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FORWARD

The major objective of Montclair Community College is to provide for the persons in its service area opportunities to advance their educational pursuits. The purpose of this catalog is to present to those citizens the information necessary to plan to use the services of Montclair Community College. The college exists to provide educational services. Inquiries regarding the college are welcome. A question will usually remain unanswered unless it is asked.

Sincerely,

[Signature]

Dr. Clifford J. Bedore, Jr.
President
AT MCC STUDENTS LEARN HOW TO LIVE AND HOW TO MAKE A LIVING
GENERAL INFORMATION

Historical Review

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

In order to emphasize the strong community commitment to vocational education, the third professional to join the Montclair Community College staff on February 1, 1966, was a Dean of Vocational/Technical Studies. The first full-time programs of Montclair 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 1972 over 40% of the registered credit hours reported were in vocational/technical courses.

In August, 1986, The Learning Resources Director began assembling materials for a comprehensive study center for Montclair Community College.

On July 1, 1987, 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 1987-88 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 1988.

Because of the recognized role of community involvement in a community college and the pressing priorities demanded of other administrators, on February 1, 1989, 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 college staff, Board of Trustees, and citizens of Montclair Community College District will strive to maintain the college as an institution dedicated to the service and well-being of the community it serves.
The Educational Plan

EDUCATIONAL OBJECTIVES

Montclair Community College subscribes fully to the following institutional objectives:

1. To provide vocational and technical study leading to occupational competence at the semiprofessional and skilled levels; also to assist in upgrading the skills of unemployed persons.
2. 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.
4. To provide general education for those who study primarily to become more knowledgeable about their cultural, social and scientific environment.
5. To provide adult continuing education, both through the regular curriculum and through study designed to meet specific objectives.
6. To provide a center for community service through exhibits, lectures, concerts, and similar cultural activities; also, to provide facilities in which community groups may carry on similar projects.
7. 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 development of responsible community citizenship. However, to describe the objectives of Montclair Community College solely in such general terms is stating only one aspect of the goal. The important purposes are better defined in terms of the people who will participate in the educational program, the instructors and students—the community learners who will participate in the educational program, the instructors and students—society after completing study at this level.

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

1. At least 50% of the student body will request programs in the vocational/technical fields.
2. At least 15% of the enrolled students will successfully transfer to senior institutions to complete work for a baccalaureate degree, and some of these will be in technical programs at Montclair Community College.
3. All students—youth and adult, academic and vocational/technical, transfer and non-transfer—will attend a quality collegiate program of studies—including skills training, university programs for creative thinking, and the challenge to become self-directive in their academic life.
4. Each student at Montclair Community College expects that the chief outcome of his educational experience at this institution will be the skilled, moral awareness, and persistent desire to become a lifetime learner.

Both the institution 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 provisions for student life are measured.

ACCREDITATION

Montclair Community College holds full accreditation with North Central Association.

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

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

While technical and vocational courses were designed primarily to promote occupational competency for students enrolled in the programs, certain state universities agreed to accept Montclair Community College credits for possible transfer where they are appropriate to a student's program.

Montclair Community College was awarded status as a Candidate for Accreditation by the North Central Association in April of 1966, in the minimum time possible. An extensive self-study was then prepared and submitted to NCA for evaluation. In December of 1972 a four-person evaluating team visited the MOC campus and in March 1974 representatives from Montclair Community College appeared before a committee of the NCA Commission on Institutions of Higher Education. Shortly thereafter, MOC was awarded full accreditation by NCA.

Montclair Community College holds full membership in the American Association of Junior Colleges, the North Central Committee of Community and Junior Colleges, the Michigan Community College Association and the Association of Community College Trustees.

EDUCATIONAL PHILOSOPHY

Montclair 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 time spent at Montclair Community College does not fulfill many lifelong goals, the daily close contact between instructor and learner helps establish goals and plan how to achieve them.

2. That all educational pursuits are of equal dignity. As Governor George Romney remarked at the Montclair Community College groundbreaking ceremony on September 26, 1966, "All work is good, whether it is done with the head or the hands." The college foresees that its student body will be about equally divided between the academic and vocational/technical divisions and anticipates the same high level of accomplishment in both. Further, it is believed that a person whose major emphasis lies in one division would benefit from educational experiences in the other.

3. That General Education, as presented by Montclair Community College and described later in this catalog, is 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.

5. That instructors at Montclair Community College must provide the basis for continuous lifelong learning.

6. That high standards of moral and spiritual character are an essential attribute for personal well-being.
Admission to the College

Applicants shall possess a high school diploma or, if over the age of 19 years, shall submit to an educational equivalency examination as prescribed by the Director of Admissions.

Exceptions to the above, in keeping with the "Open Door Policy" of Montclair Community College, may be made at the discretion of the Director of Admissions and/or the Admissions Committee.

ADMISSIONS PROCEDURE

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

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

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

3. Only full-time students are required to submit a report of physical examination. Exceptions are: Practical Nursing students, students entering MCC through Vocational Rehabilitation, and students planning on participation in Physical Education. These students must submit a report of physical condition regardless of the number of credit hours for which they are enrolled. An MCC physical examination form must be secured from the Dean of Students' Office, completed by your family physician, and returned to the Dean of Students.

4. 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.

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

A multi-purpose building containing 2 auditoriums, a reading lab., classrooms and instructor offices.
Michigan Residents 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 legal guardian 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 a guardian except by permission of the Board of Trustees in each individual case. Six months after the parents of a minor leave the state, the minor becomes a non-resident student.
2. 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 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.
3. The residence of a wife follows that of her husband, except that a woman student who is a resident under paragraphs 1 or 2 may continue to register as a resident of this state although subsequently marrying a non-resident student or other non-resident.
4. No person is deemed to have gained a residence in this state while a student at any institution in this state.
5. A person in the service of the United States, and his wife or minor children, who have met the requirements in paragraph 2, may register as residents of this state.
6. 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 have met the other requirements herein for residence, may register as residents of this state.
7. 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.
8. Discussed to adjust individual cases within the spirit of these regulations is vested in an officer appointed by the Board of this institution.

Dual Residency
In cases of dual residency, the residence from which the federal income tax return is filed shall determine residency.

PAYMENT OF TUITION AND FEES
Tuition and fees are due and payable in full on the day of registration. No other credit arrangements can be made through the college.
1. 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 2, below.
2. Students under special scholarship and/or loan programs administered by Montcalm Community College will receive no refund; the refund will be returned to the donor. Those scholarships given directly to the student and not administered by the college will be refunded as in paragraph 1. above.
(Tuition charges) for college credit apprenticeship programs shall be made in accordance with the residency requirements for all other students. The student activity fee charge shall not be in effect for apprenticeship students nor for any shared-time high school student who may be enrolled.
Non-credit courses fees shall be established and assessed for each course.

FEES
Registration Fee each semester
Submitted with application for admission.

$5.00
NEW TUITION RATES

Tuition is now $12.00 per credit hour for residents and...
$17.00 per credit hour for non-residents.

Class fees are now $2.00 per credit hour.

We no longer have registration matriculation, students activities or class fees. The $2.00 per credit hour covers all fees except the $5.00 admission fee, which is paid only once, and the $5.00 late registration fee.
Matriculation Fee $10.00
Payable once only at the time of initial registration at Montclair Community College. Students taking less than 12 credit hours of work during their initial semester need not pay the Matriculation Fee. However, this must be paid by the time the student has registered 12 credits of study at Montclair Community College.

Student Activity Fee, per semester $10.00
For students registered for 7 or more hours, except apprentices and shared-time.

Class Fees
$10.00 (13 hours or more)
7.50 (10-12 hours)
5.00 (7-9 hours)
2.50 (4-6 hours)
1.00 (0-3 hours)
5.00

Late Registration

SCHEDULE FOR TUITION REFUNDS FOR ON-CAMPUS CLASSES
If withdrawal takes place:
During first week full refund of tuition only
During second week 75% refund of tuition only
During third week 50% refund of tuition only
During fourth week, or thereafter no refund

SCHEDULE FOR TUITION REFUNDS FOR OFF-CAMPUS CLASSES
No refunds after first night of classes.

FEES ARE NOT REFUNDABLE.

Academic Regulations

Certain academic policies, regulations and practices prevail at Montclair 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 an official policy of the College enabling the community of learning to function.

SEMESTER SYSTEM
Montclair 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 number of credit hours required 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 at least a 2.00 grade point average on a 4.00 point scale.

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

Transfer students who have earned credits at other institutions of higher education may request that these credits be applied toward an Associate Degree at Montclair Community College. However, 24 credits of the total presented for graduation must be earned at Montclair 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 Montclair 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 if unavoidable should have advance arrangements made whenever possible for completion of work.

VETERANS
Montclair 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 Montclair Community College are available at the Admissions Office.

INCOMPLETE GRADES
The Incomplete 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:
1. An "I" mark shall be entered on the record when a course of study is incomplete at the termination of the scheduled semester.
2. An "I" mark shall remain in effect for one year (indefinitely). It must be removed at the beginning of the next semester.
3. 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:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Honor Point Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
<td>4.0</td>
</tr>
<tr>
<td>A</td>
<td>3.0</td>
</tr>
<tr>
<td>B+</td>
<td>2.7</td>
</tr>
<tr>
<td>B</td>
<td>2.3</td>
</tr>
<tr>
<td>C+</td>
<td>2.0</td>
</tr>
<tr>
<td>C</td>
<td>1.7</td>
</tr>
<tr>
<td>D+</td>
<td>1.3</td>
</tr>
<tr>
<td>D</td>
<td>1.0</td>
</tr>
<tr>
<td>E</td>
<td>0</td>
</tr>
</tbody>
</table>

*Failure* is recorded for those who withdraw without passing or receiving a grade.

**Incomplete** indicates that the student is not expected to receive credit for the course, but is expected to continue in the course to complete the work for which credit will be awarded.

**Audit** is recorded for credit students only.

**N** means that the student has completed the course work, but that a grade is not recorded for the following reasons: (1) the course was not completed in the semester, or (2) the student was prevented from completing the course work through circumstances beyond the student's control. A student who receives a grade of **N** should appeal their status to the Vice President for Student Affairs.

**S** indicates satisfactory completion of the course and may be recorded after an **N** grade.

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

Honors
Each semester a Dean's Honor List will be issued including only those students enrolled for at least 12 semester hours and who have no "Incompletes" recorded for that semester. The students on this list will have maintained a Grade Point Average from 3.50 through 4.00. The President's Honor List will include those whose GPA for that semester is 3.50 or higher and meet the above conditions.

The Dean of Students' Scholars will include only those students who have a cumulative GPA from 3.50 through 3.99 and have completed at least twenty-four (24) semester hours and having no incompletes for their total period of enrollment. The President's Scholars will be those students with a cumulative GPA of 3.00 or higher and who meet the above conditions.

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:

1. Students who achieve less than a 1.00 Grade Point Average (B-average) during their first semester will be placed on academic probation.
2. Failure to achieve at least a 2.00 Grade Point Average (C-average) at the end of the first semester will result in the students being placed on academic probation.
3. A student will continue on probation until his cumulative Grade Point Average has been raised to 2.00 or above.

4. While on probation, a student must achieve a 2.00 Grade Point Average each semester. Failure to do so will result in academic dismissal.

5. A student subject to academic dismissal may follow one of the three courses of action:
   a. Be accepted by the dismissal.
   b. He may request assistance in the Counseling Center, primarily to explore the advisability of a change in curriculum. If such a change is decided upon, the counselor will make the recommendation in writing concerning the student's status. Written approval for continuing in a program will be sought from the Dean of the Division in which the student wishes to enter.
   c. A student dismissed from Montclair Community College for academic reasons may appeal before the Dean of Students for special consideration.
6. Students dismissed for academic reasons from Montclair Community College or any other college, may be required to wait for a full semester before re-entering the College.
7. Students transferring into Montclair 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:
1. Students must get a Drop/Add form from the Registrar in the Business Office. This form may be obtained beginning with the first day of classes.
2. After the student has properly filled out the Drop/Add form, the student will take the form to the instructor of the class you wish to drop/add for his signature and return the form to the Registrar.
3. 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.
4. It should be 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 Rights Regarding Records
Students have the right to challenge the accuracy of their records at any time. The college may not release personally identifiable records or files of students without their written consent other than to other school officials, schools of transfer, comptroller general secretary of IBW etc., financial aid offices or under court order.

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 foundation 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 for those in residence is 12 to 18 hours of attendance in lectures, recitations, laboratories, or seminars each week. This must be added to the hours of preparation for classwork, to make a total work week averaging 40 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, various 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    Drama    Stage Band
Bridge Club Folk Singing Student Government
Art Club    Intramurals Veterans Club
Cheerleading Ski Club
Choir

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 academic honesty. Since regulations are necessary in any community, guidelines have been established in the form a Student Code which accords students the greatest possible freedom consistent with the welfare of fellow students and of the institution. Violation of the Code may result in dismissal from the College.

The M.O.C. basketball line up with coach Bob Osdyke.
Financial Aid

The financial aid policy of Montclair Community College reflects the desire of the College for a more equal share of the wealth for the student body of the highest possible quality. No student should fail to apply for admission to the College because of financial considerations.

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

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 work and/or loan to meet each student’s need.

SUPPLEMENTAL EDUCATION OPPORTUNITY GRANTS

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

LOANS

The College has been approved by the Michigan Higher Educational Assistance Authority for participation in the financial aid 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 Montclair area banks are participants in the Authority and application for the MIEAA loan should be made directly with them. High School counselors and Montclair Community College counseling staff have information regarding member banks.

In addition, the College is under the loan provision of the National Direct Student Loan. The National Direct Student Loan is a continuation of the National Defense Student Loan Program authorized by Title III of the National Defense Act of 1968. To be eligible for this loan, a student must demonstrate financial need through the College Scholarship Service and carry at least eight credit hours.

WORK/STUDY

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

BASIC GRANT PROGRAM

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

SCHOLARSHIPS AND GRANTS

The MIEAA program also provides for a program of scholarships for which the College has been declared a participating institution. Students taking the qualifying examination may designate Montclair Community College as the Institute at which their scholarships will be used.

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

- Avis Ann Bedikmeyer Scholarship
- Alvin M. Bentley Foundation
- Farm Bureau
- Ferris Township Scholarship
- Greenville Federation of Women
- Greenville Junior Chamber of Commerce
- Greenville Lions Club
- Stan and Marion Kemp Scholarships
- Stoney American Legion
- Stoney Women's Club
- United Memorial Hospital Guild
- VFW Lester J. Sikes Post 965 and Auxiliary Academic Scholarship

Many new local scholarships are made available each year.

BOARD OF TRUSTEES SCHOLARSHIPS

Two full tuition and fees scholarships, one to a student pursuing a vocational curriculum and one to a student pursuing an academic program, are presented to students from each of seven area high schools.

A minimum of two full tuition and fees scholarships and one per each 50 graduates or fraction thereof over 100 are awarded per area high school to students who have demonstrated outstanding academic and citizenship ability during their high school years.

Two full tuitions and fees Adult High School Scholarships are awarded to students in each of the high schools in the Montclair Community District having a high school completion program for adults. The Scholarship is for seven semester credit hours to be used the following school year. Scholarship recipients are selected by the Area High School Community Education Director.

Twenty full tuition athletic scholarships are awarded to students of the area high schools; no more than ten of which shall be for students for either sex.

Ten full tuition Vocal Music scholarships are awarded to students of the area high schools.

Ten full tuition Instrumental Music scholarships are awarded to students of the area high schools.

Full tuition scholarships are provided for students of the area high schools who have attained the rank of Eagle Scout.

One full tuition F.H.A. Scholarship per F.H.A. chapter in the area high schools is awarded.

One full tuition F.A. Scholarship per F.A. chapter in the area high schools is awarded.

Four full tuition 4-H Scholarships are awarded to students of the area high schools who meet the criteria of the Montclair 4-H Awards Committee.

One full tuition and fees Basic Education Scholarship per area high school is awarded to students having a less than satisfactory academic record and desire to attempt college level work.

Ten full tuition Public Speaking and Related Arts Scholarships are awarded to students of the area high schools.

Persons who are residents of the MCC District, and who are 19 years of age or older, may enroll in college credit classes without paying any tuition. Only the minimal fees will be charged.
Student Services

The College Student Services are designed to aid the student in planning a realistic and constructive 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 right 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 Montclair 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 touch life for us socially, personally or academically.

CAREER GUIDANCE

Career Guidance is provided at Montclair Community College with specific emphasis on helping students develop an awareness of their abilities, interests, values and life style preferences that help them identify and utilize resources necessary for implementation of career plans. The college also offers career planning classes that are designed to develop skills and knowledge from which students may fulfill their needs in regard to career options. A career library offering information on occupations, decision making and career planning resources, and other career information is also available.

SPECIAL NEEDS

A special needs program is available for students who, for a variety of reasons, find themselves in need of supplemental assistance. Developmental reading skills and tutorial services are the two main components of this program. Veterans should also keep in mind that their G.I. Bill benefits will allow tutoring in addition to their regular financial entitlements. Students may contact a counselor for this or may be referred by an instructor.

PLACEMENT

The College employs a Placement Counselor whose primary task is to assist students preparing training at M.C.C. in finding suitable employment. He also posts job opportunities for people desiring part-time and summer employment. Students should register with the Placement Counselor for quick reference to prospective employers. The Placement Counselor also assists students in proper transfer to other training institutions.

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

Community Services

The Community Services concept is based upon the LIFETIME learning philosophy. Through its community services program, the community college offers a variety of services beyond its well-established degree and certificate programs. Community Services at Montclair Community College provides for self-improvement and community development involving the economic, social and political life of the community.

INSTRUCTION AND CULTURAL ACTIVITIES

Community Services offer short courses, conferences and workshops, cultural enrichment activities, including a special events series, exhibits, community chorus, community players and a community outreach program. Other activities include a speakers bureau, public forums on issues, radio programs, services to senior citizens, manpower development training and classes with the Community agencies and organizations.

CAMPUS TOURS AND THE USE OF COLLEGE FACILITIES

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

CAREER INFORMATION, TESTING AND COUNSELING FOR ADULTS

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

M.C.C. works with shared time people.
Learning Resource Center

Catalog Revision

The Learning Resources Center is the central study and research area of the college. The collection of books and other materials was started in 1966. At the present time, the materials collection includes 18,000 volumes of books, more than 200 periodicals, a number of national and local newspapers, back issues of needed journals on microfilm, and several hundred disc and tape recordings.

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

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

A student learns the card catalog is a valuable tool.

COPE

(College Opportunity—Prison Extension)

Many MCC students do not attend classes on the Sidney campus. These are "full-fledged" college students, but they temporarily reside within the walls of two state prisons in Ionia. Currently, COPE students make up one fourth of the total college enrollment.

Recognizing these men as potential students, MCC began offering credit courses in the Michigan Reformatory in 1965 through the Community Services Division of the college. Since that early beginning the prison program has grown to include hundreds of COPE students served by a full-time staff which includes a director, an academic counselor, a placement counselor, counseling assistants, a learning resources assistant and a secretary.

Regular college faculty and adjunct teachers from area institutions currently staff over 120 classes per year at the Reformatory and the medium security Michigan Training Unit. The COPE schedule of courses enables students to pursue a Basic Studies Degree, an Associate of Arts degree, one of several vocational/technical degrees or certificates, or one of MCC's paraprofessional programs.

The goal of the COPE staff is to live up to the meaning implied in the acronym, to help these men cope with the difficult futures they face. Cooperation from the Corrections Department, support from political leaders, and HEW Title III funding contributes to the realization of this intent.
INSTRUCTIONAL INFORMATION

Montcalm Community College offers programs and courses which provide various options to the students.

1. The student whose goal is a four-year degree may earn credits up to the first two years at Montcalm Community College. These courses are transferable to all four-year schools in Michigan.

2. There are a number of career programs designed for immediate occupational entry. Students may earn one-year certificates, two-year certificates, the associate degree in Applied Arts, or the Associate Degree in Arts and Sciences. A number of colleges accept the credits earned in two-year occupational programs toward a four-year degree.

3. A third option is available to the student who, because of specific educational goals, may choose to earn an associate degree in Basic Studies. Students, pursuing certain pre-professional or specific vocational/technical programs, may select this degree. Requirements for such a program are to be approved by the Dean of Students office.

General Education

An integral part of our institutional program is the block of general education courses. These are designed to be inter-disciplinary in nature, to provide the student with a broad base of understanding in the areas of Communication, Natural Science, Social Science and the Humanities. It is the policy of Montcalm Community College that all graduates in the degree programs shall have achieved proficiency in these areas.

It is the goal of Montcalm Community College to equip the students with the skills necessary to conduct themselves as intelligent citizens in a complex world. Equally important, it is expected that the general education curriculum will create a desire for graduates to continue learning even though their formal education may cease with graduation from Montcalm Community College. Also, it is anticipated that the general education courses will provide an equally useful preparation for advanced study at transfer institutions.

Degrees Offered

Associate in Arts and Sciences

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

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Course No.</th>
<th>Semesters</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man's Communication</td>
<td>LA100-101</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Man's Biological &amp; Physical World</td>
<td>NS100-101</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Man's Social World</td>
<td>SS100-101</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Man's Creative World</td>
<td>SS200-201</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Contemporary Problems</td>
<td>SS900-901</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total General Education</td>
<td></td>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>

*Students may take alternate science courses. See the counselor concerning the science requirements for your program.

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

Associate in Applied Arts and Sciences

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

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

General Education Requirements

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Course No.</th>
<th>Semesters</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man's Communication</td>
<td>LA100-101</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Man's Social World</td>
<td>SS100-101</td>
<td>2</td>
<td>8</td>
</tr>
<tr>
<td>Contemporary Problems</td>
<td>SS200-201</td>
<td>1</td>
<td>1</td>
</tr>
</tbody>
</table>

Minimum General Education Credit Hours

*Student may elect to substitute one of the following for SS100: NS 100 or 101, EU200 or 201.

To complete the requirements, the student must follow the prescribed curricula for the program selected. Minimum credit hours for graduation vary with each curriculum and must be strictly observed. The student should refer to curricula outlined on the following pages.

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:

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Course No.</th>
<th>Semesters</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man's Communication</td>
<td>LA100-101</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>Man's Social World</td>
<td>SS100-101</td>
<td>1</td>
<td>4</td>
</tr>
</tbody>
</table>

At least ONE of the following:

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Course No.</th>
<th>Semesters</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man's Biological World</td>
<td>SS100-101</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Man's Physical World</td>
<td>NS100-101</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>Man's Creative World</td>
<td>HU200-201</td>
<td>2</td>
<td>8</td>
</tr>
</tbody>
</table>

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 -
2. 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 hours required for graduation.

Programs of Study

Students planning to complete the one or two-year programs are expected to schedule a program planning conference with the counseling staff in order to establish a training plan which is in keeping with individual needs and aspirations as well as program requirements. In some instances, previous training and/or experience can be considered for waiver of required credit. Documentation of such training or experience is essential and must be approved by the Divisional Dean.
The programs of study on the following pages are the basis for awarding of the Degree or Certificate and should be carefully reviewed and understood.

Apprentice Training
Automotive & Diesel Maintenance
Aviation Maintenance Technology
Business Education
Corrections Program
Mid-Management Programs
Practical Nursing
Residential Construction
Social Service Assisting Programs
Teacher Assisting Programs
Welding Practices

Automotive and Diesel Maintenance

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

Associate in Applied Arts & Sciences

First Semester
- AM150 Automotive and Diesel Engines, Clutches and Manual Transmissions 11
- VE110 Shop Mathematics 3
- VE258 Basic Electricity 3
- LA100 Man's Communication 3

Second Semester
- AM112 Automotive Fuel, Ignition and Emission Control Systems 11
- AM100 Automotive Drawing and Blueprint Reading 3
- VE105 Hydraulics & Fluid Power 3
- LA100 Man's Communication 3

Third Semester
- AM205 Automotive Chassis and Automatic Transmissions 11
- AM254 Parts Management 3
- VE110 Field Experience 3
- SS100 Contemporary Problems 3
- SS200 Contemporary Problems 3

Fourth Semester
- AM255 Diesel Engines and Auxiliary Systems 11
- AM203 Service Management 3
- AM304 Automotive Air Conditioning and Advanced Emission Control Systems 4
- SS101 Man's Social World 3
- VE291 Field Experience 30-35

Total Credit Hours Required
*Students must take either VE290 or VE291 or elect both
Aviation Maintenance Technology

(89 credit hours required)

The Aviation Maintenance Technician Program is designed to provide the skill and knowledge required to meet the requirements of the Federal Aviation Administration Licenses for the Airframe and Powerplant (A&P) Ratings. This 72-week program of studies is structured to provide the required 1900 clock hours of classroom and laboratory training in compliance with the Air Agency Certificate C16-1. Enrollment in this program is limited and selection of qualified students is based upon academic record, background of experience and/or proficiency examinations. The required courses are presented here in a suggested schedule form and beginning students should follow this schedule if possible. A Certificate is awarded upon successful completion of the program. Licensing is the responsibility of the FAA.

<table>
<thead>
<tr>
<th>Semester</th>
<th>Course Code</th>
<th>Course Title</th>
<th>Credit Hours</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year - 1st Semester</td>
<td>AV101</td>
<td>Introduction to Aviation</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>AV102</td>
<td>Airframe Nonmetal Structures</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>AV103</td>
<td>Airframe Sheet Metal Structures</td>
<td>6</td>
<td>180</td>
</tr>
<tr>
<td></td>
<td>AV104</td>
<td>Aircraft Welding</td>
<td>3</td>
<td>60</td>
</tr>
<tr>
<td></td>
<td>AV105</td>
<td>Basic Science</td>
<td>3</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>AV116</td>
<td>Materials and Processes</td>
<td>4</td>
<td>105</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Total</td>
<td>19-20</td>
<td>495</td>
</tr>
</tbody>
</table>

| First Year - 2nd Semester | AV111 | Airframe Assembly and Rigging | 3 | 60 |
|                          | AV112 | Hydraulic and Pneumatic Systems | 6 | 180 |
|                          | AV113 | Aircraft Electrical Systems | 4 | 105 |
|                          | AV114 | Aircraft Instruments and Controls | 5 | 150 |
|                          | AV115 | Aircraft Fuel Systems | 3 | 75 |
|                          |            | Total | 21 | 510 |

| Second Year - 1st Semester | AV201 | Aircraft Reciprocating Engines | 5 | 120 |
|                           | AV202 | Metal Processing | 3 | 75 |
|                           | AV203 | Engine Electrical Systems | 5 | 120 |
|                           | AV204 | Engine Lubrication Systems | 3 | 90 |
|                           | AV205 | Aircraft Drawings | 2 | 45 |
|                           |            | Total | 15 | 420 |

*Students must take either VE230 or VE291 or elect both.

Students learning to work on a crank shaft, 3rd hand knowledge.
Second Year - 2nd Semester
AV211 Aircraft Reciprocating Engine Overhaul 5 120
AV212 Aircraft Engine Ignition Systems 4 90
AV213 Engine Fuel and Induction Systems 5 120
AV214 Turbine Engines 3 60

17 390

Second Year - Summer Semester (12 week session)
AV215 Aircraft Propellers 4 90
AV216 Aircraft Servicing 5 105
AV217 Weight and Balance 2 45
AV218 FAA Review 2 30
13 270

Business Education

EXECUTIVE SECRETARY

(67 credit hours required)

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

Required Business Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*BE101 Intermediate Typing</td>
<td>3</td>
</tr>
<tr>
<td>BE202 Advanced Typing</td>
<td>3</td>
</tr>
<tr>
<td>*BE104 Intermediate Shorthand</td>
<td>4</td>
</tr>
<tr>
<td>BE203 Advanced Shorthand</td>
<td>4</td>
</tr>
<tr>
<td>BE130 Business Math</td>
<td>4</td>
</tr>
<tr>
<td>BE135 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BE139 Business Correspondence I</td>
<td>3</td>
</tr>
<tr>
<td>BE130 Business Correspondence II</td>
<td>3</td>
</tr>
<tr>
<td>BE220 Typing &amp; Office Practice</td>
<td>3</td>
</tr>
<tr>
<td>BE117 Clerical Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BE200 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BE240 Business Machines</td>
<td>4</td>
</tr>
<tr>
<td>BE250 Personnel Relations</td>
<td>3</td>
</tr>
<tr>
<td>BE290 Introduction to Electronic Data Processing</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Credit Hours: 46

Related Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>VE290 Field Experience Co-op I</td>
<td>3</td>
</tr>
<tr>
<td>VE291 Field Experience Co-op II</td>
<td>3</td>
</tr>
</tbody>
</table>

or

Academic & Business electives from LA210, SS101, LA100, BE237, or BE225.

Academic Requirements

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA100 Man's Communication</td>
<td>3</td>
</tr>
<tr>
<td>LA101 Man's Communication</td>
<td>3</td>
</tr>
<tr>
<td>SS100-101 Man's Social World</td>
<td>8</td>
</tr>
<tr>
<td>SS290 Contemporary Problems</td>
<td>1</td>
</tr>
</tbody>
</table>

*Students without high school typing and shorthand must take BE100 and BE103 before placement in these courses.
**CLERK - TYPIST**

(22 credit hours required)

The demand for skilled and well-qualified 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 which include development of skills in the use of all office machinery and the knowledge needed to carry on routine office functions. Previous training in typing is desirable. A certificate will be awarded upon successful completion of the program requirements. A student wishing to continue training may apply credits earned toward the degree program in Secretarial or Management programs.

**First Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE101</td>
<td>Intermediate Typing</td>
<td>3</td>
</tr>
<tr>
<td>BE104</td>
<td>Intermediate Shorthand</td>
<td>4</td>
</tr>
<tr>
<td>BE120</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BE130</td>
<td>Business Correspondence I</td>
<td>4</td>
</tr>
<tr>
<td>BE135</td>
<td>Clerical Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BE140</td>
<td>Business Machines</td>
<td>3</td>
</tr>
<tr>
<td>BE150</td>
<td>Introduction to Business</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE200</td>
<td>Business Correspondence II</td>
<td>3</td>
</tr>
<tr>
<td>BE230</td>
<td>Typing and Office Practice</td>
<td>3</td>
</tr>
<tr>
<td>BE240</td>
<td>Personal Relations</td>
<td>3</td>
</tr>
<tr>
<td>BE250</td>
<td>Business Machines</td>
<td>3</td>
</tr>
</tbody>
</table>

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

*Note: Sales Management, BE260, may be substituted. Permission of the instructor is required.

**STENOGRAPHER**

(34 credit hours required)

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

**First Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE101</td>
<td>Intermediate Typing</td>
<td>3</td>
</tr>
<tr>
<td>BE104</td>
<td>Intermediate Shorthand</td>
<td>4</td>
</tr>
<tr>
<td>BE120</td>
<td>Business Mathematics</td>
<td>4</td>
</tr>
<tr>
<td>BE130</td>
<td>Business Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>BE135</td>
<td>Clerical Accounting</td>
<td>3</td>
</tr>
<tr>
<td>BE200</td>
<td>Business Law</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE230</td>
<td>Advanced Shorthand</td>
<td>3</td>
</tr>
<tr>
<td>BE240</td>
<td>Advanced Typing</td>
<td>4</td>
</tr>
<tr>
<td>BE250</td>
<td>Business Correspondence II</td>
<td>3</td>
</tr>
<tr>
<td>BE260</td>
<td>Business Machines</td>
<td>4</td>
</tr>
<tr>
<td>BE270</td>
<td>Typing and Office Practice</td>
<td>3</td>
</tr>
</tbody>
</table>

Upon completion of this one-year intensive business program, a certificate of achievement will be awarded. The student may also elect to continue for the Associate Degree, completing the academic and remaining business education requirements his second year.

**CORRECTIONS SPECIALIST CERTIFICATE PROGRAM**

The purpose of this program is to broaden the horizons and provide enrichment experience for those people working in the corrections field. It provides a combination of academic and job-related courses for this purpose. The courses taken on the certificate program will apply to the two-year associate degree program.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA100</td>
<td>Man's Communication</td>
<td>3</td>
</tr>
<tr>
<td>LA200</td>
<td>Speech</td>
<td>3</td>
</tr>
<tr>
<td>SS100</td>
<td>Man's Social World</td>
<td>4</td>
</tr>
<tr>
<td>SS110</td>
<td>Man's Social World</td>
<td>4</td>
</tr>
<tr>
<td>SS150</td>
<td>Introduction to Corrections</td>
<td>3</td>
</tr>
<tr>
<td>SS230</td>
<td>Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SS190</td>
<td>Observation Lab or Supervised Field Experience</td>
<td>3</td>
</tr>
<tr>
<td>SS191</td>
<td>Corrections Practicum</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Hours: 30

*This course is only offered at the Idaho Reformatory.

**CORRECTIONS ASSOCIATE DEGREE PROGRAM**

This program is designed to complement the certificate program by providing greater depth in the academic related fields and enabling the student to complete the requirements for an Associate of Arts and Science degree. This degree program includes all of the courses in the Correction Specialist certificate program plus the following:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS220</td>
<td>Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SS235</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SS349</td>
<td>Political Science</td>
<td>3</td>
</tr>
<tr>
<td>NS100</td>
<td>Man's Biological World</td>
<td>4</td>
</tr>
<tr>
<td>NS101</td>
<td>Man's Physical World</td>
<td>4</td>
</tr>
<tr>
<td>HU200</td>
<td>Man's Creative World</td>
<td>4</td>
</tr>
<tr>
<td>HU201</td>
<td>Man's Creative World</td>
<td>4</td>
</tr>
<tr>
<td>SS200 &amp; 201</td>
<td>Contemporary Problems</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours: 30
### Mid-Management Programs

Job entry into the environment of Business is continually requiring a higher level of preparation. The curriculums are 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. These are Associate Degree programs.

#### MID-MANAGEMENT IN ACCOUNTING

(68 credit hours required)

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA100 Man's Communication</td>
<td>3</td>
</tr>
<tr>
<td>SS100 Man's Social World</td>
<td>4</td>
</tr>
<tr>
<td>BE115 Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BE120 Business Math</td>
<td>4</td>
</tr>
<tr>
<td>BE130 Beginning Typing</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA101 Man's Communication</td>
<td>3</td>
</tr>
<tr>
<td>SS101 Man's Social World</td>
<td>4</td>
</tr>
<tr>
<td>BE116 Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>BE240 Business Machines</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14</strong></td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Third Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE200 Business Law</td>
<td>3</td>
</tr>
<tr>
<td>BE237 Management</td>
<td>3</td>
</tr>
<tr>
<td>BE215 Cost Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>LA210 Speech</td>
<td>3</td>
</tr>
<tr>
<td>SS220 General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SS300 Contemporary Problems</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Semester</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE201 Business Law II</td>
<td>3</td>
</tr>
<tr>
<td>BE216 Cost Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>BE240 Personal Relations</td>
<td>3</td>
</tr>
<tr>
<td>BE245 Tax Accounting</td>
<td>3</td>
</tr>
<tr>
<td>SS115 Principles of Economics</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>15</strong></td>
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</table>

### MID-MANAGEMENT IN FINANCE

(61 credit hours required)

<table>
<thead>
<tr>
<th>Basic Business</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE115 Accounting I</td>
<td>3</td>
</tr>
<tr>
<td>BE116 Accounting II</td>
<td>3</td>
</tr>
<tr>
<td>BE120 Business Math</td>
<td>4</td>
</tr>
<tr>
<td>BE130 Introduction to Business</td>
<td>3</td>
</tr>
<tr>
<td>BE137 Management</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE139 Beginning Typing</td>
<td>3</td>
</tr>
<tr>
<td>BE133 Beginning Shorthand</td>
<td>4</td>
</tr>
<tr>
<td>BE240 Business Machines</td>
<td>4</td>
</tr>
<tr>
<td>BE239 Introduction to Electronic Data Processing</td>
<td>3</td>
</tr>
</tbody>
</table>

**Other electives may be chosen in Business Education of a 200 level.**

### Management Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE238 Money and Banking</td>
<td>3</td>
</tr>
<tr>
<td>BE239 Financial Principles</td>
<td>3</td>
</tr>
<tr>
<td>BE233 Principles of Investment</td>
<td>2</td>
</tr>
<tr>
<td>BE234 Credits &amp; Collections</td>
<td>3</td>
</tr>
<tr>
<td>BE240 Business Law I</td>
<td>3</td>
</tr>
<tr>
<td>BE241 Business Law II</td>
<td>11</td>
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</table>

### General Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA109 Man's Communication</td>
<td>3</td>
</tr>
<tr>
<td>LA101 Man's Communication</td>
<td>3</td>
</tr>
<tr>
<td>SS100 Man's Social World</td>
<td>4</td>
</tr>
<tr>
<td>SS101 Man's Social World</td>
<td>4</td>
</tr>
<tr>
<td>SS300 Contemporary Problems</td>
<td>1</td>
</tr>
</tbody>
</table>

### Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA210 Speech</td>
<td>3</td>
</tr>
<tr>
<td>SS115 Economics</td>
<td>3</td>
</tr>
<tr>
<td>SS140 Political Science</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>16</strong></td>
</tr>
</tbody>
</table>
### MID-MANAGEMENT IN MANUFACTURING

(61 credit hours required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE115</td>
<td>Accounting I</td>
</tr>
<tr>
<td>BE116</td>
<td>Accounting II</td>
</tr>
<tr>
<td>BE120</td>
<td>Business Math</td>
</tr>
<tr>
<td>BE135</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>BE237</td>
<td>Management</td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE190</td>
<td>Beginning Typing</td>
</tr>
<tr>
<td>BE193</td>
<td>Beginning Shorthand</td>
</tr>
<tr>
<td>BE290</td>
<td>Business Machines</td>
</tr>
<tr>
<td>BE290</td>
<td>Introduction to Electronic Data Processing</td>
</tr>
</tbody>
</table>

Other electives may be chosen in Business Education at a 200 level.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE206</td>
<td>Production Management</td>
</tr>
<tr>
<td>BE256</td>
<td>Purchasing</td>
</tr>
<tr>
<td>BE273</td>
<td>Industrial Relations</td>
</tr>
<tr>
<td>BE278</td>
<td>Production and Quality Control</td>
</tr>
<tr>
<td>BE296</td>
<td>Business Law</td>
</tr>
<tr>
<td>BE290</td>
<td>Personnel Relations</td>
</tr>
</tbody>
</table>

### MID-MANAGEMENT IN RETAILING

(64 credit hours required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE115</td>
<td>Accounting I</td>
</tr>
<tr>
<td>BE116</td>
<td>Accounting II</td>
</tr>
<tr>
<td>BE120</td>
<td>Business Math</td>
</tr>
<tr>
<td>BE135</td>
<td>Introduction to Business</td>
</tr>
<tr>
<td>BE237</td>
<td>Management</td>
</tr>
</tbody>
</table>

**Electives**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE190</td>
<td>Beginning Typing</td>
</tr>
<tr>
<td>BE193</td>
<td>Beginning Shorthand</td>
</tr>
<tr>
<td>BE290</td>
<td>Business Machines</td>
</tr>
<tr>
<td>BE290</td>
<td>Introduction to Electronic Data Processing</td>
</tr>
</tbody>
</table>

Other electives may be chosen in Business Education at a 200 level.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BE233</td>
<td>Merchandising I</td>
</tr>
<tr>
<td>BE234</td>
<td>Merchandising II</td>
</tr>
<tr>
<td>BE295</td>
<td>Sales Management</td>
</tr>
<tr>
<td>BE295</td>
<td>Credit &amp; Collections</td>
</tr>
<tr>
<td>BE290</td>
<td>Business Law</td>
</tr>
<tr>
<td>BE248</td>
<td>Advertising</td>
</tr>
<tr>
<td>BE290</td>
<td>Personnel Relations</td>
</tr>
</tbody>
</table>

### Management Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA100</td>
<td>Man's Communication</td>
</tr>
<tr>
<td>LA101</td>
<td>Man's Communication</td>
</tr>
<tr>
<td>SS100</td>
<td>Man's Social World</td>
</tr>
<tr>
<td>SS101</td>
<td>Man's Social World</td>
</tr>
<tr>
<td>SS200</td>
<td>Contemporary Problems</td>
</tr>
</tbody>
</table>

### Electives

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA210</td>
<td>Speech</td>
</tr>
<tr>
<td>SS215</td>
<td>Economics</td>
</tr>
<tr>
<td>SS240</td>
<td>Political Science</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Practical Nursing

After completion of this forty-two 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.

Monroe 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 and Ionia County Health Departments.

Requirements for Admission
1. Applicants must be 17 years old. The total maximum age is 55. All applicants will be considered individually.
2. 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.
3. 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 physicians and dentists.
4. Applicants are required to take the FSH screening battery which is scheduled through the Dean of Students Office.
5. 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 I                                      7
PN110 Food in Health and Disease                                 2
PN120 Personal and Environmental Health                       2
PN130 Body Structure and Function                             7
PN140 Human Growth and Behavior                       3
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 Nursing Foundations II                                   7
PN220 Medical-Surgical Nursing                                 7
PN230 Mental Health                                             1
The student will have more clinical experience and fewer formal classes.

Summer Semester                                               Credit Hours
PN320 Pharmacology                                              6
PN340 Nursing III                                                4
The student will have full-time clinical experience.

Advanced Certification Course for L.P.N.'s                     Credit Hours
PN381 Basic Concepts of Pharmacology and the Administration of Medicines (open only to Licensed Practical Nurses) 4

Residential Construction Technology

(One Year Certificate Program)

Demands for well trained trades people in construction are continuing. Methods of construction as well as materials used are continuously changing as the technology of construction expands.

Upon successful completion of the program, the student will attain job entry skills for the Construction Trades. Students will construct an on-site residence as part of the training program.

Fall Semester
RC120 Construction I                                             12
RC130 Construction Methods & Materials I                        3
RC131 Elective from RC115, RC120, RC121, RC122                2

Spring Semester
RC121 Construction II                                            12
RC131 Construction Methods & Materials II                        3
RC141 Elective from RC160, RC161, RC162, RC163                 2

MINIMUM HOURS REQUIRED

Social Service Assisting Programs

SOCIAL SERVICE ASSISTANT CERTIFICATE PROGRAM

The Social Service Assistant Program has been formulated for the student who is seeking employment with a community service agency. It is also planned as an enrichment experience for those who are currently working in a community service agency. It includes a combination of courses introducing the student to the role and function of social services with related academic studies.

Course No.     Course Name                      Credit Hours
LA100 Man's Communication                                 3
LA101 Man's Communication                                 3
LA210 Speech                                              3
SS300 Man's Social World                                  4
SS400 Man's Social World                                  4
SS100 Introduction to Social Service                      3
SS100 Observation Lab or Supervised Field Experience      3
BE100 Beginning Typing                                      3
*Elective                                                   4

Total Hours: 37

*The student who has attained a proficiency in typing may substitute another course.
SOCIAL SERVICE ASSOCIATE DEGREE PROGRAM

This program requires all of the courses included in the Social Service Certificate program plus those listed below.

This program provides a greater depth to the student in areas related to the field such as Psychology, Sociology, and in addition, enables the student to complete the requirements of the Associate Degree of Arts and Sciences.

Since most job opportunities will require the taking of Civil Service examination, the additional background should be helpful to the student.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS220</td>
<td>Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SS230</td>
<td>Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SS235</td>
<td>Social Problems</td>
<td>3</td>
</tr>
<tr>
<td>SS240</td>
<td>Political Science</td>
<td>3</td>
</tr>
<tr>
<td>NS100</td>
<td>Man’s Biological World</td>
<td>4</td>
</tr>
<tr>
<td>NS101</td>
<td>Man’s Physical World</td>
<td>4</td>
</tr>
<tr>
<td>HU120</td>
<td>Man’s Creative World</td>
<td>4</td>
</tr>
<tr>
<td>HU121</td>
<td>Man’s Creative World</td>
<td>4</td>
</tr>
<tr>
<td>SS200 &amp; SS201</td>
<td>Contemporary Problems</td>
<td>2</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>

A classroom lecture in political science.

Teacher Assisting Programs

TEACHER ASSISTANT CERTIFICATE PROGRAM

There is growing recognition in the field of education of the need for people trained to provide assistance to the teacher and other professional staff. Some educators refer to this as diversified staffing.

The student pursuing the teacher assistant program may find employment possibilities as a teacher assistant, school office assistant, school library assistant, and similar positions in education.

The program is designed for people who are seeking to enter the field and also as enrichment for people already employed in a school situation.

The courses taken in the certificate program will apply toward the two-year Teacher Aide associate degree program.

While the majority of the courses are transferable, the student should consult with a counselor if planning to pursue further education at another institution.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>LA101</td>
<td>Man’s Communication</td>
<td>3</td>
</tr>
<tr>
<td>LA102</td>
<td>Man’s Communication</td>
<td>3</td>
</tr>
<tr>
<td>SS100</td>
<td>Man’s Social World</td>
<td>4</td>
</tr>
<tr>
<td>BE101</td>
<td>*Beginning Typing</td>
<td>3</td>
</tr>
<tr>
<td>LA120</td>
<td>Speech</td>
<td>3</td>
</tr>
<tr>
<td>LA201</td>
<td>Children’s Literature</td>
<td>3</td>
</tr>
<tr>
<td>LA110</td>
<td>Introduction to Audio-Visual Services</td>
<td>2</td>
</tr>
<tr>
<td>HU110</td>
<td>Music in the Elementary Classroom</td>
<td>3</td>
</tr>
<tr>
<td>HU120</td>
<td>Introduction to Art</td>
<td>2</td>
</tr>
<tr>
<td>HU121</td>
<td>Art in the Elementary Classroom</td>
<td>2</td>
</tr>
<tr>
<td>MA151</td>
<td>Math for Elementary Teachers</td>
<td>3</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

*The student who has attained a proficiency in typing may substitute another course.

TEACHER AIDE ASSOCIATE DEGREE IN APPLIED ARTS

The purpose of the second year Teacher Aide program is to provide additional training and information which will enable the student to be more proficient in working with professional teachers and other staff members within the school system. While the majority of these courses are transferable, it is important that the student planning to transfer to a four-year institution plan with a counselor on the Montclair Community College staff.

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Name</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS220</td>
<td>Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SS221</td>
<td>Child Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SS235</td>
<td>Educational Psychology</td>
<td>3</td>
</tr>
<tr>
<td>SS240</td>
<td>Sociology</td>
<td>3</td>
</tr>
<tr>
<td>SS241</td>
<td>Political Science</td>
<td>3</td>
</tr>
<tr>
<td>SS190</td>
<td>Field Work &amp; Observation</td>
<td>3</td>
</tr>
<tr>
<td>NS100</td>
<td>Man’s Biological World</td>
<td>4</td>
</tr>
<tr>
<td>NS141</td>
<td>Man’s Physical World</td>
<td>4</td>
</tr>
<tr>
<td>Exec Core</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Total Hours</td>
<td></td>
<td>30</td>
</tr>
</tbody>
</table>
Welding Practices

(23 credit hours required)

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

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE110 Welding Fundamentals &amp; Practices</td>
<td>9</td>
<td>12</td>
</tr>
<tr>
<td>VE110 Shop Mathematics</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>VE104 Shop Drawing</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>VE253 Hydraulics &amp; Fluid Mechanics</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>17</strong></td>
<td><strong>21</strong></td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
<th>Clock Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE101 Advanced Welding</td>
<td>9</td>
<td>.12</td>
</tr>
<tr>
<td>VE102 Vocational Communications</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>VE102 Technical Writing &amp; Speaking</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>VE106 Blueprint Reading</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>16</strong></td>
<td><strong>19</strong></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE102 Advanced Welding Laboratory I</td>
<td>3</td>
</tr>
<tr>
<td>WE103 Advanced Welding Laboratory II</td>
<td>2</td>
</tr>
<tr>
<td>WE104 Advanced Welding Laboratory III</td>
<td>3</td>
</tr>
</tbody>
</table>

Course Descriptions

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

Numbers in the parenthesis () which follow course titles represent the total credits, hours of lecture/demonstration, and hours of laboratory in that order. For example, 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.

Learning is doing. Students are learning how to weld.
APPRENTICE TRAINING

AP109 Machine Tool Operation Theory (48 clock hrs.)
A lecture course consisting of the definition, history, operation and application of the various tool room machines. Tool topics covered include lathe, shaper, horizontal and vertical mills and surface and pedestal grinding. Emphasis is also placed on specific and special operations of these machines.

AP105 Blueprint Reading I (20 clock hrs.)
This course covers the following: three view projections, line alphabet, location of dimensions, sketching, shop terminology, drafting terminology, tolerances, decimal and angular tolerances, machine operations, sectional drawing, thread representation, finished surfaces, sections, auxiliary views, violations of the theory of true projection, arrangements of views, scale drawing, phantom outlines, structural steel shapes, mechanical accessories, A.S.A. symbols, systems of drill sizes and gear formulas.

AP106 Blueprint Reading II (20 clock hrs.)
A continuation of AP105

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

AP111 Shop Mathematics II (36 clock hrs.)
A continuation of AP110

AP112 Shop Mathematics III (36 clock hrs.)
A continuation of AP111

AP113 Shop Mathematics IV (36 clock hrs.)
A continuation of AP112

AP115 Strength of Material and Hydraulics (42 clock hrs.)
Areas covered by this course are simple stresses, shear, riveted joints, stresses in thin-walled cylinders-welded torsion, steam-turbine and moment diagrams, stresses in beams, beam deflection, combined axial bending stresses, columns and materials.

AP122 Shop Drawings (36 clock hrs.)
A condensed course covering the basic principles and techniques of shop drafting stressing the essentials as: lettering, instrument usage, technical terms, applied geometry, free hand sketching, orthographic and section drawings, dimensioning practices, detail and assembly drawings, conventions and standard drafting practices. Pictorial drawing and presentation of engineering data through the media of charts and graphs is also included.

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

AP130 Metallurgy and Heat Treatment (36 clock hrs.)
Studied in this course are properties of alloys and tests to determine their use, chemical and physical metallurgy, forming of metals, metallurgy producing iron and steel, and non-ferrous alloys. Study of properties of steel, surface treatments, power metallurgy, and classification of steels.

AP135 Tool and Die Design—Sheet Metal I (42 clock hrs.)
This course covers instruction on die design standards, solid and spring stripper drop through blanking die, inverted type blanking die, compound blank and pierce die, composite section blanking, solid forming dies, single and multiple pressure pad forming dies, and progressive type dies such as pierce, blank, notch, countersink, cutoff and form.

Welding Instructor, Mr. Radke, illustrates how to use equipment.
AUTOMOTIVE MECHANICS

AM110 Drawing and Blueprint Reading (3,1,12) Spring 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 adjustment is covered.

AM120 Automotive and Diesel Engines, Clutches and Manual Transmissions (11,4,12)
This course covers instruction in theory, laboratory procedures, diagnosis and operations for automotive engines and Diesel engines, clutches and manual transmissions. Shop work consists of the overhaul or rebuilding of engines, clutches and manual transmissions. All popular engines are covered, including the study of the gas turbine and the Wankel engine.

AM131 Automotive Fuel, Ignition and Emission Control Systems (11,4,12) 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. The student receives an in-depth study of fuel, carburetion, starting, charging, standard ignition, electronic ignition and emission control systems.

AM230 Automotive Chassis and Automotive Transmissions (11,4,12) Fall Semester
This course covers front end alignment, brakes, steering, drive line, differentials and automatic transmissions. Laboratory experience involves diagnosis and repair on late model units using latest methods on modern equipment.
AVIATION MECHANICS

AV101 Introduction to Aviation (3,2,0)
An introductory course including aircraft nomenclature, theory of flight, and principles of aircraft maintenance and repair.

AV102 Airframe Nonmetal Structures (3,2,3)
This course studies the repair of wood structures, fabric coverings, and the application of aircraft finishes.

AV103 Airframe Sheet Metal Structures (6,4,6)
This course studies the repair of sheet metal structures, including various types of fasteners, plastics, honeycomb, and interior furnishings.

AV104 Aircraft Welding (3,1,3)
This course is designed to provide the student with skills for soldering, brazing, gas-welding, and arc-welding. It will also provide the student with an understanding of the procedures for welding magnesium and titanium.

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

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

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

AV113 Aircraft Electrical Systems (4,2,4)
This course will provide the student with an understanding of aircraft electrical system operation and the repair of electrical system components. Prerequisite: AV105.

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

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

AV118 Materials and Processes (4,2,5)
This course includes the study of nondestructive testing methods, heat-treating processes, aircraft hardware, and methods of cleaning and controlling corrosion.

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

AV202 Metal Processing (3,2,3)
This course includes a study of hand and power tools used in shaping and processing of metal.

AV203 Engine Electrical Systems (5,4,4)
This course studies the engine's electrical system, its components, and the repair of these components. The course also studies engine instrument systems and fire protection systems. Prerequisite: AV105

AV204 Engine Lubrication System (3,2,2)
This course studies the source of lubricants, their use, and engine lubricating systems.

AV205 Aircraft Drawings (2,1,2)
This course will include the study of basic drawing procedures, making sketches, and reading blueprints, graphs, and charts.

AV211 Aircraft Reciprocating Engine Overhaul (5,3,5)
This course studies the overhaul procedures for conducting a major overhaul on a reciprocating engine and the procedures for removing and reinstalling an engine on an aircraft. Prerequisites: AV201, AV204.
AV212 Aircraft Engine Ignition Systems (4,2,4)
This course studies the operating principles of the aircraft magneto, its overhaul and the repair and replacement of ignition harness. Prerequisites: AV105

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

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

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

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

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

AV218 FAA Review (2,2,0)
This course is a review of all previously taught subjects designed to prepare the student to take the FAA written, oral and practical examinations for both the airframe and powerplant mechanics licenses. Prerequisites: All AV courses except AV215, AV216 and AV217.

AV219 Pilot Ground School (3,3,0)
This course provides the student with information regarding pre-flight planning, airplane systems, airports, communications, air traffic control, weight and balance, meteorology, Federal Aviation Regulations, the Airman’s Information Manual, the use of the flight computer, basic navigation, radio navigation and medical facts of flight. Successful completion of this course should be very helpful in taking the FAA pilot’s written exam.

BUSINESS EDUCATION

BE100 Beginning Typing (3,1,3) Fall and Spring Semester
This is an introduction to and a mastery of the typewriter keyboard. Personal and business letters, elementary tabulation, simple outlines, and manuscript writing are included.

BE101 Intermediate Typing (3,1,3) Fall and Spring Semester
This writing of business letters with practice in proofreading, tabulation, special communication forms and reports, application and employment procedures. Prerequisite: BE100 or equivalent.

BE103 Beginning Shorthand (4,3,2) Fall and Spring Semester
A course in the elementary principles of Gregg Shorthand. Prerequisite: BE100 or equivalent.

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.

BE116 Accounting I (2,3,0) 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.

BE118 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 are included. Prerequisite: BE116 or equivalent.

BE119 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) Fall and Spring Semester
This course reviews fundamental arithmetic processes and their business applications and includes cash and trade discounts, mark-ups, depreciation and interest, and payroll deduction.

BE121 Financial Math (3,5,0)
This course covers simple and compound interest; ordinary and deferred annuities, and perpetuities; amortization and depreciation; bonds and insurance.

BE129 Business Correspondence I (3,3,0) Fall Semester
The basic communication skills are developed through a review of language structure. Attention is given to grammar, English for business use, vocabulary, punctuation, capitalization, and numbers.

BE130 Business Correspondence II (3,3,0) Spring Semester
A study of effective correspondence in business. Prerequisite: BE129.

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.
BE105 Introduction to Business (3,3,0) Fall 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.

BE201 Business Law II (3,3,0) Spring Semester
A continuation of BE200. Security devices, commercial paper and agency and employment are considered. Special emphasis is placed on corporate and partnership law.

BE202 Advanced Typing (3,1,3) Spring Semester
Continued speed-building techniques; advanced production typing techniques; skill in business letters, telegrams, memorandum writing, legal documents, and business forms. Prerequisite: BE101 or equivalent.

BE203 Advanced Shorthand (4,3,2) Spring Semester
Further development of the ability to write new—matter dictation with increasing emphasis on speed and accuracy in transcription. Prerequisite: BE101 and BE104.

BE150 Cost Accounting I (3,3,0) Fall Semester
Cost information systems and accumulation procedures are considered. Planning and control of factory overhead, materials, and labor are considered along with other related costs. Prerequisite: BE116.

BE151 Cost Accounting II (3,3,0) Spring Semester
Planning for profits and cost control. Costs and profits are considered. Emphasis will be placed on cost and profit analysis. Prerequisite: BE118.

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. Prerequisite: BE202.

BE233 Merchandising I (3,3,0) Fall Semester
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
A continuation of BE233 with emphasis placed upon control of the operation. Prerequisite: BE233 or equivalent.

BE235 Small Business Management (3,3,0) On Demand
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.

BE256 Production Management (3,3,0) Fall Semester
The management functions as applied to the production of products. The inputs of capital, labor, design, and purchasing are covered with emphasis upon the process including all types of control. Prerequisite: MA105 or equivalent.

BE257 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, cost control and government regulations. The development and installation of a total information system for managerial decisions is investigated.

BE258 Money and Banking (3,3,0)
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, credit, and banks are studied.

BE290 Business Machines (4,1,7) Fall and Spring Semester
A course designed to train the student in the fundamental process of key-driven calculators, adding-listing machines, rotary calculators, listing calculators, and ten-key machines. Prerequisites: BE120 or equivalent.

BE246 Tax Accounting (3,3,0) Spring Semester
Local, State, and Federal taxes of sole proprietorships, partnerships, and corporations are considered. Tax practices and procedures relating to assessment and collection are also covered. Prerequisite: BE116.

BE248 Advertising (3,2,0) Spring Semester
The role of advertising in society is investigated along with its limitations and media. The creation and planning of advertising is covered along with effective promotional activities.

BE250 Personal 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.

BE253 Financial Principles (3,3,0)
Monetary and credit systems are covered extensively with emphasis placed on meeting the demand for funds, the factors affecting the supply of funds, and monetary and credit policies and problems.

BE259 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: BE116 or equivalent.

BE260 Purchasing (3,3,0)
The purchasing department's role in logistics, objectives, and contributions are studied. Coordination of purchasing with other management functions such as materials management, the computer, and ethics are studied. Prerequisite: BE257.
BE266 Sales Management (3,3,0) Spring Semester
To provide the student with necessary background in organization, management, and operation of an effective sales force. The laws of effective selling are covered extensively.

BE268 Credits and Collections (3,3,0) Fall Semester
This course is designed to provide the student with understanding of basic credit principles. Use of credit as a tool, analysis of dealers and individuals ability to pay, use of credit references, and development of skills and techniques normally used in a credit department for collection of past due accounts.

BE273 Industrial Relations (3,3,0)
The components of personnel problems, supervision skills, organization, manpower, and employment development are investigated. Incentives and management responsibilities also are covered.

BE278 Production and Quality Control (3,3,0)
Organizing for production, interminent and continuous production are studied. Control for job shops, repetitive production, continuous production, and automatic production along with mathematical methods for solving problems are covered. Prerequisite: BE225.

BE280 Introduction to Electronic Data Processing (3,2,1) Fall Semester
This course provides the student with a basic understanding of the procedures, uses and limitations of unit record data processing equipment as applied to various areas of business.

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. Students electing this class should plan to take FL121 second semester.

FL121 Elementary French (4,4,0)
A continuation of French 120. Prerequisite: FL120 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.

FL221 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.

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

FL131 Elementary Spanish (4,4,0)
A continuation of FL120. Prerequisite: Spanish 130 or equivalent.

FL230 Intermediate Spanish (4,4,0)
The second year of college Spanish with greater emphasis upon conversation and reading of Spanish literature. Dictation and vocabulary study will also continue. Prerequisite: at least two years of high school Spanish, FL131 or its equivalent.

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

HUMANITIES

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

HU120 Introduction To Art (3,1,2)
The purpose of this course is to introduce the student to the varieties and types of materials for individual and classroom use.

HU122 Drawing I (3,3,3) 6 Studio Hours
Introduction to the tools and materials of drawing using the various approaches to the graphic representation of real and intangible form. Exploration of traditional and experimental drawing media.

HU123 Advanced Drawing II (3,1,2 to 12) 6 Studio Hours
Advanced problems in drawing; with emphasis on the human figure and art expression. Prerequisite: HU122.

HU125 Painting (3,3,3) 6 Studio Hours
Introduction to the media and techniques of oil painting. Instruction in principles of drawing, color, design as they apply to painting. There will also be discussion of aesthetic and theory of historical painting styles using prints and slides.

HU191 Choir (1,1,0)
Offers student, interest in the performing arts, an opportunity to further develop musical talents. The choir performs at several campus and community events throughout the academic year. Opportunity is also provided to perform with small vocal ensembles whose members are selected from choir personnel.

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

HU193 Special Ensemble (1,0,1)
These groups are appropriate for musicians who enjoy performing in small instrumental and/or vocal ensembles. Participants will be selected, after audition with the director. Each ensemble will meet once per week with the director to rehearse and to set up rehearsal schedules. There will be vocal ensembles such as mixed ensemble, girl's ensemble and men's quartet. Following are the potential instrumental ensembles; brass choir, woodwind quintet, and trumpet trio.
**LANGUAGE ARTS**

**H200 Man's Creative World (4,1,0)**
The purpose of this course is to develop the student's understanding of the artistic, literary and philosophical nature of man, viewed historically, selected topics integrate material from the fields of art, literature, philosophy and religion.

**H201 Man's Creative World (4,1,0)**
Continuation of H200. Emphasis on the modern historical development of thought in art, literature, music, philosophy and religion.

**H205 Music Literature (2,2,0)**
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 repertoire. The fundamentals of music, including meter signature, accidentals, treble and bass clefs, note and rest values, and circles of fifths, will be introduced. Students will be expected to attend various concerts throughout the semester.

**H223 Art In The Elementary Classroom (2,2,0)**
The purpose of this course is to emphasize the role of art in the elementary classroom and its role in contributing to the creative development of the child.

**LA100 Man's Communication (2,1,0)**
The purpose of this course is to introduce the student to the nature and function of the English language. The student will attain basic competency in oral and written communication.

**LA101 Man's Communication (2,1,0)**
The purpose of this course is to develop the student's ability to analyze the various processes of formal and informal communication and to improve the ability to recognize and utilize effective argumentative and expository prose. Second Semester. Prerequisite: LA100 or by consent of instructor.

**LA120 Introduction to Audio-Visual and Library Services (2,1,1)**
This course has two major purposes: (1) To acquaint prospective teachers and teacher aides with the operation and simple repair of audio-visual equipment (2) To familiarize students with the tools of the library in the school setting and principles and techniques of managing a school library. Field trips are planned to local schools libraries.

**LA150 Reading Lab (1,2,0)**
This course is designed to increase reading speed and comprehension in addition to rectifying various deficiencies of 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.

**LA151 Journalism (2,2,0)**
An introductory course which includes the basic techniques of writing, the principles of effective news writing; a survey of newspaper organization and practical experience provided through laboratory sessions.

**LA200 American Thought and Literature (2,2,0)**
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 on the 20th Century.

**LA210 Speech (2,1,0)**
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 peers, the student will become familiar with the basic principles of speech organization, preparation and delivery.

**LA212 Oral Interpretation (2,2,0)**
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.
**MA100 Elementary Algebra (3,3,0)**
A review of the properties of the basic number systems, using the tools of beginning algebra. Additional topics include first degree equations and inequalities, special products and factors, graphs and linear systems, radicals and quadratic equations. Prerequisite: none.

**MA102 Trigonometry (3,3,0) 2nd Semester of Even Years**
The right triangle is studied to introduce the student to the trigonometric functions. Further topics include trigonometric identities, additional formulas, law of sines, law of cosines, complex numbers and DeMoivre's Theorem. Prerequisites: one and one half years of high school algebra and one year of high school geometry.

**MA104 Intermediate Algebra (3,3,0)**
This course provides students with the algebraic skills, including manipulation and proofs necessary for the study of college algebra and analytic geometry. Topics covered include the usual topics through quadratics plus the exponential and logarithmic functions, the binomial theorem, sequences, systems of equations, complex numbers, permutations and combinations with an introduction to probability. Prerequisite: MA100 or equivalent.

**MA151 Math for Elementary Teachers (3,3,0) 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, parallel, congruence, measures and introduction to vectors. Prerequisite: MA151 or equivalent.

**MA158 College Algebra (3,3,0) Fall Semester**
Topics covered include the quadratic equation, sequences and series, complex numbers, DeMoivre'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 quadric surfaces. Prerequisite: MA158 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, hypothesis testing, chi-square, linear correlation and regression. Each topic is introduced with examples and problems. Practice in the use of appropriate tables will be sufficient to insure confidence in their use. Prerequisite: One year of high school algebra.
MA250 Calculus I (4.0) Fall Semester
Functions and continuity, limits, differentiation, applications, integration and the definite integral with applications. Prerequisite: MA160.

MA251 Calculus II (4.0)
Logarithms and exponentials, arc length, polynomials, partial fractions, Taylor's series. Special methods of integration, partial differentiation. Prerequisite: MA250 or equivalent.

MA290 Differential Equations (3.0) lst Semester of Odd Years
Linear equations, the Bernoulli Equation, existence and uniqueness theorems, applications equations of first order and high degree, Clairaut's equation, solution by power series, an introduction to Laplace transform, Strum's theorem. Prerequisite: One year of Calculus.

NATURAL SCIENCES

NS109 Man's Biological World (4.3)
This course provides a basic general education in the major biological sciences (Biochemistry, Botany, Zoology, Genetics and Geology) and also a basis for the individual to relate to his total environment. It presents an opportunity for the student to evaluate his or her own interest and potential in a biological science.

NS101 Man's Physical World (4.2)
The purpose of this course is to provide a basic general education in the major science areas (Astronomy, Geology, Physics and Chemistry) so that the student will better be able to understand and evaluate the results of scientific and technological achievement and their impact upon society. It also provides a basis for the student to evaluate his or her own interest and potential in physical science.

NS102 Physical Geography (3.0) (Earth Science)
A study of the earth-sun relationships, climatic factors on the earth, the geographic grid, land forms, rocks and minerals. Opportunity will also be provided to gain skills in map reading. The course will also include the study of the earth's natural resources and the part played by man in the depletion of these vital materials.

NS109 Botany (4.3) 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.

NS105 Zoology (4.3) 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.
NS206 Invertebrate Zoology (4,3,2) First Semester
A study of the invertebrates representative of various habitats of the local area. Field and laboratory work involves the interrelationships, identification, and biological adaptations of local invertebrates while the lecture sessions provide background in basic invertebrate zoology.

NS207 Human Anatomy and Physiology (4,3,2) Second Semester
An elementary course in human anatomy and physiology with emphasis on normal function and common disorders.

NS209 General Chemistry (4,3,4) First Semester
Fundamental theories, principles, and problems of chemistry will be emphasized. Prerequisite: One year of high school algebra; NS101 or permission from the instructor.

NS211 General Chemistry (4,3,4) A continuation of NS209. Organic and biochemistry will be introduced and the last four weeks will cover qualitative analysis.

PHYSICAL EDUCATION

PE101 Golf (1,0,2)
A coeducational course designed to teach the fundamentals of golf.

PE102 Bowling (1,0,2)
A coeducational course designed to teach the fundamentals of bowling.

PE103 Weight Lifting (1,0,2)
A course involving the supervised lifting of weights and body conditioning.

PE104 Archery (1,0,2)
A coeducational course designed to teach the fundamentals of archery for target or field shooting.

PE105 Diversified Activities (1,0,2)
A coeducational course designed to teach recreational activities involving lawn jugs, table tennis, chess, checkers, volleyball, badminton, horseshoe, and other quiet recreational activities.

PE106 Swimming (1,0,2)
A coeducational course designed to teach the basic elements of swimming and lifesaving. The student will also learn the proper administration of first aid to an accident victim.

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

PE108 Folk Dancing (1,0,2)
A general course designed to develop skills and techniques in the various country and folk dances.
PE121 Sports Officializing (1.0.1)
This course presents the rules of major sports, officiating techniques, relationship with players and school officials and game administration. Major emphasis is to stimulate students into becoming registered officials with the state association.

PE126 Principles of Physical Education (1.0.0)
This course includes the nature of health, physical education and recreation. Physical education is discussed from ancient to modern times. The course includes the biological, psychological and sociological foundations of physical education, professional organization, literature and career opportunities.

PRACTICAL NURSING

PN100 Nursing Foundations I (7.3.9)
This course provides the nursing student with the information and skills necessary to build a foundation for efficient bedside nursing. Students not only gain skill in basic nursing procedures they are to perform, but also increase their ability to communicate with patients and members of the health team.

PN110 Food in Health and Disease (2.2.0)
Basic nutrition facts are presented with their relationship to health. The student becomes familiar with food nutrients, good nutrition, and variations of diet therapy.

PN120 Personal and Environmental Health (2.2.0)
The person as a nurse is studied in this course. It contributes to self understanding and what in nursing history and education has evolved as the present role of a member of the nursing profession. The student 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 Body Structure and Function (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 Human Growth and Behavior (3.3.6)
The developmental processes of the human being are studied with emphasis on early childhood growth and development and the child-parent relationships. Nursing skills essential to the care of children and the study of the common childhood disease conditions are also presented.

PN200 Maternal and Child Health (3.2.6)
This course teaches the student facts about pregnancy. It gives an understanding of the related care, treatment and possible complications of the mother before, during, and following delivery. Care of the new-born infant is also covered. Prerequisite courses: PN100, PN130.

PN210 Nursing Foundations II (7.3.9)
This course provides the nursing student with the knowledge and ability to perform sterile procedures, assist the doctor with more technical procedures, and administer first aid and medications. Prerequisite courses: PN100, PN130.
FN220 Medical-Surgical Nursing (3.3,3)
This course presents the more common medical and surgical conditions and the treatment and skill involved in providing nursing care. The course is intended to present the concept of assessing and meeting the total needs of the patient and a return to normal functioning life.
Prerequisite courses: PN100, PN110, PN120, PN130, PN140

FN225 Mental Health (1.1,1)
This course in mental health is given to help students identify and meet the emotional needs of all patients in general hospital situations. The course also surveys concepts of the Psychiatric patient and their applications to all interpersonal situations. At the completion of the course, the nursing student will be able to identify basic dynamics of human behavior and differentiate among patterns of behavior. The correlation between physical illness and emotional instability are learned as factors to consider in planning patient care. Prerequisite courses: PN100, PN130

FN230 Pharmacology (4.4,9)
This course offers instruction in pharmacology and safety factors essential to dosages and drug administration. Upon completion of the course, the graduate will be able to participate appropriately in the total process involved in the administration of a drug to a patient, including preparing, observing, recording, and reporting the effects of the drug. In addition, a program on substance abuse is included. Prerequisite courses: PN100, PN110, PN120, PN130, PN140, PN220, PN230, PN240, PN250.

RESIDENTIAL CONSTRUCTION TECHNOLOGY

RC109 Construction Methods & Materials I (3,2,1)
This course is designed primarily to supplement RC120 in that it is designed to broaden the scope of instruction gained in RC120. The course will include field trips to various construction job sites (residential and commercial), a truss building factory, modular home factory, and various points of interest relative to the construction industry. Lectures by guest speakers on construction will be included. Basic mathematics is also included in this course.

RC110 Construction Methods & Materials II (3,2,1)
A continuation of RC109.

RC155 Architectural Blueprint Reading (2,1,2)
A lecture/laboratory course designed to teach students the art of reading construction blueprints as it relates to residential and commercial construction.

RC20 Construction I (2,2,16)
A practical course involving full-scale construction of a residential building using modern materials and methods. This course will involve rough framing, exterior covering and closing against the weather.

RC21 Construction II (2,2,16)
A continuation of RC20 involving drywalling and plastering and interior finishing of a residential home.
RC180 House Wiring (2.1.2)
A course in residential house wiring techniques and wiring codes. Instruction will be practical in nature with students doing wiring exercises in a laboratory situation.

RC180 Foundations and Block Laying (4.2.4)
A practical course in foundation layout and construction, and block laying. The student will layout foundation footings and construct a building or basement of cement blocks. It is intended to build a basement for a residential home, install footing drains, backfill, and install floor joists and sub-floor on a house. (Offered summers only)

RC181 Basic Block Laying and Brick Laying (2.1.2)
A laboratory/lecture course covering the following topics: building corners, swiping mortar; joint reinforcing; coating of joints; laying to a line, buttering head joints; laying headers, rowlocks and soldiers. The student will gain laboratory experience in the above mentioned topics.

RC182 Fireplaces and Arches (2.1.3)
A laboratory/lecture course covering the following topics: basic arch construction, basic fireplace and chimney construction, fireplace construction with sheet metal forms and firebrick. The student will gain laboratory experience in the above mentioned topics.

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 the 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, Psychology, 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. Special emphasis will be given to the rights and responsibilities of citizenship and the form and function of government. Emphasis will also be given to specific problem areas which confront the contemporary world. (This course also satisfies the state requirements for political science.)

SS103 Contemporary Society (3.2.0)
This course will explore the volatile nature of the "new" 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 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.

SS130 Introduction to Social Services (3.2.1)
A survey course designed to acquaint the student with the role and function of social services, the various agencies involved and related information. In addition, there will be some emphasis on the role of the para-professional with activities planned for self-improvement such as interviewing, role playing, listening, and other related activities.

SS40 Introduction to Corrections (3.3.0)
An examination of the total correctional process from law enforcement through the administration of justice, probation, prisons and correctional institutions.
SS145 Corrections Practicum (4,4,0)
This course incorporates several aspects of the corrections process including role of the correctional practitioner and psychological aspects of the client, and other important information related to corrections work.

SS185 Introduction to Early Childhood Education (3,3,0)
Curriculum planning, methods and materials for nursery and kindergarten children. Concepts of interaction with and guidance of the pre-school child.

SS190 Observational Laboratory or Supervised Field Work (3,1,2)
The purpose of this course is to provide an opportunity for the student or para-professional to gain first hand experience in a community service agency. The student will have the option of participating in any type of experiences (1) An in-depth study of a designated community service agency with defined objectives, agencies and/or (2) Participation in a community service agency with defined objectives.

SS200 Contemporary Problems (3,1,0)
This is a series providing for study and examination of problems and concerns for which, hopefully, solutions can be found. Such areas of concern may include, but are not limited to, problems in the social, political, and economic domains.

SS210 Environment, Ethics, Personal Identity, Politics and Drugs (3,3,0)
A course in the study of the environment, ethics, personal identity, politics, and drugs. Emphasis will be placed upon the importance of understanding the interrelationships between these concepts and their impact on society.

SS215 Principles of Economics (3,3,0)
A one-semester course in introductory economics. Although this course provides exposure to both macroeconomics and microeconomics, greater attention is given to macroeconomics, which is related to issues of national economic policy. Units include the macroeconomic system, the theories of supply and demand, and the role of government in the economy.

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 introductory survey of the subject matter of psychology with emphasis on both scientific and humanistic approaches to the study of man. The course is designed to familiarize the student with the field of psychology and how it addresses itself to and how among the subjects covered are experimental methodology, human growth, and development, intelligence, perception, learning, motivation and emotion, personality disorder, and group behavior.

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, motivation, intelligence and achievement, learning and childhood anxiety.

SS225 Educational Psychology (3,3,0)
This course is designed to introduce the student to the basic principles of psychology as applied to education. Emphasis will be placed upon learning and the phenomena of teaching.

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 will be placed upon acquainting the student with the sociological perspective of human behavior and social change.

SS233 Social Problems (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 will be placed upon acquainting the student with the sociological perspective of human behavior and social change.

SS240 Political Science (3,3,0)
An introduction to the institutions and functions of the national government. Special emphasis will be placed upon the role of the states in the national political system and 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 requirement of the general education curriculum as well as the state requirements for political science.

SS241 State and Local Government (3,3,0)
A study of the state constitutions, legislative, executive and judicial organization and powers of the state and principal agencies of the state. Attention will be given to the state-local relations and to county and municipal government.

SS250 U.S. History to 1965 (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 Revolution, the conflicts between individualism, sectionalism, and nationalism; and the implications and consequences of disorder in the Civil War.

SS251 U.S. History from 1965 to the present (3,3,0)
This course is a continuation of SS250. A survey of American political, economic and diplomatic history from the close of the Civil War to the "Great Society" will be made. Special emphasis will be placed upon the Reconstruction of the South, the industrial transition, the Progressive movement, the world wars, the demographic wars, the emergence of the United States into a position of world leadership and the responsibility of this maturity.

TRADE-TECHNICAL EDUCATION

VE100 Vocational Communication Skills (3,3,0) Fall Semester
A course to develop reading, writing and speaking skills. Emphasis is placed on precision, clarity and organization of written and oral communications.
VE102 Technical Writing and Speaking (2,2,0) Spring Semester
A study of the nature of concise writing of technical papers, reports, and correspondence demanded of the technician is made providing ample practice assignments in the student's area of study. Topics covered include: Effective organization, style, mechanics, tables and figures, contents and techniques of report writing, formal reports, figures, contents and special letters, memos, the letter of application, the bibliography, abbreviations, spelling and others. This course also emphasizes the value and necessity for effective verbal communications. Persuasive oral presentations are a part of the course.

VE104 Shop Drawing (2,1,2)
This course is designed to enable students to develop skill in the production of a working drawing. Programmed instruction involving line work, projection, dimensioning and identification is the major emphasis on the course.

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

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

VE112 Technical Math (3,3,0)
This course is presented in terms of application normally encountered in industry and the laboratory by the technician and consists of simple arithmetical and algebraic solutions, 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)
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)
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)
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)
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.

VE120 Metallurgy (2,2,0)
This course is a study of 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.

VE120 Tool Room Operations (3,2,3)
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 machine processes rather than machine shop skill.

VE120 Mechanics and Strength of Materials (3,3,0)
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 static and cyclic loads, stress and fatigue factors and study of design data from experiments.

VE120 Basic Electricity (3,2,3) Fall Semester
The purpose of this course is to give a student a basic knowledge of electrical components, AC and DC circuits, and electrical measuring instruments. Other topics include schematic symbols, power, capacitance, inductance, impedance, magnetism, electromagnetism, transformers and motors. This course emphasizes a "hands on" approach with the use of modern components and equipment.

VE120 Hydraulics and Fluid Mechanics (3,3,0) Spring Semester
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.

VE120 Manufacturing Processes (2,2,0)
A study of the methods of 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.

VE120 Field Experience (5-6 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.)

VE120 Field Experience (3 credit hours) Spring Semester
A continuation of VE120.
WELDING

WELDING

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

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

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

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

WE104 Advanced Welding Laboratory III (3,0,4)

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

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