1959 – 1960

Lansing Community College

CATALOG NUMBER 3

1959-1960

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LANSING COMMUNITY COLLEGE

Lansing, Michigan

September, 1959

Lansing Board of Education

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Mr. Clarence H. Rosa, Vice President

Mr. Vernon D. Ebersole, Secretary

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(Term commences July 1, 1959)

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Mr. Stephen A. Partington, Assistant Superintendent of Schools

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Lansing Community College
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Lansing, Michigan

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LANSING COMMUNITY COLLEGE
CALENDAR

Day and Evening College

Fall Term 1959

September 21-22	Monday-Tuesday - Orientation for New Students
September 23-24	Wednesday-Thursday - Registration of Students for Day and Evening Classes 9:00-5:00 P.M., 7:00-9:00 P.M.
September 28	Monday - Day and Evening Classes begin
October 16	Friday M.A.J.C. - No Classes
October 29	Thursday - Mid-term Grades Due
November 26-29	Thanksgiving recess
December 12-17	Saturday-Thursday - Final Examinations
December 17	Thursday - Fall Term Closes

Winter Term 1960

January 4	Monday - Registration of Students for Day Classes 9:00-5:00 P.M.
January 4-5	Monday-Tuesday - Registration of Students for Evening Classes 9:00-5:00 P.M., 8:00-9:00 P.M.
January 6	Wednesday - Day and Evening Classes Begin
February 18	Thursday - Mid-term Grades Due
March 19-24	Saturday-Thursday - Final Examinations
March 24	Thursday - Winter Term Closes

Spring Term 1960

March 31	Thursday - Registration of Students for Day Classes 9:00-5:00 P.M.
March 31, April 1	Thursday-Friday - Registration of Students for Evening Classes 9:00-5:00 P.M., 7:00-9:00 P.M.
April 4	Monday - Day and Evening Classes Begin
May 5	Thursday - Mid-term Grades Due
June 11-16	Saturday-Thursday - Final Examinations
June 16	Thursday - Spring Term Closes

Summer Term 1960

June 23-24	Thursday-Friday - Registration of Students for Summer Term
June 27	Monday - Classes Begin
July 15	Friday - Mid-term Grades Due
August 8-9	Monday-Tuesday - Final Examinations

FACULTY

Benedict, Frank----------Registrar

B.M., Michigan State University; M.A., University of Michigan; Additional graduate work: Michigan State University

Burge, Calvin----------Mathematics

A.B., Greenville College; M.S., University of Illinois; Additional graduate work: Washington University

Campbell, Paul----------Counselor and Psychology

A.B., Tennessee Temple; M.A., Baylor University; Additional graduate work: Michigan State University

Clark, James----------History

A.B., Oberlin College; A.M., Harvard University; Additional graduate work: Michigan State University and University of Michigan

Clark, Ruby----------Homemaking, Practical Nurses

B.S., Michigan State University

Comes, Francis----------Political Science, Economics

B.A., Michigan State University; M.A., Michigan State University; Additional graduate work: Michigan State University

Cory, Frank----------Mechanical Technology

B.S., Eastern Michigan College; M.A., University of Michigan: Additional graduate work: Michigan State University

Cannon, Philip J.----------Dean

B.A., Albion College; M.A., Michigan State University; Additional graduate work: Duke University, Columbia University, Michigan State University

Cif, Edwin----------Mechanical Technology

B.S., Michigan State University; Additional graduate work: Michigan State University

Canfield, Mary----------Business Training

B.A., Michigan State University; M.S., University of Michigan

Cain, Ardath----------Nursing Arts, Practical Nurses

R.N., Edward W. Sparrow Hospital

Huggett, Floyd----------Biology, Natural Science

B.S., Western Michigan University; M.S., Michigan State University. Additional graduate work: Michigan State University

Kelly, Ruth----------Mathematics

B.A., Ferris Institute, Michigan State Normal, Michigan State University. Additional graduate work: Michigan State University.

Kleiver, Jane----------Director, Practical Nurses

R.N., Edward W. Sparrow Hospital.

Lawton, David----------English

B.A., Hiram College; M.A., Western Reserve University; Additional graduate work: Michigan State University

MacClure, Thomas----------Electronics Technology

B.S., Michigan State University; Additional graduate work: Michigan State University

Manion, John----------English

B.A., Washington State; M.A., Washington State; Additional graduate work: Michigan State University

McCormick, Floy----------Mathematics

B.A., University of Kansas; M.A., University of Kansas.

Overhouse, John----------Civil Technology

B.S., Michigan College of Mines and Technology; Additional graduate work: Case School of Applied Science, Western Reserve University, Michigan State University. Registered Professional Engineer.

Oviatt, Carla----------Mathematics

B.S., South Dakota State

Rinehart, Richard----------Civil Technology

B.S., Michigan State University; M.S., University of Michigan; Registered Professional Engineer.

Rodner, Kim----------Social Science, Philosophy

B.A., Michigan State University; M.A., Michigan State University Additional Graduate Work: University of California.

Shong, Robert----------Mathematics, Engineering Drawing

B.S., General Motors Institute.

Stolberg, Donald----------Physical Education

B.S., Western Michigan University; M.A., Michigan State University; Additional graduate work: Michigan State University

VonReichbauer, William----------Accounting

B.S., Ohio State University; M.A., Ohio State University; L.L.B., John Marshall Law School.

Warback, Laura----------Nursing Arts, Practical Nurses

R.N., Cumberland Hospital School of Nursing

Watson, Claude----------Physics

B.S., Michigan State University; M.S., Michigan State University; Additional graduate work: Michigan State University

Wilson, Harry----------Electronics Technology

B.S., Western Michigan Univeristy; Additional graduate work: Michigan State University.

Witcher, Elma----------Mathematics

B.S., University of Virginia; M.A., Columbia University; Additional graduate work: John Hopkins University, American University

Wolff, Edward----------English

Ph.B., University of Detroit; M.A., University of Detroit; Additional graduate work: Michigan State University

Office Staff

Bertoline, Lillian----------Secretary

Cavanaugh, Lyla, L.P.N.----------Secretary

Clegg, Betty----------Secretary

Rich, Phyllis----------Secretary

GENERAL INFORMATION

BACKGROUND

The Lansing Community College has completed two years of successful operation. Over one thousand students have attended the college taking course work in Liberal Arts, Business, and the Technical curricula. Instrumental in making the first two years a success has been the guidance from local representatives of industry, labor, business, and Michigan State University.

The College now offers a complete freshman and sophomore year of college, making it possible for a Community College student to transfer to other institutions of higher learning to complete the junior and senior years of college.

The primary aim of the Lansing Community College is to provide excellent college instruction. In addition, each student receives guidance and counseling which help to make the first two years of college a success. Modern and well equipped laboratories and classrooms are available to students under the guidance of an experienced staff.

Because the College belongs to and is a part of the Lansing community it is prepared to adjust its program to meet any new educational needs.

FULL-TIME PROGRAM

To students desiring to attend college on a full-time basis, a day time program is being offered in electrical, civil, and mechanical technology and other collegiate areas. The above curricula are two years in length, with an Associate Degree awarded on successful completion of the two year program.

PART-TIME PROGRAM

The Community College has a day and evening program. Students may enroll for courses offered by the college in its part-time program and should be able to complete requirements for a degree in four to five years while fully employed.

The part-time program is specifically designed to aid the adult student in gaining the skills necessary for advancement beyond his present position.

APPLICATION PROCEDURE

In order to be eligible for admission to Lansing Community College, an applicant must provide evidence of satisfactory scholarship in former schools and either show evidence of high school graduation or take an entrance exam.

SCHEDULE OF FEES

Fees:

Basic Tuition:

Students Who Live Within The Lansing School District:

Credit hour per quarter----------$ 3.00

**Maximum charge per quarter----------$50.00

Students Who Live Outside Of The Lansing School District:

Credit hour per quarter----------$ 4.25

**Maximum charge per quarter----------$65.00

Registration Fee:

(For first registration only)----------$ 2.00

Audit Fee:

Per credit hour equivalent-----(City Residents)---------$ 3.00

(Non-Residents)---------$ 4.25

Laboratory Fee:

There will be a material fee for each *laboratory course in Liberal Arts, Civil Technology, Mechanical Technology, and Electrical Technology----------$ 2.00

Locker Fee:

(Per school year)----------$ 1.00

Towel Fee:

(Each quarter)----------$ 1.00

A STUDENT SHOULD PAY ALL HIS FEES BEFORE HE ATTENDS CLASSES

*Courses marked laboratory in catalog

**Any student carrying more than twelve credit hours per term will be considered a full-time student.

REFUNDING FEES

Tuition will be refunded in accordance with the following policy:

Time from date of final registration	Percent of Registration fee to be refunded
One week or less	80%
From one to four weeks	50%
After four weeks	None

Veterans will receive refunds on all changes on a prorated basis throughout the school year in accordance with P.L. 550.

REGISTRATION PROCEDURE

To become officially enrolled in the Lansing Community College a student must complete the following:

1. File with the Dean's office an application form which includes the personal history and the high school academic record of the student.

2. Request that official transcripts from any other college or university in which the student has been enrolled since his last attendance in high school be sent to the Dean's office.

3. Report for pre-registration at the time requested by the Dean's office. A new student will be given a pre-registration appointment, but a returning or transferring student will be assigned his appointment as soon as all credentials are on file in the Dean's office. The student will then be assigned a counselor to help him organize a program for his major interest,

the specific courses of which will be indicated on the student's pre-registration card.

4. Report on the day for final registration as indicated in the school calendar. At this time the student will pay his fees, complete all registration blanks, and may if he wish, purchase his books.

Credit will be given only for courses in which the student is officially registered.

LATE REGISTRATION

A student registering late will be required to make up the work he has missed. After the second week in any quarter a student is not permitted to enroll for a full-time class schedule. If the Dean and the instructor approve, a student may initiate a program at any time within the first half of a quarter. A student registering late will be required to submit all credentials as listed above within one week of the day he enrolls. An additional $2.00 is charged those students who register after the official registration period.

AUDITING A COURSE

A student who desires to attend classes regularly, but does not wish to take the final examinations or receive grades or credit, may register as an auditor. A record will be kept of classes attended. Credit for such courses cannot be established at a later date.

CHANGE IN REGISTRATION

During the first two weeks of a quarter a student may make changes in his schedule by obtaining the proper form from the Dean's office. After the second week no courses can be added for credit.

A student may withdraw from a course in the first half of a quarter without penalty. If he withdraws after that time and is passing in the course at the time of withdrawal, he will be considered to have withdrawn without failure and a "W" will appear on his record. If he withdraws after that time and is failing in the course at the time of withdrawal, the instructor will record a grade of "F".

WITHDRAWAL FROM COLLEGE

If a student finds it necessary to withdraw from college he should report to the Dean's office without delay and obtain the proper blank

to make his withdrawal official.

HONORABLE DISMISSAL

A statement of "honorable dismissal" will be given to the student if at the time of withdrawal all his financial obligations to the college have been met and his status as to conduct, character and scholarship is such as to entitle him to continue in the college.

SCHOLASTIC REGULATIONS

CREDITS

The regular college year is divided into three terms of approximately twelve weeks each. In general, a class meets one hour each week for each credit earned; somewhat more time is required for courses with laboratory work. To the student taking laboratory work, the usual load of 16 credit hours of courses will, then, mean about 25 or more hours of class attendance each week for one quarter. Carrying 16 credit hours each term plus 1 credit hour in physical education, the student will earn in two year the 90-96 credit hours required for graduation. A statement of credit hours earned follows the course titles in this catalog.

CREDIT BY EXAMINATION

A regularly enrolled student may obtain credit for certain courses at the discretion of the Dean and faculty advisors by passing a comprehensive examination (or series of examinations). The fee is $3.00 per credit hour.

TRANSFER OF CREDITS

Transfer courses will be accepted from accredited institutions. Each course so designated will be evaluated by Lansing Community College. A student may earn more than 92-110 credit hours at Lansing Community College but the transfer value of any hours over the 110 must

be determined by the institution to which the student is submitting his credentials for further college work.

An "Official Transcript" is one which is signed by the Dean, or his representative, has the school seal placed over his signature, and gives the date of the "honorable dismissal" of the student from the college. A student expecting to transfer to a senior college is advised to examine carefully the current catalog of the particular college he expects to enter and to follow as closely as possible its particular recommendations for programs of study.

Each student is furnished two official transcripts free of charge; for each additonal transcript a fee of 50¢ is charged.

STUDENT CREDIT LOAD AND LIMITATIONS

The standard student schedule is 15-18 credits per term. Permission to carry class schedules exceeding this will be dependent upon past attendance and scholarship records.

SYSTEM OF GRADES

The following system of symbols is used at Lansing Community College to evaluate work accomplished by the student.

A - A high degree of excellence shown in effort and intellectual achievement

B - Strong effort and better than average achievement

C - Average achievement

D - Accomplishment of a minimum standard of achievement

F - Failure

I - Incomplete. This grade is given only when for good cause the student has been unable to complete the work at the end of the term. A student receiving this grade should

consult his instructor immediately regarding completion of the work. Incompletes must be removed before the closing date of the next term in which the student is enrolled or the grade will automatically become an "F".

W - Withdrawal

UW - Unofficial Withdrawal. This grade is given when a student neither attends a class nor withdraws officially from it.

Point averages are determined on the following basis:

A - 4, B - 3, C - 2, D - 1, F - 0, I - 0, W - 0, UW - 0

Thus, a student who earned 5 hours of A, 5 hours of B, and 5 hours of C would have a total of 45 points for 15 hours, a grade point average of 3.00.

SCHOLARSHIP

Any student whose grade point average for any term falls below 1.5 will have special counseling before he re-enrolls. One consecutive term of grade point below 1.5 will place the student on probation. If the student's grade point continues below 1.5 after he has been placed on probation, he will be asked to leave the college. After one term has elapsed he may apply for re-admission. His application must be in writing and he must have a personal interview with the Dean of the college.

TERM GRADE REPORTS

A grade report will be issued approximately one week after the last day of final examinations each term. This report may be obtained only by the student to whom it belongs. If unable to call for it, the student should leave a self-addressed envelope in the Dean's office and the report will be mailed directly to him. The grade report will be withheld if the student does not have all credentials on file in

the Dean's office, or if any financial obligation toward the college has not been fulfilled.

EXAMINATIONS

Final examinations are held regularly at the end of each term. Students are required to take the final examination at the appointed time and place in order to receive credit in a course. An examination taken at any other time than that officially scheduled is a "special examination" and the student must make application through the Dean's office for it to be administered. A fee of $1.50 per examination is charged for special examinations.

REPEATING A COURSE

A student may repeat a course in which he has received a failing or low passing grade and in such case the grade received the second time will appear on the student's permanent record and shall be used in computing his cumulative grade point average.

ATTENDANCE

A student is expected to attend all sessions of each class in which he is enrolled. Failure to do so may result in a lower grade. Absence or tardiness because of serious illness or unavoidable circumstances may be excused if the instructor in charge of the course is completely satisfied as to the cause. Being excused for an absence in no way relieves the student from the responsibility of completing all the work of the course to the satisfaction of the instructor in charge.

Absences will be excused when incurred by reason of a student's participation in field trips, and other trips arranged by the college, provided such trips have been previously arranged by the instructor

through the Dean's office. The instructor whose work requires absences of students from classes will file in the Dean's office a list of the names of the students involved at least 48 hours before the activity.

GRADUATION REQUIREMENTS

To graduate from Lansing Community College a student must:

1. Complete a two-year balanced course of study adapted to his needs, interests, and capacities, and conform to a plan acceptable to the college. The course of study should be (a) suitable for transfer to admit the student to the approximate level of upper-division work in a four-year college of his choice, or should (b) form a complete program of study to be terminated at the end of two years in the Community college.
2. A grade point average of 2.0 is required for graduation.
3. Of credits earned toward graduation at least 15 must be earned at this college; if fewer than 25 are earned here, not fewer than 10 of them must be in the last quarter of attendance.
4. File with the Dean a petition for graduation before final registration for the last term.
5. Satisfy all general and specific requirements of Lansing Community College which pertain to him, including the fulfillment of all financial obligations.
6. Be in attendance at the Commencement exercise of his class unless a petition of absence, properly made by him to the Dean, is approved.

DEGREE

The degree of Associate in Science or Associate in Arts is granted to all who meet graduation requirements. Degrees will be granted only

once each year. Any student completing the requirements during the Fall or Winter terms will be able to apply for graduation during the term his work is completed. All degree will then be granted in June of that school year.

STUDENT SERVICES

COUNSELING

Lansing Community College endeavors to make available to each student during his college career the most modern aids to a wise vocational choice, to improvement of work and study habits, and to the development of an efficient and wholesome personality. Every instructor assumes responsibility of counseling along with the special counseling by professionally trained counselors.

Each student is assigned an educational advisor to assist him in preparing an educational plan, and to register him each quarter. After the student has started his class schedule, there is available to him at all times a program of guidance which calls into service the resources of all faculty personnel and a special testing division. Students are encouraged at all times to seek counsel, not only for help with specific problems, but also in an effort to discern, through the aid of friendly faculty assistance, ways of constantly improving the skills required for effective living.

HOUSING

The Lansing Community College maintains no housing units for students but it does cooperate in making available suitable living quarters. The Dean will assist students by maintaining a list of approved housing. The facilities are first inspected, and then approved if they provide adequate heat, light, ventilation and study conditions.

EMPLOYMENT

Every possible effort is made to secure desirable part-time employment for those who need financial help and who have time for such work. Students who wish part-time employment should register their qualifications with the Dean who maintains a file of available opportunities.

COLLEGE LIBRARY

The college has a new library faculty under the direction of an experienced staff. In addition to the College Library students have available for their study and research the Lansing Public Library which is adjacent to the college.

FACILITIES

The Lansing Community College has excellent facilities for Liberal Arts, Business Training, and the Technical Curriculums. At present the college has the following facilities:

1. Biology & Natural Science Laboratory
2. Business & Secretarial Laboratories
3. Cafeteria
4. Chemistry & Physics Laboratory
5. Counseling Center
6. Drafting Rooms
7. Electrical Laboratory
8. Electronics Laboratory
9. Engineering Materials Laboratory
10. Engineering Processes Laboratory
11. Fabrication Laboratory
12. Gymnasium
13. Hydraulics Laboratory
14. Lecture Rooms
15. Metallurgical Laboratory
16. Practical Nurses Classrooms & Laboratory
17. Reference Library
18. Strength of Materials Laboratory
19. Student Lounge
20. Surveying Laboratory & Materials Laboratory
21. Welding Laboratory

BOOKS & SUPPLIES

Each student provides his own books and supplies. Students expenses per quarter for books and supplies will average between twenty and thirty dollars, depending on the student's specific program.

CONDUCT

Inasmuch as students attending the Lansing Community College are considered mature adults, it is assumed that the need for well defined rules of conduct are not required. The student should remember that attendance at the college is a privilege and can be revoked at any time by the Dean of the college.

APPRENTICE TRAINING

Room 216, Phone IV 9-6581 Ext. 231

The Apprentice Training Department is operated by the Lansing Community College in cooperation with labor and management as a part of a joint program consisting of:

1. Practical training in a specific skilled trade, and
2. Related training provided at the college for the trade.

The trades currently participating in the joint program are as follows:

Bricklaying
Carpentry
Die Making
Die Sinking
Electrical Construction
Electrical Maintenance
Electrical (Municipal)
Iron Work (Structural)
Jig Building
Machinist
Plumbing
Sheet Metal
Tool Making

The school program is not designed to give complete trade training but is supplemental to the training on the job. Therefore, anyone desiring trade training must be employed as an apprentice before entering class. The college does not provide apprentice placement service nor does it exercise control over selection of apprentices.

Qualifications

To qualify for an apprenticeship in any of the skilled trades, a young man must have mechanical aptitude and ability. To be successful he must have perseverance, ambition, and initiative. Most trades require high school graduation as a prerequisite; a few do not. In general, age limits are between 18 and 25, although exceptions are sometimes made. School records, test results, and personal interview

are used by most committees in determining the qualifications of the applicant. The successful applicant must be in good health, mentally alert and genuinely interested in the training.

Becoming an Apprentice

Applications for apprenticeship may be secured from a joint apprentice committee member or from the apprentice coordinator in the college office. No common procedure can be outlined here since each trade differs in its selection and placement procedure. An applicant must reside within the jurisdictional area of the joint apprenticeship committee of the trade for which he is making application.

Time Required to Complete Training

The time required to complete training varies from three to eight years, depending on the trade. There is no speed-up of apprentice training although credit is sometimes granted by the joint apprentice committee for previous experience. The apprentice attends classes at the college for a minimum of 4 hours a week during the period of his apprenticeship. The on-the-job training is obtained during the standard work week.

Earnings

Apprentices are paid by their employer for the time in school directly or through an adjustment in hourly pay rate as established by industry. The apprentice wage scale is graduated in accordance with training status and represents a specific percentage of the journeyman wage rate.

Apprenticeship Agreement

Each apprentice enters into an agreement with the joint apprenticeship committee or its agent to observe the apprenticeship rules and

regulations. It then becomes a function of the joint apprenticeship committee or its agent to enforce these rules. It is also the function of the joint apprenticeship committee to review any problems that may arise relative to the apprentice's training program and to endeavor to keep him employed during the term of his apprenticeship. The apprenticeship agreement is registered with the State Board of Control for Vocational Education and with the Federal Committee on Apprenticeship (U.S. Department of Labor). A copy of the registered agreement is required by the Veterans Administration for all veterans who apply for the training benefits.

Entering the School

Applicants approved for apprentice training are assigned a day to report to college by either the joint apprenticeship committee or the employer. On inquiry at the apprentice coordinator's office, they are referred to the instructor for the trade.

Fees

Each apprentice receiving related training at the college is required to pay a course fee of $2.00 per term. A class admission slip indicating payment of apprentice fees must be shown to the instructor at the time a student enters a class.

Veterans

Veterans who are eligible for training benefits under existing laws for veterans' readjustment (PL895, or PL550) should consult the apprentice co-ordinator at the college office relative to benefits in apprenticeship training and the application procedure to be followed for obtaining such benefits.

Apprentice Instructors

Balmer, Harold	Machine Trades	Related Instruction
Kowatch, John	Electrical	Related Instruction
Lehman, Fred	Plumbing	Related Instruction
Nothelfer, Donald	Iron Working	Related Instruction
Smith, Carl	Electrical	Related Instruction
Webb, Frank	Sheet Metal	Related Instruction
Wilder, Francis	Carpentry	Related Instruction
Zander, Hugo	Bricklaying	Related Instruction

LANSING PRACTICAL NURSE CENTER

Lansing Community College

Rooms 308-310

Requirements for Admission

Age: Maximum 18 years - Maximum 50 years

Education: Pre-Entrance Examination
High School for 18 to 25 years
Minimum eighth grade for over 25 years of age

Good Health: Mental & Physical
Pre-entrance physical examination by family doctor

Fees

Fees will be paid in the following manner:

$25.00	When application is accepted
$25.00	First Day of College
$10.00	Textbooks for first day of College
$25.00	First week of college for three uniforms 3 caps, 3 jumpers and blouses
$15.00	During second month of college for Activities fee
$50.00	End of first three months of college

Earnings

The students begin to earn as soon as assigned to hospital affiliation.

$3.50 a day for five-day week starting in the fifth month and continuing through the hospital affiliation.

A One Year Course

4 months at the Center - 8 a.m. to 4 p.m.
150 days supervised nursing practice in hospital
3 weeks vacation
1 week senior review and examinations

Hospital Affiliations

Edward W. Sparrow Hospital, Lansing

St. Lawrence Hospital, Lansing

Ingham Chest Hospital, Lansing

Ingham County Rehabilitation Center, Okemos

*Prices may vary

During the hospital affiliation one learns to care for common diseases, medical, surgical cases, mothers and babies and handicapped patients.

Certificate

Upon graduation the student receives a certificate from the State Office of Vocational Education.

Upon graduation the student is eligible to write the examination to become a Licensed Practical Nurse.

Opportunities After Opportunities After Graduation

Work is available in hospitals, homes, and other health agencies under the supervision of doctors and professional nurses.

Sponsors

Lansing Board of Education
State Office of Vocational Education
Michigan State Practical Nurses Association
College Womens Volunteer Service
Michigan State Nurses Association

Approved by the Michigan Board of Nursing

For Information and Applications write to:

Lansing Practical Nurse Center
Lansing Community College
419 N. Capitol Avenue
Lansing, Michigan

Call--IVanhoe 9-6581 Extension 260

Benefits of Training

A lifetime vocation (age is no handicap)

A career that is interesting, varied, and rewarding

Employment available in most areas of the United States

Practical Nurse Certificate

State licensure

Correspondence courses for practical nurses, doctors assistants, and dental assistants are not recognized by the Michigan Board of Nursing.

Classes Start

Two classes are enrolled annually, September and February.

Instructors

Mrs. Jane Kleiver, R.N., Director

Mrs. Ardath Hamelin, R.N., Nursing Arts

Mrs. Laura Warbach, R.N., Nursing Arts

Mrs. Ruby Clark, B.S., Homemaking

Office Staff

Mrs. Lyla Cavanaugh, L.P.N.----------Secretary

Curriculum

First 4 months

P.N. 101 Nursing procedures

P.N. 102 Body structure and functions

P.N. 103 Personal and community health

P.N. 104 Vocational relationships

P.N. 105 Nursing care of common diseases, aged, and handicapped

P.N. 106 Care of mothers and babies

P.N. 107 Normal growth and development

P.N. 108 Nutrition

Diversional activities

BUSINESS TRAINING

BUSINESS TRAINING

The two year college program leads to the Associate in Business Degree. Students can arrange programs which will enable them to transfer to four-year colleges, or universities. Qualified students may enroll for courses on a part-time basis.

A business student interested in gaining new skills, or acquiring greater proficiency in those he already has, may select from among the following courses the ones that meet his specific needs:

Typewriting
Shorthand
Legal Shorthand
Medical Shorthand
Business Machines
English
Accounting
Business Law
Social Science
Letter Writing
Office Management

A student interested in improving his present employment status may select from among the following categories the one in which he desires improvement:

(1) Stenographical or Secretarial
Accountancy
Clerical
Management

(2) Machine Operator:
Burrough's Sensimatic
Rotary Calculator
Key-driven Calculator
Duplicator
Dictating Machine

BUSINESS TRAINING

*This curriculum is designed to help prepare Stenographers, Secretaries and Clerical Workers for responsible positions in local business offices.

Freshman Year	Fall Term	Hours Per Week Class	Laboratory	Credit Hours
Eng. 101	English	3		3
S.S. 101	Basic Social Science	4		4
B.T. 101	Beginning Typewriting		3	3
B.T. 104	Beginning Shorthand	4		4
B.T. 117	Business Math	3		3
	Total	14	3	17
	Winter Term			
Eng. 102	English	3		3
S.S. 102	Basic Social Science	4		4
B.T. 102	Intermediate Typewriting		4	4
B.T. 105	Intermediate Shorthand	4		4
B.T. 107	Business Machines		3	3
	Total	11	7	18
	Spring Term			
Eng. 103	English	3		3
S.S. 103	Basic Social Science	4		4
B.T. 103	Advanced Typewriting		4	4
B.T. 106	Advanced Shorthand	4		4
B.T. 108	Business Machines		4	3
	Total	11	8	18

*For the clerical trainee, shorthand will be omitted and an elected course may be chosen.

Science
Mathematics
Physiology
Sociology

BUSINESS TRAINING

Sophomore Year	Fall Term	Hours Per Week Class	Laboratory	Credit Hours
Eng. 104	Speech	3		3
B.T. 201	Transcription		4	4
B.T. 205	Principles of Accounting		4	4
Hist 101	History of Western Thought	4		4
B.T. 109	Secretarial Machines		2	2
	Total	7	10	17
	Winter Term			
B.T. 202	Shorthand Speed Building	4		4
B.T. 206	Office Management	3		3
Hist 102	History of Western Thought	4		4
	Elective			3
	Elective			3
	Total	11		17
	Spring Term			
B.T. 203	Secretarial Training	3		3
B.T. 204	Letter Writing	3		3
Hist 103	History of Western Thought	4		4
	Elective			3
	Elective			3
	Total	10		16

Suggested Electives:

Accounting
Business Law
Natural Science
Philosophy
Physiology
Sociology

BUSINESS TRAINING

This curriculum is designed to help prepare Medical and Legal Secretaries for responsible positions.

Freshman Year	Fall Term	Hours Per Week Class	Laboratory	Credit Hours
Eng. 101	English	3		3
Sci. 101	Natural Science	2	4	4
B.T. 101	Beginning Typewriting	3		3
B.T. 104	Beginning Shorthand	4		4
B.T. 117	Business Mathematics	3		3
	Total	15	4	17
	Winter Term			
Eng. 102	English	3		3
Sci. 102	Natural Science	2	4	4
B.T. 102	Intermediate Typewriting		4	4
B.T. 105	Intermediate Shorthand	4		4
B.T. 107	Business Machines		3	3
	Total	9	11	18
	Spring Term			
Eng. 103	English	3		3
Sci. 103	Natural Science	2	4	4
B.T. 103	Advanced Typewriting		4	4
B.T. 106	Advanced Shorthand	4		4
B.T. 108	Business Machines		3	3
	Total	9	11	18

BUSINESS TRAINING
Medical and Legal Secretaries

Sophomore Year

	Fall Term	Hours Per Week Class	Laboratory	Credit Hours
Eng. 104	Speech	3		3
B.T. 201	Transcription		4	4
B.T. 205	Elements of Accounting		4	4
B.L. 201	Business Law I	3		3
Sci. 201	Physiology	4		4
	Total	10	8	18
	Winter Term			
B.T. 202	Shorthand Speed Building		4	4
B.T. 207 or B.T. 208	Legal Shorthand I Medical Shorthand I		4	4
B.T. 206	Office Management	3		3
B.L. 202	Business Law II	3		3
B.T. 108	Secretarial Machines		2	2
	Total	6	10	16
	Spring Term			
B.T. 209 or B.T. 210	Legal Shorthand II Medical Shorthand II		4	4
B.T. 203	Secretarial Training	3		3
B.T. 204	Letter Writing	3		3
B.L. 203	Business Law III	3		3
	Total	9	4	13

Elective

TECHNICAL TRAINING

CIVIL TECHNOLOGY

Titles Of Positions Held By Civil Technicians

Topographical Draftsman
Highway-Bridge Draftsman
Structural Detailer
Road-Bridge Construction Inspecter
Specification Writer
Estimator
Expediter
Construction Equipment & Materials Salesman
Materials Tester
Contractor
Surveyor
Instrument Man

DESCRIPTIONS OF TYPICAL POSITIONS

TOPOGRAPHICAL DRAFTSMAN

Prepares topographical maps from field information; draws profiles and sections of road locations.

CONSTRUCTION INSPECTOR

Represents the owner on construction work to insure that materials and workmanship are in accordance with plans and specifications.

MATERIALS TESTER

Makes physical and/or chemical tests on materials to determine their fitness and compliance with specifications; prepares reports of his findings.

CIVIL TECHNOLOGY

Freshman Year	Fall Term	Hours Per Week Class	Laboratory	Credit Hours
Math 102	Algebra	5		5
E.D. 101	Engineering Drawing I		6	3
S.S. 101	Basic Social Science I	4		4
C.T. 101	Construction Methods	2		2
Eng. 101	English	3		3
	Total	14	6	17
	Winter Term			
Math 103	Trigonometry	5		5
E.D. 102	Engineering Drawing II		6	3
S.S. 102	Basic Social Science II	4		4
C.T. 102	Construction Materials	2	4	~~3~~ 4
Eng. 102	English	3		3
	Total	14	10	18
	Spring Term			
E.D. 103	Descriptive Geometry		6	3
S.S. 103	Basic Social Science III	4		4
Eng. 103	English	3		3
C.T. 111	Elementary Plane Surveying	3	4	5
C.T. 103	Construction Costs	2		2
	Total	12	10	17

CIVIL TECHNOLOGY

Sophomore Year	Fall Term	Hours Per Week Class	Hours Per Week Laboratory	Credit Hours
Eng. 204	Technical Report Writing	2		2
Sci. 201	Physics I	2	4	4
C.T. 212	Route Surveying	2	4	4
C.T. 203	Soil Testing & Classification	2	3	3
Elective	(see following page)	4-5		4-5
	Total	23-24		17-18
	Winter Term			
Sci. 202	Physics II	2	4	4
C.T. 202	Highway Technology	2	6	4
C.T. 204	Strength of Materials	2	3	3
Electives	(see following page)	5-8		7-8
	Total	24-27		18-19
	Spring Term			
Sci. 203	Physics III	2	4	4
C.T. 206	Project Lab.	1	2	2
C.T. 207	Structural Technology	2	6	4
Electives	(see following page)	9		6-7
	Total	26		16-17

CIVIL TECHNOLOGY

Sophomore Year	Fall Term	Hours Per Week Class	Hours Per Week Laboratory	Credit Hours
Eng. 204	Technical Report Writing	2		2
Sci. 201 or 206	Physics I	2	4	4
C.T. 112	Route Surveying	2	4	4
C.T. 202	Soil Testing & Classification	2	3	3
Elective	(see following page)	4-5		4-5
	Total	23-24		17-18
	Winter Term			
Sci. 202 or 206	Physics II	2	4	4
C.T. 204	Highway Technology	2	6	4
C.T. 201	Strength of Materials	2	3	3
Electives	(see following page)	5-8		7-8
	Total	24-27		18-19
	Spring Term			
Sci. 203 or 206	Physics III	2	4	4
C.T. 206	Project Lab.	1	2	2
C.T. 205	Structural Technology	2	6	4
Electives	(see following page)	9		6-7
	Total	26		16-17

The following courses are acceptable as electives in the Civil Technology curriculum: A total of 19 credits of electives is required Those marked (*) are required of students in the Michigan State Highway Program.

Sophomore Year			Credits
Fall Term:	*Math 201	College Algebra	5
	Math 202	Analytic Geometry	5
	Math 203	Calculus I	5
	Math 204	Slide Rule	1
	B.T. 107	Business Machines	3
	Chem 101	Chemistry I	4
Winter Term:	*C.T. 213	Advanced Surveying	4
	*C.T. 205	Hydrology	3
	Math 204	Calculus II	5
	E.D. 201	Structural Dwg.	4
	Chem 102	Chemistry II	4
Spring Term:	*C.T. 214	Geodetic Surveying	4
	*C.T. 201	Contracts & Specifications	3
	C.T. 206	Extra work in Project Lab	1-4
	E.D. 202	Architectural Dwg.	4
	Chem 103	Chemistry III	4

ELECTRONICS TECHNOLOGY

Titles Of Positions Held By Electronic Technicians

Electronic Technician	Laboratory Technician
Electrical Draftsman	Research Technician
Electrical Designer	Radio-TV Service Man
Engineering Aide	Sales Engineer
Customer Engineer	Transmitter Operator
Instrument Technician	TV Studio Technician

The Technician has forged a link in the chain of cooperation among the scientist, the engineer, and the craftsman. In Electronics Technology he is an indispensable part of such fields as automation, radio, television, digital and analog computers, electronic motor control, welding control, and telemetry.

He prepares blueprints and assists in the construction of electrical and electronic apparatus. He tests, modifies and maintains the final product. He must possess the ability to understand and to do, to supervise the work of others, and to describe with technical accuracy the functions of the machines he controls. He is frequently required to record data, make calculations, draw graphs and write reports of his work. He may be called upon to sell the equipment he helped to build or to instruct others in its use.

ELECTRONICS TECHNOLOGY

Freshman Year		Hours Per Week Class	Laboratory	Credit Hours
	Fall Term			
Eng. 101	English	3		3
Math 102	Algebra	5		5
S.S. 101	Basic Social Science I	4		4
P.E. 101	Physical Education		2	1
E.D. 101	Engineering Drawing		6	3
E.T. 101	D.C. Theory & Applications	3	6	4
	Total	15	14	20
	Winter Term			
Eng. 102	English	3		3
Math 103	Trigonometry	5		5
S.S. 102	Basic Social Science II	4		4
P.E. 102	Physical Education		2	1
E.D. 102	Engineering Drawing		6	3
E.T. 102	A.C. Theory & Applications	3	6	4
	Total	15	14	20
	Spring Term			
Eng. 103	English	3		3
Math 201	College Algebra (Elective)			
S.S. 103	Basic Social Science III	4		4
P.E. 103	Physical Education		2	1
E.D. 103	Electronic & Electrical Circuits		6	3
E.T. 103	Electronics I (Vacuum Tube Theory & Circuitry)	3	6	4
	Total	10	14	15
	Summer Term			
E.T. 104	Testing Methods & Practices (Elect.)		9	3

ELECTRONICS TECHNOLOGY

Sophomore Year	Fall Term	Hours Per Week Class	Hours Per Week Laboratory	Credit Hours
Sci. 201	Physics I	2	4	4
E.D. 201	Project Laboratory (Electronics)		6	3
E.T. 201	Automation I (Motors & Motor Control)	3	4	4
E.T. 202	Electronics II (Receivers & Transmitters)	3	4	4
Math 202	Analytic Geometry (Elective)			
	Total	8	18	15
	Winter Term			
M.T. 101	Manufacturing Processes		6	3
Sci. 202	Physics II	2	4	4
E.T. 203	Automation II (Synchros & Servomechanisms)	3	4	4
E.T. 204	Electronics III (Computers & Computer Circuitry)	3	4	4
Math 203	Calculus (Elective)			
	Total	8	18	15
	Spring Term			
Eng. 204	Technical Report Writing	2		2
Sci. 203	Physics III	2	4	4
Sci. 204	Hydraulic & Pneumatic Controls		3	3
E.T. 205	Electronics IV (Television)	3	4	4
E.T. 206	Communication Electronics & Project Laboratory	4	3	4
	Total	11	14	17

MECHANICAL TECHNOLOGY

Titles Of Positions Held By Mechanical Technicians

Tool Designer	Quality Control Technician
Machine Designer	Production Expediter
Mechanical Draftsman	Specification Writer
Product Designer	Cost Estimator
Lead Draftsman	Time Study Technician
Detailer	Tool Inspector
Checker	Shop Foreman
Engineering Aide	Installation Engineer
Research Laboratory Technician	Service Technician
Mechanical Laboratory Technician	Technical Salesman
Materials Testing Laboratory Technician	Instrument Technician
Plant Layout Technician	Purchasing Agent

DESCRIPTIONS OF TYPICAL POSITIONS

MACHINE DESIGNER

An expert who translates his or someone else's ideas into mechanical drawings. He must have a thorough knowledge of mechanisms, materials, and the latest developments in industrial processes.

COST ESTIMATOR

A person with a complete knowledge of manufacturing processes, besides a familiarity with the machines and processes in his own plant so that he can accurately figure the manufacturing cost of any component from a drawing.

MECHANICAL TECHNOLOGY

Freshman Year	Fall Term	Hours Per Week Class	Laboratory	Credit Hours
Eng. 101	English	3		3
Math 102	Algebra	5		5
S.S. 101	Basic Social Science	4		4
P.E. 101	Physical Education		2	1
E.D. 101	Engineering Drawing		6	3
M.T. 101	Machine Tools & Sheet Metal	3	6	3
	Total	15	14	19
	Winter Term			
Eng. 102	English	3		3
Math 103	Trigonometry	5		5
S.S. 102	Basic Social Science	4		4
P.E. 102	Physical Education		2	1
E.D. 102	Engineering Drawing		6	3
M.T. 102	Welding & Fabrication	3	6	3
	Total	15	14	19
	Spring Term			
Eng. 103	English	3		3
S.S. 103	Basic Social Science	4		4
P.E. 103	Physical Education		2	1
E.D. 103	Descriptive Geometry		6	3
M.T. 103	Foundry & Plastics	3	6	4
	Total	10	14	15

MECHANICAL TECHNOLOGY

Sophomore Year		Hours Per Week Class	Laboratory	Credit Hours
	Fall Term			
Sci. 201	Physics	2	4	4
T.D. 201	Tool Design		6	3
M.T. 201	Time Study & Machine Cost	3	3	4
M.T. 204	Metallurgy	2	3	4
	Total	7	16	15
	Winter Term			
Sci. 202	Physics	2	4	4
T.D. 202	Machine Design		6	3
M.T. 202	Machine Elements & Linkages	3	3	4
M.T. 205	Strength of Materials	2	3	3
M.E. 201	Industrial Electricity		4	3
	Total	7	20	17
	Spring Term			
Sci. 203	Physics	2	4	4
T.D. 203	Machine Design		6	3
M.T. 203	Industrial Management	3	3	4
M.T. 206	Hydraulics		3	3
M.E. 202	Industrial Electronics		4	3
	Total	5	20	17

L I B E R A L A R T S

LIBERAL ARTS

The curriculum offers two years of college study in the humanities and sciences which prepare the student for transfer to a senior college as well as offer additional training in developing a personal philosophy of life. The strength and purposes of this curriculum, along with the other curricula in the Community College, are that it allows the student to evaluate the heritage of recorded ideas and actions of societies both past and present through his own reading and under the guidance of his instructors.

The Community College student who desires to transfer to another college or university should study the requirements for course work demanded by that institution. Counsellors will help each student to analyze the courses he must take to assure that his work will be fully transferable to the institution of his choice. It is possible for the student to receive credit acceptable to programs in all areas of academic endeavor.

LIBERAL ARTS

Freshman Year	Fall Term	Hours Per Week Class	Laboratory	Credit Hours
Eng. 101	English	3		3
*N.S. 101	Natural Science	2	4	4
S.S. 101	Basic Social Science	4		4
P.E. 101	Physicsl Education		2	1
Hist 101	History of Western Thought	4		4
	Total	13	6	16
	Winter Term			
Eng. 102	English	3		3
*N.S. 102	Natural Science	2	4	4
S.S. 102	Basic Social Science	4		4
P.E. 102	Physical Education		2	1
Hist 102	History of Western Thought	4		4
	Total	13	6	16
	Spring Term			
Eng. 103	English	3		3
*N.S. 103	Natural Science	2	4	4
S.S. 103	Basic Social Science	4		4
P.E. 103	Physical Education		2	1
Hist 103	History of Western Thought	4		4
	Total	13	6	16

*Mathematics: Entering students who are found deficient in mathematics will be required to take one or more of the 011,012, 013 sequences in mathematics to repair their deficiencies.

LIBERAL ARTS

Sophomore Year	Fall Term	Hours Per Week Class	Laboratory	Credit Hours
Eng. 104	Speech	3		3
Sci. 201	Biology 201 Chemistry 201, or Physics 201	2	4	4
P.E. 201	Physical Education		2	1
Eng. 201	Introduction to Literature	3		3
Phil 201	Philosophy	3		3
	Elective			3
	Total	11	6	17
	Winter Term			
Sci. 202	Biology 202 Chemistry 202, or Physics 202	2	4	4
P.E. 202	Physical Education		2	1
Eng. 202	Introduction to Literature	3		3
Phil 202	Philosophy	3		3
	Elective			3
	Elective			3
	Total	8	6	17
	Sprint Term			
Sci. 203	Biology 203 Chemistry 203, or Physics 203	2	4	4
P.E. 203	Physical Education		2	1
Eng. 203	Introduction to Literature	3		3
Phil 203	Philosophy	3		3
	Elective			3
	Elective			3
	Total	8	6	17

COURSES OF INSTRUCTION

BUSINESS TRAINING

B.T. 101 Typewriting I
Introduction and mastery of keyboard; building accuracy and speed. No prerequisite. Three one-hour periods each week. Three hours credit.

B.T. 102 Typewriting II
Improvement of speed, accuracy and manipulation; business letters, reports and tabulation. Prerequisite: B.T. 101. Four one-hour periods each week. Four hours credit.

B.T. 103 Advanced Typewriting III
Improvement of efficient secretarial skills based on knowledge and judgment. Prerequisite: B.T. 102. Four one-hour periods each week. Four hours credit.

B.T. 104 Beginning Shorthand
Basic principles and elementary vocabularly for beginners. No prerequisite. Four one-hour periods each week. Four hours credit.

B.T. 105 Intermediate Shorthand II
Completion of theory, development of speed and accuracy in reading from plates, and limited dictation. Prerequisite: B.T. 104. Four one-hour periods each week. Four hours credit.

B.T. 106 Advanced Shorthand III
Development of high speed; writing from dictation. Prerequisite: B.T. 105. Four one-hour periods each week. Four hours credit.

B.T. 107 Business Machines
Machine calculation covering basic operations. Includes ten-key, key-driven, rotary calculators and Burrough's Sensimatic. Prerequisite: B.T. 117. Three one-hour periods each week. Three hours credit.

B.T. 108 Business Machines
Development of speed. Prerequisite: B.T. 107. Four one-hour periods each week. Three hours credit.

B.T. 109 Secretarial Machines
Stencil and fluid duplicating; machine transcription; filing. No prerequisite. Three one-hour periods each week. Four hours credit.

B.T. 117 Business Mathematics
Development of skill in getting quick and accurate results from figures handled. Included: decimals, fractions, aliquot parts, percentages, discounts, inventory, pay roll, interest. No prerequisite. Three one-hour periods each week. Three hours credit.

B.T. 201 Transcription
Projection of mailable transcripts from shorthand notes. Prerequisite: B.T. 106. Four one-hour periods each week. Four hours credit.

B.T. 202 Shorthand Speed Building
Attention given to specialized vocabulary; high speed writing. Prerequisite: B.T. 201. Four one-hour periods each week. Four hours credit.

B.T. 203 Secretarial Training
Realization of effective personality; office practice procedure. No prerequisite. Three one-hour periods each week. Three hours credit.

B.T. 204 Letter Writing
Development of effective correspondence techniques. No prerequisite. Three one-hour periods each week. Three hours credit.

B.T. 205 Elements of Accounting I
Work of the first quarter includes the development of basic principles underlying the bookkeeping procedures as applied to the single proprietorship, the accounting cycle, the worksheet, controlling accounts and special journals. No prerequisite. Four one-hour periods each week. Four hours credit.

B.T. 205a Elements of Accounting II
Continuation of accounting principles as applied to partnerships and corporations. Prerequisite: B.T. 205. Four one-hour periods each week. Four hours credit.

B.T. 205b Elements of Accounting III
Continuation of accounting principles in the interpretation and analysis of balance sheets, manufacturing statements, the voucher system, payroll procedures. Prerequisite: 205a. Four one-hour periods each week. Four hours credit.

B.T. 206 Office Management
Introductory principles; office organization and lay-out; functions of business departments. No prerequisite. Three one-hour periods each week. Three hours credit.

B.T. 207 Legal Shorthand I
Development of skill in writing and transcribing the numerous words and phrases commonly recurring in the spoken and written language of the law. Prerequisite: Shorthand 106. Four one-hour periods each week. Four hours credit.

B.L. 201 Business Law I - Contracts
A course in the law of contracts for the student of business, including the study of fundamentals of legal binding agreements between persons, and their enforcement. No prerequisite. Three one-hour periods each week. Three hours credit.

B.L. 202 Business Law II - Agency, Partnership, and Corporations
A course designed to give the student of business a practical working knowledge of important laws governing the formation and operation of partnerships and corporations. Prerequisite: B.L. 201. Three one-hour periods each week. Three hours credit.

B.L. 203 Business Law III - Sales and Negotiable Instruments
A course in the fundamental principles that apply to sales, bills of exchange, promissory notes, and checks. Designed to guide the businessman in his daily transactions with such instruments. Prerequisite: B.L. 201. Three one-hour periods each week. Three hours credit.

*B.T. 208 Medical Shorthand I
Development of the skill in writing and transcribing the many words and phrases recurring in the written and spoken language of medicine. Prerequisite: Shorthand 106. Four one-hour periods each week. Four hours credit.

*B.T. 209 Legal Shorthand II
This course is directed toward assisting the law stenographer to rise to the satisfying heights of usefulness in the legal shorthand world. Prerequisite: Legal Shorthand I. Four one-hour periods each week. Four hours credit.

*B.T. 210 Medical Shorthand II
Increased learning in terminology and meaning. Practical application. Prerequisite: Medical Shorthand I. Four one-hour periods each week. Four hours credit.

* A background of knowledge in the Latin language is ideally helpful.

CIVIL TECHNOLOGY

C.T. 101 Construction Methods
A study of techniques and equipment used in constructing highways, structures, pipelines, buildings and earth moving projects. Prerequisite: None. 2 hours lecture, 2 credits.

C.T. 102 Construction Materials
Determination of the properties of concrete, asphalts, aggregates, steel, wood, clay products, and miscellaneous construction materials. The course also teaches methods of sampling and testing these materials. There is then discussion of the application of the knowledge to proper design procedures. Prerequisite: None. Two hours lecture and six hours laboratory. 4 credits.

C.T. 103 Construction Costs
The purpose of this course is to familiarize the student with general methods of preparing material take-offs, and labor estimates, and application of current unit costs to estimate construction costs. The indirect costs are itemized and discussed and thestudent learns to recognize and evaluate hidden costs. Methods for predicting the trend of future costs are discussed. Prerequisite: CT 102, CT 101 Two hours lecture. Two credits.

C.T. 201 Construction Contracts
Preparation of specifications, requests for quotations, bid analysis, proposals and contracts, and change orders. Fundamentals of law in engineering, liability, and workmen's compensation. Three hours lecture. Three credits. Prerequisites: CT 103; PS 103.

C.T. 202 Highway Technology
The course covers: Plan and profile drawings; highway planning, financing, organization, geometrical design, traffic studies, structural design of pavements, mass diagrams, earthwork computations, and costs. Prerequisite: CT 212, CT 203. Two hours lecture. Six hours laboratory. Four credits. Recommended requirements SS 103.

C.T. 203 Soils
This course teaches testing and classification of soils: A.S.T.M, A.A.S.H.O., B.P.R., and others. Also elementary geologic principals are discussed as they relate to soils. Prerequisite: CT 101, CT 102. Recommended requirements, Math 201. Two hours lecture and 3 hours laboratory. Three credits.

C.T. 204 Strength of Materials
A study of: Beams, shear and movement diagrams; stress, strain, creep, fatigue, yield; equilibrium-reactions, free body analyses; combined stresses; deflections; shear,

flexure, compression, tension, and horizontal shear stresses. Prerequisite: CT 102, Sci 201: Recommended requirements - Math 203. Two hours lecture. Three hours laboratory. Three credits.

C.T. 205 Hydrology
Methods for designing and analyzing run-off. Drainage and culverts are discussed in this course. Stream flow, open channel flow, Bernoulli's Theorem, rainfall, storm water studies, ground water, and water tables are also covered. Prerequisite: CT 203. Recommended requirements - Math 201. Two hours lecture. Three hours laboratory. Three credits.

C.T. 206 Project Lab
A complete project is designed by the student using all of the previous course information, under personal supervision by the staff. Prerequisite: Graduation term. 1-6 credits.

C.T. 207 Structural Technology
The student studies plans of sight and structure for bridges steel detailing, concrete detailing, elementary theory of reinforced concrete, elementary analysis of structural steel, history of bridges, costs and economics of structures types of bridges and building frames, connections, riveting and bolting details and truss analyses. Prerequisite: CT 204, CT 205, Math 201. Recommended requirements - Math 203. Two hours lecture. Six hours laboratory. Four credits.

C.T. 211 Surveying
This first course in surveying includes study of the terminology of surveying; field work with instruments for familiarization; use of tape, level, transit; measuring distances, angles, and evaluations; analysis and use of verniers; public land system; traverses; topographic surveys and mapping. Prerequisite: Math 103. Two hours lecture. Four hours laboratory. Five hours credit.

C.T. 212 Route Surveying
The route surveying concentrates on profiles, horizontal curves, vertical curves, slope stakes, sun shots for azimuth, earthwork surveying and computations, superelevation, spirals, compound and reversed curves. Prerequisites: CT 211. Two hours lecture. Four hours laboratory. Four credits.

C.T. 213 Advanced Surveying
This is a study of the theory of modern and advanced surveying methods: photogrammetry, ground and aerial; astronomy, stellar and solar observations and calculations; precise surveying principals, and the theory of probable errors. Prerequisite: CT 212. Three hours lecture. Two hours laboratory. Four credits.

C.T. 214 Geodetic Surveying

Geodetic surveying includes precise first and second order measuring methods, base lines, level circuits, triangulation and least squares. Prerequisite: CT 213. Two hours lecture. Four hours laboratory. Four credits.

ELECTRONICS TECHNOLOGY

E.D. 101 Engineering Drawing
This is a basic course in drafting designed to cover beginning work in the Civil, Electrical and Mechanical technology. The student develops skill in the use of drawing instruments, becomes familiar with drafting room standards, and gains a thorough understanding of orthographic projection. The principles of dimensioning and techniques of lettering are introduced. Practice is also given in sketching and measuring of machine parts. No prerequisite is necessary. Two three-hour periods each week. Three hours credit.

E.D. 102 Engineering Drawing
During this term further work is given in the principles of dimensioning. Sketching is emphasized and assembly drawings are developed and detailed. In addition to those from mechanical technology, projects are chosen from the electrical field. Prerequisite: E.D. 101. Two three-hour periods each week. Three hours credit.

E.D. 103 Introductory Electrical Circuits, Symbols and Standards
This course acquaints the student with the drawing and reading of electrical and electronic circuit diagrams. He is introduced to the use of tubemanuals, catalogs, technical manuals and periodical trade literature. Typical diagrams are drawn and analyzed. Component parts are specified and their function in the circuit determined. All work is done according to accepted national standards. Representative projects include a power supply, an amplifier, and a welding control panel. Prerequisite: E.T. 103. Two three-hour periods each week. Three hours credit.

E.T. 101 D. C. Theory and Applications
With a study of direct current and the application of its basic laws the student is introduced to Electrical Technology. Ohm's Law and Kirchoff's Law are applied to the analysis of series and parallel circuits, electrical power units, magnetic phenomena and electric cells. Problems typical of both electrical and electronic circuits are investigated. No prerequisite: Three one-hour class periods and two three-hour laboratory periods each week. Four hours credit.

E.T. 102 A. C. Theory and Applications
This course introduces the study of alternating current. Topics included are sine-wave voltages and currents, inductive reactance, impedance and A. C. circuits in parallel and series. In laboratory work circuits are analyzed using, in addition to the V. O. M. and the V. T. V. M., the oscilloscope, capacity checker and impedance bridge. Prerequisite: E.T. 101. Three one-hour laboratory periods each week. Four hours credit.

E.T. 103 Electronics I (Vacuum Tube Theory & Circuitry)
An introduction to basic electronics. The electronic tube is presented in its basic functional circuits. Studies include

rectifiers, oscillators, and amplifiers. Prerequisites: E.T. 102. Three one-hour class periods and two three-hour laboratory periods are given each week. Four hours credit.

E.T. 104 Testing Methods and Practices
Technicians are usually judged by their ability to maintain proper functioning of equipment and systems. This course covers both theory and practice in checking, testing, and measuring electronic and electrical equipment. Procedures are given to include both preventive maintenance and trouble-shooting. Circuits are constructed and analyzed using technical manuals and instruments. The course also provides a background in test equipment circuit theory. Prerequisite: the third term of the first year. Summer term only. Three three-hour laboratory periods each week. Three hours credit.

E.T. 201 Automation I (Motors & Motor Control)
A course introducing automatic control systems. It begins with a study of D-C generators and small D-C and A-C motors. Shop laboratory work includes circuit construction, testing and measurement. Both electrical and electronic methods of motor control are analyzed. A Ward-Leonard system is constructed. Motor speed is controlled and regulated using the amplitude and phase-shift methods. The use of the oscilliscope as a servicing instrument is emphasized. Prerequisite: E.T. 103 and E.T. 101. Two two-hours laboratory periods and three one-hour class periods each week. Four hours credit.

E.T. 202 Electronics II (AM & FM Transmitters and Receivers)
The purpose of this course is to familiarize the student technician with both A.M. and F.M. receivers and transmitters. A detailed study is made of the superheterodyne receiver, the F.M. receiver and a high frequency transmitter. Typical circuits are constructed and analyzed. Servicing procedures are incorporated in the laboratory work. Prerequisite: E.T. 103. Three one-hour class periods and two three-hour laboratory periods each week. Four hours credit.

E.T. 203 Automation II (Synchros & Servomechanisms)
A further study of the principles and operation of electronic, electrical and magnetic circuits and devices used in automatic control systems. Circuits are studied, constructed and tested using saturable core reactors, magnetic amplifiers, peaking transformers, and thyratrons. Topics also include welding controls, synchros and servomechanisms. Three one-hour class periods and two two-hour laboratory periods each week. Four hours credit.

E.T. 204 Electronics III (Computers & Computer Circuitry)
This course places emphasis on the use of semi-conductor devices and digital computer circuitry. Topics include pulse phenomena, basic computer circuits, computer binary arithmetic, electron theory of matter, point contact and junction transistors, frequency limitations of transistors, power transistors, tetrode

transistors, and transistor life expectancy. Prerequisite: E.T. 203. Three one-hour class periods and two three-hour laboratory periods each week. Four hours credit.

E.T. 205 Electronics IV (Television)
An introduction to the field of television. Topics included are television receiver fundamentals, mixer-oscillator stages, vertical and horizontal sweep systems, power supplies and antennas. Servicing procedures are given as part of the laboratory work. Prerequisite: E.T. 202. Three one-hour class periods and two two-hour laboratory periods each week. Four hours credit.

E.T. 206 Communication Electronics & Project Laboratory
In this course, for his laboratory work, the student selects a project compatible with his chosen field of work. Under guidance of the instructor, and through research, he designs, constructs and tests an electrical or electronic mechanism. During lecture-discussion periods a complete review is made of various phases of communication electronics in preparation for the F.C.C. Radio Telephone First Class Operators License. Prerequisite:

MECHANICAL TECHNOLOGY

E.D. 101 Engineering Drawing
A basic course in drafting designed to cover beginning work in the Civil, Electrical, and Mechanical fields. The student develops skill in the use of drawing instruments and gains a thorough understanding of orthographic projection, sketching, auxiliary views, and sections. Principles of dimensioning and techniques of lettering are introduced. No prerequisite. Two three-hour laboratory periods each week. Three hours credit.

E.D. 102 Engineering Drawing
Further work is given in the principles of dimensioning with practice in perspectives to develop skill in technical sketching. Assembly drawings are developed and detailed. Prerequisite: E.D. 101. Two three-hour laboratory periods each week. Three hours credi

E.D. 103 Descriptive Geometry
A basic course in the science of graphic representation and solution of space problems through the fundamental principles of advanced orthographic projection. Topics covered are the followin points, lines, and planes; primary and successive auxiliary views; parallelism; perpendicularity; concurrent vectors; developments and intersections; pictorial projections; shades and shadows. Civil, Electrical, and Mechanical engineering problems are studied. Prerequisite: E.D.102. Two three-hour laboratory periods each week. Three hours credit.

T.D. 201 Tool Design
A course designed to acquaint the student-technician with methods used in designing and proportioning tools which will most economically meet the requirements called for by the production plans. The "project" method is used and all tools are designed to process a small machine part on a mass production basis. The sequence of operations of a process is studied and charted. Standard and special cutting tools are specified and designed. Holding devices, jigs, fixtures, and gages are designed. Two three-hour laboratory periods each week. Three hours credit.

T.D. 202 Machine Design
Design of machine elements, keys, bolts, screws, rivets, shafts, gears, cams, planetary gears, chain drives, and linkages. The mathematical and physical aspect of mechanisms will be developed. Two three-hour laboratory periods each week. Three hours credit.

T.D. 203 Machine Design
Development of machines using principles of strength of materials and statics and dynamics. A major project is selected for mathematical development and layout. This may be an overhead traveling crane, hydraulic lift truck or some other commonly used unit of mechanical equipment. Prerequisite: T.D. 202. Two three-hour laboratory periods each week. Three hours credit.

M.T. 101 Machine Tools and Sheet Metal
This course is an introduction to the operation of machine tools; lathe, shaper, milling machine, radial drill, and grinders. The

course is to develop a realistic understanding of the problem in plant layout, inventory control, production control, inspection, purchasing, work measurement, cost and personnel relations. The structure of the modern market is studied, the economics of producing a profit are related to it. The legal aspects to the corporation, proprietorship and partnership are investigated. The implications of the Industrial Revolution are brought down to modern times, and the needs and justifications of automation are explored. Prerequisite: M.T. 202. One three-hour lecture and one three-hour laboratory period each week. Four hours credit.

M.T. 204 Metallurgy
This course is designed to acquaint the student with the principle processes in the production of iron, steel, copper, and aluminum; and with the crystalline state of metals, the phase diagram, the theory of alloys, the non-carbon diagram, and the critical temperature diagram. The laboratory work will consist of the preparation of metallurgical specimens and the examination and interpretation of structures. A study will be made of the e mechanical treatment of steel, iron and its alloys with carbon, heat treatment of steel, analysis and uses of steel with one or more alloying elements, non-ferrous metals, and alloys. Laboratory work will involve experiments in the heat treatment of the above metals and the study of the effect of this process upon their physical properties. Students will become familiar with the operation and use of various metallurgical equipment such as polishers, microscopes, metallograph, etc. Prerequisite: M.T. 103. One two-hour class period and one three-hour laboratory period each week. Three hours credit.

M.T. 205 Strength of Materials
Equilibrium of forces, stress and strain, center of gravity, moment of inertia, riveted, bolted and welding joints, shear and bending moment diagrams, stresses and deflection in bending, stresses due to eccentrically applied loads, torsion, columns, combined stresses, fatigue strength, fatigue stress concentrations, concrete, wood. Prerequisite: Physics 201. Two one-hour class periods and one three-hour laboratory period each week. Three hours credit.

M.T. 206 Hydraulics
This course covers the standard hydraulic and pneumatic equipment used on modern machine tools, the different types of pumps, their construction and operation, the different types of valves, their uses, construction, and adjustment, tracing of circuits, checking of circuits, and making repairs. No prerequisite. One three-hour laboratory period each week. Three hours credit.

M.E. 201 Industrial Electricity
This course has a two-fold purpose. First, it presents the general elementary principles of Direct Current and Alternating Current electricity and secondly, it applies these principles to the construction and operating characteristics of the more common types of circuits, devices and machines used in industry

today. It is especially designed for the non-electrical engineering student and will give him an appreciation of the part electricity plays in his particular technology. Prerequisite: Math 103. Two two-hour laboratory periods each week. Three hours credit.

M.E. 202 Industrial Electronics
Engineers today are predicting that the manufacturing plant of tomorrow will be almost entirely automatic. Machinery for processing and assembly will be electronically controlled. Three major components of automation are already in existence and use. They are (1) automatic machines (2) electronic indicating, recording and measuring equipment and (3) electronic controls. This course will introduce the student to the application of electronic theory to all three of the above. Prerequisite: M.T. 201. Two two-hour laboratory periods each week. Three hours credit.

H U M A N I T I E S A N D S C I E N C E

Anthro. 201 Introduction to Anthropology
General introduction to the field of anthropology. Concentration will be directed to four fundamental areas of the field; linguistics, ethnology, archeology, and physical anthropology. Latter part of course will concentrate on culture as the main focus and theoretical concern of anthropology. Prerequisite: B.S.S. I, II, III. Three one-hour class periods each week. Three hours credit.

S.S. 101 Basic Social Science I (fall)
Survey of some of the major concepts and methods of sociology and anthropology. Attention given to selective aspects of culture, socialization, social stratification, associations, primary groups, collective behavior, population and ecology, biological background of human culture, basic concepts of linguistics, and the general development of human cultural history. Four one-hour class periods each week. Four hours credit.

S.S. 102 Basic Social Science II (winter)
Continuation of Basic Social Science I, with special attention given to economic institutions in their social context. Early part of course will be concerned with economic sociology--the sociology of work--as the proper context of economic analysis. Attention will then turn to the economic regularities of modern capitalism and its modifications in other countries of the western world. Course will conclude with a short presentation of economic phenomena and economic problems in non-western societies. Four one-hour class periods each week. Four hours credit.

S.S. 103 Basic Social Science III (spring)
Continuation of Basic Social Science I and II with special attention given to political institutions in their social context. Early sections of the course will be devoted to a general discussion of political sociology as a framework for comprehending western power structures. Attention will then turn to comparative political institutions with special concern for the American system. The course will conclude with a short presentation of political behavior in non-western societies. Four one-hour class periods each week. Four hours credit.

Bio. 201, 202, 203 Biology (Zoology and Botany)
This course is planned to help the student gain a basic working knowledge of animal life and a general understanding of the world of plants. In Botany the student will study the structure, functioning and economic importance of the flowering plants along with the plant kingdom, emphasizing the evolution of the plant world and including a study of genetics. In Zoology the student will be concerned with such basic aspects of life science as structure, function, classification, growth, reproduction, development, heredity, and evolution. No prerequisite for Biology 101. Biology 101 is prerequisite for Biology 102 and Biology 102 is prerequisite for Biology 103. Two one-hour class periods and two three-hour laboratory periods each week. Four hours credit.

Chem 201, 202, 203 Chemistry
This course is designed to give the student a background in elementary college chemistry. The course consists of the following: metric systems, elements, mixtures, atoms, atomic weights, molecular weidhts, crystals, solutions, gas laws, electron theory, periodic table, valence, equations, acids, bases, salts, ionization, reactions, electrolysis spectrum analysis, and pH. No prerequisite for Chemistry 101. Chemistry 101 is prerequisite for Chemistry 102. Two one-hour class periods and two three-hour laboratory periods each week. Four hours credit.

ENGLISH REQUIREMENTS

All entering students will be required to take an entrance examination in English. Students who fail to make a satisfactory score on the examination will have to take English 011, 012, and 013 as a pre-requisite to entrance into the standard freshman English course.

Eng. 011, 012, 013 Remedial English
This course is designed for students who fail to make a satisfactory score on the English placement test. Hence, the course is concerned with sentence structure, vocabulary building, selected readings, and expository writing.

A student may waive 012 or 013 and enter the regular college-transfer English section upon his satisfactory completion of the English placement test at the end of the 011 or 012 course. Three one-hour class periods per week.

N.B. It is suggested that a student in the foregoing program carry a reduced load.

Eng. 101, 102, 103 English
Emphasis is placed on writing and reading. The course is designed to develop the student's ability to clarify his purposes; to organize his ideas in a clear and logical manner; to write and speak clearly, effectively, and accurately; to reorganize and utilize the various communicative devices. An investigative paper is required third term. Eng. 101 is prerequisite for 102 and Eng. 102 is prerequisite for Eng. 103. Three one-hour class periods each week. Three credit hours.

Eng. 104 Speech
Consideration will be given to the following areas of speech activity: discussion, informal public speaking, interpretation, diction, pronunciation, enunciation; the collective effectiveness of oral communication will be emphasized. Three one-hour class periods. Three credit hours.

Eng. 201, 202, 203. Introduction to Literature
The object of this course is to help the student read literature with understanding and appreciation. The course consists in the study of representative fiction, non-fiction, poetry, and drama. Three one-hour class periods each week. Three credit hours.

Eng. 204 Technical Report Writing
Extensive application of the principles of good writing in industrial reporting. Emphasis is placed on short, accurate reports in the students area of interest. Two one-hour class periods each week. Two hours credit.

Hist. 101, 102, 103. History of Western Thought
This is a basic course which traces the cultural foundations of western civilization from its earliest beginnings to the present day. The artistic, literary, philosophic, and scientific contributions are stressed along with the political aspects of history. No prerequisite for Hist. 101. Hist. 101 is prerequisite for Hist. 102 and Hist. 102 is prerequisite for Hist. 103. Four one-hour class periods each week. Four hours credit.

Hist. 104 Recent European History
European historical developments in their world setting. Especially stressed are the more recent political, military, and diplomatic events which are of international significance. Three one-andone-half-hour class periods each week. Three hours credit (Summer)

Math 010 Arithmetic
Refresher course with emphasis on per cent and fractions, both common and decimal. Four one-hour class periods each week. Four hours credit. (Summer)

Math 011 Beginning Algebra
First course in high school algebra to meet college entrance requirements. Math 011 and 012 together are the equivalent of one entrance credit in Algebra. Five one-hour class period each week. Five hours credit.

Math 012
Continuation of Mathematics 011. Five one-hour class periods each week. Five hours credit.

Math 013 Geometry - plane & solid
High school level course of combined plane and solid geometry with emphasis on mensuration principles. Five one-hour class periods each week. Five hours credit.

Math 102 Algebra
Quadratic equations; systems of linear and quadratic equations with graphs; exponents and rodicals; introduction of logarithms and the use of tables; ratio, proportion, and variation. Prerequisite: one and one-half entrance units in high school algebra and one entrance unit in geometry; or mathematics 011, 012 and

013. Five one-hour class periods each week. Five hours credit.

Math 103 Trigonometry
Trigonometric functions, radian measure, graphs, sum and difference formulae, simple trigonometric equations, logarithms, solution of plane triangles, inverse functions. Prerequisite: Math 102. Five one-hour class periods per week. Five hours credit.

Math 201 College Algebra
Extended work with quadratic equations; natural logarithms; binomial theorem; introduction to mathematical induction; progressions; complex numbers;inequalities; introduction to theory of equations; systems of equations including solution of linear systems by determinants. Prerequisite: Mathematics 103 or equivalent. Five one-hour class periods each week. Five hours credit.

Math 202 Analytic Geometry
Rectangular and polar coordinates; lines; circles; conic sections; loci; translation and rotation of axis; transcendental curves; and parametric equations. Prerequisite: Mathematics 201. Five one-hour class periods each week. Five hours credit.

Math 203 Calculus I
Differentiation of elementary functions; integration of polynomials and powers; and applications. Prerequisite: Mathematics 202. Five one-hour class periods each week. Five hours credit.

Math 204 Calculus II
Continuation of differential calculus. General methods of integration and application. Prerequisite: Mathematics 203. Five one-hour class periods each week. Five hours credit.

Math 205 Calculus III
Infinite series; partial differentiation; multiple integrals. Prerequisite: Mathematics 204. Five one-hour class periods each week. Five hours credit.

Math 206 Slide Rule
Fundamentals of operation, including multiplication and division, squares, and square roots, cubes and cube roots; trigonometric, and logarithmic scales. Prerequisite: Mathematics 103. Five one-hour class periods each week. Five hours credit.

Nat. Sci. 101, 102 Natural Science
This course is designed to give the student a basic understanding of some of the scientific principles related to human development, body mechanics, cause of disease, diet and knowledge of specific mechanical apparatus. Included in these two courses are human anatomy and physiology, microbiology, embryology, with integrated physics and chemistry. Two one-hour class periods and two two-hour laboratory periods. Four hours credit.

Nat. Sci. 103 Natural Science
This course is an integrated study of the physical sciences of astronomy, geology, and chemistry in the light of their inter-dependence in the development of present day knowledge of the universe. Two one-hour class periods and two two-hour laboratory periods. Four hours credit.

Phil. 201 History of Western Philosophy I
Survey history of the philosophy of ancient Greece and Rome. Ideas of the metaphysical Pre-Socratics will occupy the first part of the course. Socrates, Plato, and Aristotle will be discussed as an outgrowth of the Pre-Socratic period. Finally the later philosophy of the Helleistic world will be presented, especially the stoical, cynic, sceptic, and epicurean developments. Three one-hour class periods each week. Three hours credit.

Phil. 202 History of Western Philosophy II
Survey history of Medieval and Early Renaissance philosophy of Europe. Presentation will center on the founding fathers of the great Catholic integration, the Jewish background and Christian beginnings with early culminations in St. Augustine, St. Benedict, and Gregory the Great. General social organization of the Papacy will be presented along with the influence of Mohammedan culture leading up to the high integration of the twelfth and thirteenth centuries in such figures as St. Thomas Aquinas and the Franciscans. Following this, the decline of Papal philosophy as a universal system will be traced with the development of the Renaissance. Machiavelli, More, Erasmus, and Bacon will be discussed. Three one-hour class periods each week. Three hours credit.

Phil. 203 History of Western Philosophy III
Survey history of modern philosophy from Hobbes through Russell. Attention will be given to the interrelationship of philosophy and science in the modern world and their respective impact upon one another. The great schools of empiricism, idealism, pragmaticism, etc. in their modern guise will be analyzed. The relationship of philosophy to academic and everday problems will be discussed. Three one-hour class periods each week. Three hours credit.

Sci. 201 Physics (Mechanics and Heat)
Simple machine elements, torque, work, power, efficiency, concurrent and non-parallel forces, properties of materials, velocity and acceleration, three laws of motion, rotational and periodic motion. Temperature and thermal expansion, heat transfer. No prerequisite. Two one-hour lecture periods and two two-hour laboratory periods each week. Four hours credit.

Sci. 202 Physics (Heat, Electricity, and Magnetism)
Solids, liquids, and gases, thermodynamics, electrostatics, capacitance, direct current circuits, electrochemisty, thermo-electricity, magnetic effects of electric currents, magnetic properties of matter, electro-magnetic induction, alternating

current circuits. Prerequisite: Science 201. Two one-hour lecture periods and two two-hour laboratory periods each week. Four hours credit.

Sci. 203 Physics (Wave motion, Sound, Light and Modern Physics)
Mechanical waves, sinusoidal waves, interference phenomena, electromagnetic waves, reflection and refraction of waves, standing waves, production of sound, speed of sound in solids, liquids and gases, psychological effects of sound waves, response of ear to sound waves, Doppler effect, absorption of sound, architectural acoustics, nature of light, illumination and photometry, reflection and refraction of light, optical instruments, physical optics, dispersion and spectra, space and time at high velocities, momentum at high speeds, energy and mass, nuclear reactions. Prerequisite: Science 202. Two one-hour lecture periods and two two-hour laboartory periods each week. Four hours credit.

Phys. 201 Physiology 201
In this course the functions of each system of the body are studied separately, and also as each refers to the body as a functional unit. The physiology of the muscular, nervous, circulatory, respiratory, and excretory systems receive special emphasis. Frequent reference is made to practical applications of physiological phenomena and their manifestations as encountered in day to day living. No prerequisite. Two two-hour class periods each week. Four hours credit.

Psy. 201 Psychology
A course introducing the more important principles and theories of human thought and action. Three one-hour class periods each week. Three hours credit.

Soc. 201 Introduction to Sociology
General introduction to the field of sociology. Course will be organized around a detailed presentation of seven fundamental elements of sociological analysis: culture, socialization, social stratification, associations, collective behavior, primary groups, and population and ecology. Three one-hour class periods each week. Three hours credit.

Span. 101 Spanish
Elementary Spanish, vocabulary, pronunciation, intonation contours, syntax, and reading. Two two-and-one-half-hour periods each week. Five hours credit

Span. 102 Spanish
Continuation of Spanish 101. Prerequisite: Span. 101. Two two-and-one-half-hour periods each week. Five hours credit.

Span. 103 Spanish
Continuation of Spanish 102 Prerequisite: Span. 102. Two two-and-one-half-hour periods each week. Five hours credit.