE101 Diversified Activities (1,0,2)

PE103 Weight Lifting (1,0,2)

PE104 Archery (1,0,2)

PE121 Sports Officiating (2,2,0)

This course presents the rules of major sports, officiating techniques, relationship with players and school officials, game administration, major emphasis is to stimulate young men into becoming registered officials with the state association.

PRACTICAL NURSING

PN100 Nursing Foundations (8.4.8)

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 procedures they are to perform, but also increase their ability to deal 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, malnutrition, and variations of diet therapy.

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

The person as a nurse is studied in this course. Who, what, and why she is along with study of herself as a person, a family member and a member of the nursing profession. The students will be introduced to preventive medicine, laws of sanitation, the community health team and each member's role in meeting the total needs of its citizens.

PN130 The Living Body (7.6.2)

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 well-being of the body is stressed.

PN140 Pediatrics (2,2,0)

The growth and developmental processes of children are studied so the student nurse can better understand all children. Nursing skills essential to the care of children and study of the more common disease conditions are also presented.

PN200 Maternal and Child Health (3,2,2)

This course teaches the student facts about pregnancy, prenatal care, and the care of the new-born infant and gives an understanding of the complications and related care and treatment.

PN210 Rehabilitation Nursing (3,2,2)

The principles and practices of rehabilitation nursing aspects including crutch walking, transfer techniques, and bed positioning are taught. Special emphasis is placed on changes which occur during the process of aging, both physiological and mental. Also explored are recreational and diversional activities in relation to the patient's recovery and peace of mind.

PN220 Nursing and Patient in Health and Disease (7,3,8)

Medical-Surgical nursing presents the more common medical and surgical conditions and the nursing techniques and skills involved in providing nursing care. The course is intended to present the concept of meeting the total needs of the patient and a return to normal functioning life.

PN230 Introduction to Medicines (4,3,1)

This course offers beginning instructions in pharmacology and safety factors essential to dosages and drug administration. The practical nurse must take further post-graduate study to be a medications nurse.

PN240 Nursing of Adults and Children (4,0,8)

Each student will be working in the clinical area. Each student will be assigned clinical areas to gain in nursing skills essential to the care of each individual patient.

SOCIAL SCIENCES

SS100 Man's Social World (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 man's thinking about his individual nature and social relationships. (Materials from the following disciplines will be utilized: History, Anthropology, Sociology, Political Science, Psychology, and Economics.)

SS101 Man's Social World (4,4,0)

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. Emphasis will be given to specific problem areas which confront contemporary worlds.

SS105 Contemporary Society (3,3,0)

This course will explore the volatile nature of the "now" society. It will deal with such areas as youth culture, rebellion in the home, on the street and on the campus, divergent group antagonism and the social "I" concept. The students will be given a larger decision making role concerning the context and direction of the course. However, techniques of instruction will involve social encounter and/or sensitivity methodology.

SS150 Contemporary Political Problems (3,3,0)

A critical analysis of current major problems confronting decision making in the international, national, state, and/or local political arenas. Major emphasis will be placed on exploring the nature of political problems utilizing the basic theoretical concepts of political science rather than solving the problems. Principle source materials will consist of current newspapers and magazines, with a view toward demonstrating the interrelationship of the "Practical" and the "Theoretical" to provide a better understanding of contemporary political problems.

SS200 Contemporary Problems (1,1,0)

This course provides for study and examination of problems and concerns, for which hopefully, solutions can be found. Such areas of concern may include, but are not limited to, Environment, Ethics, Personal Identity, Politics, and Drugs.

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

SS215 Principles of Economics (3,3,0)

Macroeconomics—Foundations of economic analysis and policy; national income, employment and fiscal policy; money, banking, and monetary policy; economic stabilization and growth.

SS216 Principles of Economics (3,3,0)

Microeconomics—Markets, the price system, and the allocation of resources; households, businesses and government sectors; current domestic economic problems; international economics and alternative economic systems.

SS220 General Psychology (3,3,0)

An introduction to the subject matter of psychology with emphasis on both scientific and humanistic approaches to the study of man. The first half of the course is designed to familiarize the student with what the field of psychology addresses itself to and how. The second half of the course emphasizes the application of psychology to personal growth and the development of the students own self-awareness and sensitivity to others.

SS221 Child Psychology (3,3,0)

A study of psychological theory and experimental findings in the context of their application to understanding, predicting and modifying childhood behavior. Emphasis is on such basic concepts as heredity and environment, maturation, intelligence and achievement, learning, and childhood anxiety.

SS230 Sociology (3,3,0)

An introduction to the field of sociology surveying such topics as culture and society, social structure, social class, institutions, demography, deviancy, and social change. Emphasis is placed upon acquainting the student with the sociological perspective of human behavior and man's modes of social organization.

SS240 National Government (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.

SS241 State and Local Government (3,3,0)

A study of the state constitution, legislative, executive and judicial organization and powers of the state and principal activities of the state. Attention will be given to the state-local relations and to county and municipal government. This course is planned as an elective in Political Science and does not meet the minimum requirements of the State Law of a three credit hour course in 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.

SS280 Europe since Napoleon (3, 3.0)

A study of the political, cultural, social, and economic developments of Europe since Napoleon.

TECHNICAL DRAFTING

TD100 Technical Drafting I (4,2,6) Fall Scmester

This is a laboratory/lecture course and includes the development and manipulative skills needed for the use of drafting instruments, linework, lettering, geometric construction, multiview projection, sectioning and dimensioning.

TD110 Descriptive Geometry (4,2,6) Fall Semester

A laboratory/lecture course consisting of projection of lines, surfaces, planes, revolution of objects, intersection of planes and solids and sheet metal layouts.

TD130 Technical Drafting II (4,2,6) Spring Semester

A laboratory/lecture course including isometric, oblique and perspective projection, welding drawings, roughness symbols and fastening devices.

TD 140 Jig and Fixture Detailing (4,2,6) Spring Semester

A laboratory/lecture course which includes detailing of jigs, fixtures and dies from assembly layouts. The study of various fits and tolerances are covered along with the new concept of positioning tolerancing.

TD200 Die Design-Plastic Mold (4,2,6) Fall Semester

A laboratory/lecture course whereby the student designs transfer and injection moid dies for the production of various plastic products.

TD210 Die Design-Sheet Metal (4,2,6) Fall Semester

A laboratory/lecture course consisting of the layout and design of blanking, forming, piercing and progressive draw dies.

TD230 Jig and Fixture Design (4,2,6) Spring Semester

The following topics are covered in the laboratory/lecture course: Drill jigs with various types of locating devices, drill bushings, clamping devices, locating pins, milling and tapping fixtures.

TD240 Advanced Die Design (4,2,6) Spring Semester

A laboratory/lecture course which allows the advanced student to further strengthen these skills and knowledge with more complex design problems in plastic mold and sheet metal dies. The student also has an option of choosing either plastic mold or sheet metal die design as a specialty.

RELATED TECHNICAL EDUCATION

VE100 Vocational Communication Skills (3,3,0) Fall and Spring Semesters
A course to develop reading, writing and speaking skills. Emphasis is placed
on precision, clarity, and organization of written and oral communication.

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 communication. Persuasive oral presentations are a part of the course.

VE110 Shop Math I (3,3,0) Fall and Spring Semester
This course is applied shop mathematics which includes a review of decimals, fractions, simple computations, measurements, and applied shop problems.

VEI12 Technical Math (3,3,0) Fall Semester

This course is presented in terms of application normally encountered in industry and the laboratory by the technician and consists of simple arithmetic and algebraic notations, the language of algebra, positive and negative numbers, factoring, fractions, exponents, powers, roots, radicals, equations, formulas, and their application to industry.

VE113 Technical Math II (3,3,0) Spring Semester

An informal approach to topics in elementary geometry that have trade related applications. Topics include construction, properties of triangles, circles. Elementary operations on the slide rule will be covered including problems in multiplication, division, combined multiplication and division, square root, cubing and cube root.

VE114 Technical Math III (3,3,0) Fall Semester

This course begins with a review of linear equations and proceeds with quadratic equations, trig functions through fundamental identities, logarithms and the slide rule through trig functions.

VE115 Technical Math IV (3,3,0) Spring Semester
This course consists of work with the binomial theorem, arithmetic and geometric progressions, complex numbers, solution of cubic and quartic equations, mathematical induction and law of sines and cosines with applications for industry.

VE120 Technical Physics (3,2,2) Fall and Spring Semesters

This course gives an introduction to applied science, its history and use, and
an insight into understanding the properties and control of matter and
energy; technical aspects analysis and use of mechanics; technical aspects of
heat effects and energy.

VE150 Metallurgy (2,2,0) Spring Semester

This course is a study of the properties, classifications, production, and application of steel as it relates to the designer and die-maker. The course includes the study of heat treatment of metals and various tests to determine physical properties of metals.

VE220 Tool Room Operations (3,2,2) Fall Semester

This course covers the theory and practice in the operation of the typical machine tools as well as the use of bench tools and layout equipment. The course is designed to provide practical knowledge of machines processes rather than machine shop skill.

VE230 Mechanics and Strength of Materials (3,3,0) Spring Semester

This course explores the fundamental principles and applications of materials testing, mechanics, strength of materials. Included in the course are topics such as selection and appropriate use of non-destructive testing methods which includes penetrant, chemical etching, and magnetic particle inspection. Basic heat treating along with an in depth study of material selection and use will be a part of the course. Included will be topics dealing with axial and central loads, stress and fatigue factors and study of design data from experiments.

VE250 Electricity and Electronics (3,2,2) Fall and Spring Semesters

This course is designed to give the student a working knowledge of basic AC/DC circuitry, electricity measurements and tests, basic vacuum tube theory, basic transistor theory, fundamentals of power transformers and transmission, engine ignition, and basic circuit wiring. Electrical drawing and symbols will be studied and practical applications of theory will be carried out through lecture, demonstrations and practice on modern electronic equipment and live units.

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

VE260 Manufacturing Processes (2,2,0) Fall Semester

A study of the methods or processes used in manufacturing a product is studied. Individual and group tours of industry along with a survey of technical literature is the basis for the term paper required.

VE290 Field Experience (3-9 credit hours) Fall Semester

A course consisting of a carefully planned cooperative work experience in business industry and a weekly seminar. To receive credit for the course the student must meet the following requirements: 1) acquire approved work experience, 2) show evidence of satisfactory progress through bi-weekly employer reports, 3) complete a minimum of 75 clock hours work for each semester hour of credit granted. (Permission of coordinator required).

VE291 Field Experience (3 credit hours) Spring Semester A continuation of VE290

WELDING

WE100 Welding Fundamentals and Practice (3 semester hours—80 clock hours)

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 oxy-acetylene welding, brazing, cast iron welding, pipe welding, silver soldering and flame cutting. Lecture, discussion, and text and study guide assignments provide the essential background material needed by the welder.

WEJ01 Advanced Welding (3 semester hours—80 clock hours)

This course incorporates theory and practice in improved mastery in welding techniques, use of processes, joint design, weld symbols, and inspection and testing of welds.

WE102 Advanced Welding Laboratory I (3 semester hours—80 clock hours)

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 an expected part of student performance. Early completion of certification requirements will enable the student to develop ability to make process comparisons and economic feasability studies.

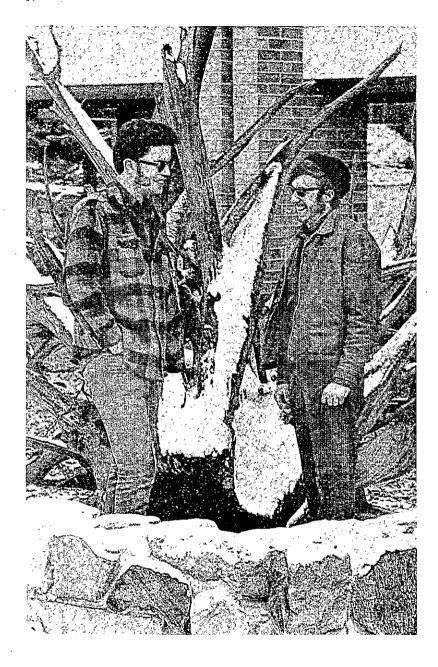
WE103 Advanced Welding Laboratory II (3 semester hours—80 clock hours)
A continuation of WE102

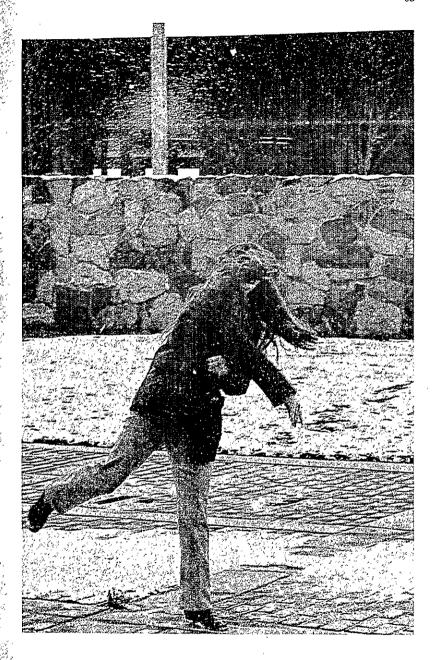
WE104 Advanced Welding Laboratory III (3 semester hours-80 clock hours)
A continuation of WE103.

WE110 Related Welding Skills (3,1,3)

This course covers welding theory and practice in oxy-actylene cutting, welding, and brazing. Electric arc welding theory and practice with mild steel electrodes in flat and vertical position to meet visual inspection requirements as they would apply in automotive areas.







DIRECTORIES

BOARD OF TRUSTEES

Beatrice Doser (Mrs. Fred), Chairman Orville Trebian, Vice-Chairman Dr. Larry Disher, Treasurer Grace Greenhoe (Mrs. Harold), Secretary Willard Braman, Trustee Dr. Harold Steele, Trustee Einer Thorlund, Trustee

ADMINISTRATIVE STAFF

Clifford J. Bedore, Jr. Ed.D., Howard D. Bernson, M.A. John B. Carlson, M.L.S., Donald B. Olson, M.A., Robert G. Gravelle, M.A., James D. Kirk, M.A.,

Acting President and Business Manager Director of Community Services Director of Learning Resources Dean of Vocational/Technical Studies Dean of Academic Studies Dean of Students

FACULTY

Blake, Vernon, M.A. Brehm, Helen, M.A. Bucholtz, Jane, R.N. Burns, Donald, M.A. Dargitz, John, B.S. Decker, La Vonna, R.N., B.S. Ewing, Gayle, Ed.S. Fishell, Frank, M.A. Fox, Richard, B.S. Freid, Gerald, M.A. Highfield, Marjorie, M.A. Hood, Herbert, M.B.A. Hop, Frederick, M.A. Lada, Ronald, M.A. LeGree, Lawrence, M.S.

Language Arts **Business Education** Practical Nursing Counselor Drafting and Design Practical Nursing Counselor Mathematics Automotive Mechanics Social Science Language Arts Business Drafting Social Science

Automotive

Morford, Les, M.A. Moutsatson, Peter, M.B.A. Mulder, Dennis, A.M. Nelson, Dennis, M.A. Pastoor, John, M.A. Peltier, Gordon, Journeyman's Certificate Radtke, Heinz, Vocational Certificate

Regis, Jo Ann, R.N., B.S. Rose, Ruth, R.N. Smith, Kenneth, M.A. Steams, Donald, M.S. Stewart, Maron, M.S. White, Jerry, M.A. Wylie, Leard, B.S.

Social Science Business Language Arts Social Science Language Arts Automotive Welding and Coordinator of Apprenticeship Practical Nursing Practical Nursing Natural Science Natural Science Natural Science Humanities Aircraft



CALENDAR

1972-1973

FALL SEMESTER

Faculty Conferences
Registration
Sept
Classes Begin
Sept
Thanksgiving Recess
Nov
Final Exams
Grading Exams and Grades Due
Semester Ends
Aug
Registration
Sept
Sept
Thanksgiving Recess
Nov
Final Exams
Decc
Grading Exams and Grades Due

August 28 - Scptember 1 September 5 & 6 September 7 November 23 - 26 December 18 - 21 December 22 December 22

SPRING SEMESTER

Faculty Conferences
Registration
Classes Begin
Spring Vacation
Final Exams
Grading Exams
Grades Duc
Faculty Conferences
Semester Ends

January 8 - 10 January 11 & 12 January 15 April 20 - 29 May 7 - 11 May 14 - 16 May 16 May 17 & 18 May 18

