COLLEGE CALENDAR
1951-1952

I. Summer Session 1951 (6 weeks)

June 25, Monday ........................................ Registration for the Summer Session
June 26, Tuesday .......................................... Recitations Begin
July 4, Wednesday .......................................... Holiday
August 3, Friday ........................................ Session Closes

II. Semester I. 1951-1952

September 17 and 18, Monday and Tuesday ............. "Freshman Days"
September 17, Monday .................................. "Testing Day" for Freshmen
September 17, Monday .................................. "Counseling Day" for Upperclassmen
September 18, Tuesday .................................. Freshmen Activities as Scheduled
September 19, Wednesday Enrollment of all Veterans and of all Freshmen
September 20, Thursday enrollment of all Upperclassmen
September 21, Friday ..................................... Recitations Begin
September 22, Saturday ................................... Graduate Division Enrollment
October 20, Saturday ..................................... Homecoming Holiday
November 21, Wednesday (12:00 noon) to Monday, November 26
Thanksgiving Recess

December 19, Wednesday (4:00 p.m.) to Thursday, January 3
(8:00 a.m.) Holiday Vacation
January 28, Monday through February 1, Friday .... Final Examinations
February 3, Saturday ..................................... Semester I Ends

III. Semester II. 1951-1952

February 9, Saturday ................................... Graduate Division Enrollment
February 11, Monday ................................... Enrollment of all Veterans and all Freshmen
February 12, Tuesday ................................... Enrollment of all Upperclassmen
February 13, Wednesday ................................ Recitations Begin
April 9, Wednesday (4:00) to April 17, Thursday (8:00 a.m.)
(April 13 is Easter Sunday) Spring Vacation
May 30, Friday ............................................. Memorial Day Holiday
June 8, Sunday ............................................. Baccalaureate Services
June 9, through 13, Monday through Friday ........ Final Examinations
June 14, Saturday ....................................... Commencement Exercises
June 14, Saturday ....................................... Second Semester Ends

IV. SUMMER SESSION 1952 (6 weeks)

June 23, Monday ........................................ Registration
June 24, Tuesday .......................................... Recitations Begin
July 4, Friday ............................................... Holiday
August 1, Friday .......................................... Session Closes
ADMINISTRATION

STATE BOARD OF EDUCATION

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STEPHEN S. NISBET
LOUISA DURHAM MOHR
LEE M. THURSTON

President Secretary

STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

Lee M. Thurston

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Northern Michigan College of Education

CHARLES L. ANSPACH
Central Michigan College of Education

EUGENE B. ELLIOTT
Michigan State Normal College

PAUL V. SANGREN
Western Michigan College of Education

President

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JOHN C. HOEKJE, Ed.M.
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RAY C. PELLETT, L.H.D.
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LOY NORRIS, Ph.D.
*DEYO B. FOX, Ph.D.
ELMER H. WILDS, Ed.D.
GEORGE H. HILLIARD, Ph.D.
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President Vice-President Dean of Administration-Registrar Dean of Women Dean of Men Comptroller

Director of Teacher Education Assistant Director of Teacher Education Director of Vocational Education Director of Summer Session and Graduate Division Director of Student Personnel and Guidance Director of Placement and Alumni Relations

*Deceased December 11, 1950.
KANLEY MEMORIAL CHAPEL

Chester L. Hunt

Dean of the Chapel

MAINTENANCE OFFICIALS

John A. Goldsworth

Superintendent, Buildings and Grounds

Irving Barber

Supervisor, Grounds Service

Robert H. Williams, B.S.

Supervisor, Supplies

Ralph Willis

Supervisor, Janitorial Services

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Manager, Union Building and Dormitories

John M. Thompson

Manager, College Book Store

ADMINISTRATIVE ASSISTANTS

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Nursing Consultant

Katharine B. Chapman

Director, Lydia Siedschlag Hall

Blanche Draper

Publicity Secretary

Homer M. Dunham, A.B.

Athletic Records and Publicity

Eva Falk, A.B.

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Margaret Feather, A.B.

Secretary, Dean of Men

Leonard Gernant, A.M.

Assistant Registrar

Kenneth R. Hawkins, A.M.

Assistant Manager, College Book Store

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Frank Hinds, A.M.

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Edna L. Hirsch, B.S.

Secretary, Student Personnel and Guidance

Dorothy S. Horst, A.M.

Assistant Dean of Women and

Virginia M. Jarman

Director, Walwood Hall

Lloyd E. Jesson, A.B.

Secretary, Campus Schools

Eleanor Linden, B.S.

Secretary to the President

Margaret T. Mabie, A.B.

Secretary, Teacher Education

Margaret M. Pastryk, A.B.

Secretary, Graduate Division and

H. Duane Plough, A.B.

Summer Session

Lucille E. Sanders, A.B.

Director, Burnham Halls

Alice Smith

Director, Spindler Hall

J. Towner Smith, A.M.

Secretary, Dean of Administration

Leroy W. Myers

Assistant Manager, Union Building

Katherine A. Parsons

Secretary, Rural Life and Education

Margaret M. Pastryk, A.B.

Placement Secretary

H. Duane Plough, A.B.

Assistant Director, Student Personnel

Lucille E. Sanders, A.B.

and Guidance

Alice Smith

Assistant Director, Student Personnel

J. Towner Smith, A.M.

and Guidance

Leah M. Smith

Secretary, Extension

Waneta A. Stabler, A.B.

Director, Blanche Draper Hall

Benjamin H. Wheatley, A.M.

Associate Director, Student Personnel

and Guidance
ADMINISTRATIVE GROUPS

THE ADMINISTRATIVE COUNCIL

The Council meets weekly to keep informed on college affairs, to fix general administrative policies, and to coordinate and unify administrative decisions, practices, and services designed to promote the educational program of the college.

PAUL V. SANGREN, President; WYNAND WICHERS, Vice-President; JOHN C. HOEKJE, Dean of Administration; CORNELIUS B. MACDONALD, Comptroller; ELMER H. WILDS, Director of the Graduate Division; JAMES H. GRIGGS, Director of the Teacher Education Division; GEORGE H. HILLIARD, Director of Student Personnel and Guidance.

THE FACULTY COUNCIL

The Council meets each month to deal with such problems as may be delegated to it; to receive and consider recommendations and suggestions proposed by members of the Faculty, and to recommend to the President or Faculty changes in policy and procedures.

Elected: CHARLES R. STARRING (Chairman), CORA EBERT, MARGARET MACMILLAN, terms expiring in 1951; ALBERT BECKER (Vice-Chairman), JAMES GRIGGS, MYRTLE WINDSOR, terms expiring 1952; KATHARINE STOKES (Secretary), WILLIAM BROWN, JOHN AMEY, terms expiring 1953. Appointed: ESTHER SCHROEDER, JAMES ANSEL, ADRIAN TRIMPE; M. E. A. representative, M. J. GARY; Ex-officio: PAUL V. SANGREN, President; WYNAND WICHERS, Vice-President.

THE ATHLETIC BOARD OF CONTROL

The Board has jurisdiction over all matters pertaining to Intercollegiate Athletics.

JOHN C. HOEKJE, Dean of Administration; MITCHELL J. GARY, Director of Athletics; WILLIAM J. BERRY, CORNELIUS B. MACDONALD, CHARLES A. SMITH, appointed by the President; President of the W. Club; Sports Editor of the Western Herald; President of the Student Council.

FACULTY STANDING COMMITTEES FOR 1951-52

Persons whose names on a given committee appear opposite number 1 are appointed for one year, those opposite number 2 are appointed for two years, and those opposite number 3 are appointed for three years. Replacements will be made in such a way that new persons are appointed for a three-year period.
EDUCATIONAL POLICIES

RUSSELL SEIBERT, Chairman
2. Vern Mabie, Arnold Schneider, Katharine Stokes, Elmer Wilds.

GRADUATE COUNCIL

ELMER WILDS, Chairman
   Paul V. Sangren, Ex-officio.

INSTITUTIONAL

OTTO YNTEMA, Chairman
1. Elwyn Carter, Floyd Moore.
2. Alice LeFevre, Vern Mabie, Wynand Wichers.

PUBLIC RELATIONS

WYNAND WICHERS, Chairman
2. Vern Mabie, Ray Pellett, Otto Yntema.

RESEARCH

O. I. FREDERICK, Chairman
2. Homer Carter, Fred Beeler, Margaret Macmillan.
3. Harriette Bartoo, Albert Becker, Phil Buck.

SCHOLARSHIP

JOHN FEIRER, Chairman
1. Mitchell Gary, Ralph Miller, Mathilde Steckelberg.
2. Pearl Ford, Chester Hunt, Elsworth Woods.

STUDENT ACTIVITIES

JOHN C. HOEKJE, Chairman
1. Cornelius MacDonald, Elizabeth Smutz.
2. Winifred MacFee, Charles Starring.
3. Dorothy Horst, Norman Russell.
   Plus six students.

VISITATION, ORIENTATION AND RECRUITMENT

JOHN C. HOEKJE, Chairman
1. James Griggs, Roxana Steele, Crystal Worner.
2. Phil Buck, Esther Schroeder, Helen Sellers, Cyril Stout.
3. Isabel Crane, Willis Dunbar, Vern Mabie, Winifred MacFee.
FACULTY

1950-1951

EMERITUS


AMELIA BAUCH, A.M. ASSISTANT PROFESSOR EMERITUS OF EDUCATION B.S., A.M., Columbia University.

GRACE L. BUTLER, A.M. ASSISTANT PROFESSOR EMERITUS OF EDUCATION B.S., Western Michigan College of Education; A.M., Teachers College, Columbia University.

BERTHA S. DAVIS DEAN EMERITUS OF WOMEN


JOHN P. EVERETT, PH.D. PROFESSOR EMERITUS OF MATHEMATICS A.B., A.M., University of Michigan; M.Pd., Michigan State Normal College; Ph.D., Columbia University.

ANNA L. FRENCH LIBRARIAN EMERITUS

LUCIA C. HARRISON, M.S. ASSOCIATE PROFESSOR EMERITUS OF GEOGRAPHY A.B., University of Michigan; M.S., The University of Chicago.


HEADS OF DEPARTMENTS

GRACE E. MOORE, ASSISTANT PROFESSOR EMERITUS OF HOME ECONOMICS
B.S., Western Michigan College of Education.

MARY E. MOORE, B.S., ASSISTANT PROFESSOR EMERITUS OF HOME ECONOMICS

EFFIE B. PHILLIPS, A.M., ASSISTANT PROFESSOR EMERITUS OF EDUCATION
B.S., University of Minnesota; A.M., Teachers College, Columbia University.

HERBERT W. READ, A.M., ASSOCIATE PROFESSOR EMERITUS OF PHYSICAL EDUCATION
A.B., Western Michigan College; A.M., Columbia University.

NANCY E. SCOTT, PH.D., PROFESSOR EMERITUS OF HISTORY
A.B., AM., Indiana University; Ph.D., University of Pennsylvania.

G. EDITH SEEKELL, A.M., ASSOCIATE PROFESSOR EMERITUS OF HISTORY
A.B., A.M., University of Michigan.

MARION J. SHERWOOD, A.M., ASSOCIATE PROFESSOR EMERITUS OF INDUSTRIAL EDUCATION
B.S., A.M., Teachers College, Columbia University.

BEß BAKER SKILLMAN, A.M., ASSISTANT PROFESSOR EMERITUS OF EDUCATION
Ph.B., The University of Chicago; A.M., University of Michigan.

LAVINA SPINDLER, A.B., PROFESSOR EMERITUS OF EDUCATION
A.B., University of Michigan.

GEORGE SPRAU, A.M., PROFESSOR EMERITUS OF ENGLISH
A.B., Ohio Northern University; A.B., A.M., Ohio University; A.M., Harvard University.

LOUISE E. STEINWAY, A.M., ASSISTANT PROFESSOR EMERITUS OF EDUCATION
B.S., A.M., Columbia University.

CLELLA STUFFT, A.M., ASSISTANT PROFESSOR EMERITUS OF EDUCATION
A.B., University of Nebraska, A.M., Columbia University.

ELISABETH T. ZIMMERMAN, A.M., PROFESSOR EMERITUS OF LANGUAGES
A.B., University of Michigan; A.M., University of Wisconsin.
HEADS OF DEPARTMENTS

WILLIAM J. BERRY, Ph.D.
A.B., Iowa State Teachers College; M.S., Ph.D., The University of Chicago.

HAROLD BLAIR, A.M.
B.S., A.M., University of Michigan

WILLIAM R. BROWN, Ph.D.
A.B., University of Texas; A.M., Ph.D., Harvard University.

PHIL W. BUCK, Ph.D.
B.S., M.S., Kansas State Teachers College; Ph.D., Ohio State University.

ELWYN F. CARTER, Ed.D.

HOWARD D. CORBUS, M.S.
B.S., Michigan State College; M.S., Cornell University.

*DEYO B. FOX, Ph.D.
B.S., M.S., University of Michigan; Ph.D., University of Pittsburgh.

ORIE I. FREDERICK, Ph.D.
A.B., A.M., Findlay College; Ph.D., University of Michigan.

MITCHELL J. GARY, A.M.
B.S., A.M., University of Minnesota.

JAMES H. GRIGGS, Ed.D.

LESLIE A. KENOYER, Ph.D.
A.B., Campbell College; A.M., University of Kansas; Ph.D., The University of Chicago; Ph.D., Iowa State College.

LEONARD C. KERCHER, Ph.D.
A.B., A.M., Ph.D., University of Michigan; University of London.

JAMES O. KNAUSS, Ph.D.
A.B., Lehigh University; A.M., Harvard University; Ph.D., Cornell University.

ALICE LOUISE LEFEVRE, M.S.
A.B., Wellesley College; M.S., Columbia University.

GEOGRAPHY AND GEOLOGY

MATHEMATICS

ENGLISH

PSYCHOLOGY

MUSIC

AGRICULTURE

INDUSTRIAL EDUCATION

RESEARCH

EDUCATION

BIOLOGY

SOCIOLOGY

HISTORY

LIBRARIANSHIP

*Deceased December 11, 1950.
FLOYD W. MOORE, Ph.D.  
ECONOMICS  
A.B., Albion College; A.M., University of Michigan; Ph.D., Northwestern University.

GERALD OSEBORN, Ph.D.  
CHEMISTRY  
A.B., Michigan State Normal College; M.S., Ph.D., University of Michigan.

SOPHIA REED, A.M.  
HOME ECONOMICS  
Ph.B., The University of Chicago; A.M., Teachers College, Columbia University.

WM. MCKINLEY ROBINSON, Ph.D.  
RURAL LIFE AND EDUCATION  
B.S., Hiram College; A.M., Ph.D., Teachers College, Columbia University.

PAUL ROOD, Ph.D.  
PHYSICS  
A.B., Albion College; A.M., Ph.D., University of Michigan.

ARNOLD E. SCHNEIDER, Ph.D.  
BUSINESS STUDIES  
B.S., Iowa State Teachers College; A.M., State University of Iowa; Ph.D., University of Michigan.

LAURA V. SHAW, A.M.  
SPEECH  
B.S., Ohio Wesleyan University; A.M., University of Michigan.

D. C. SHILLING, Pd.D.  
POLITICAL SCIENCE  
Ph.B., Ohio Northern University; A.B., Miami University; A.M., University of Wisconsin; Pd.D., Ohio Northern University.

LYDIA SIEDSCHLAG, A.M.  
ART  

MARION R. SPEAR, O.T.R., A.M.  
OCCUPATIONAL THERAPY  
B.S., Massachusetts School of Art; A.M., University of Michigan.

MATHILDE STECKELBERG, A.M.  
LANGUAGES  
A.B., University of Nebraska; A.M., Teachers College, Columbia University.

COL. CURTIS L. VARNER, M.B.A.  
MILITARY SCIENCE AND TACTICS  
B.S., Washington and Jefferson College; M.B.A., Harvard University.

CRYSTAL WORNER, A.M.  
PHYSICAL EDUCATION FOR WOMEN  
A.B., Michigan State Normal College; A.M., University of Michigan.
PROFESSORS

FRED A. BEELER, Ph.D.  Mathematics
B.S., University of Alaska; A.M., University of Indiana;
Ph.D., University of Michigan.

CHARLES T. BROWN, Ph.D.  Speech
A.B., Westminster College; A.M., Ph.D., University of Wisconsin.

CHARLES H. BUTLER, Ph.D.  Mathematics
Ph.B., A.M., The University of Chicago; Ph.D., University of Missouri.

WILLIAM H. CAIN, A.M.  Mathematics
A.B., University of Michigan; A.M., Teachers College, Columbia University.

HOMER L. J. CARTER, A.M.  Psychology
(Director of Psycho-Educational Clinic)
B.S., Wayne University; A.M., Ohio State University.

MANLEY M. ELLIS, Ph.D.  Education
A.B., A.M., Ph.D., University of Michigan.

JOHN L. FEIRER, Ed.D.  Industrial Education
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GEORGE G. MALLINSON, Ph.D.  Education and Psychology
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A. EDYTHE MANGE, Ph.D.  History
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ASSOCIATE PROFESSORS

WALTER G. MARBURGER, M.S.
A.B., M.S., University of Michigan.

ALFRED H. NADELMAN, Ph.D.
A.M., Ph.D., University of Berlin.

ROBERT R. RUSSEL, Ph.D.
A.B., McPherson College; A.M., University of Kansas; Ph.D., University of Illinois.

RUSSELL H. SEIBERT, Ph.D.
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Ph.D., Ohio State University.

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ASSOCIATE PROFESSORS

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VIOLET BEIRGE, Ed.D.
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Ed.D., New York University.

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A.B., Wesleyan University; A.M., Harvard University.

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Ph.D., University of Wisconsin.

JAMES W. BOYNTON, M.S.
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THEODORE L. CARLSON, Ph.D.  Economics
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CLAARA R. CHIARA, Ph.D.  Education
B.S., Miami University; A.M., Western Reserve University;
Ph.D., Ohio State University.

J. WM. CUNDIFF, J.D.  Business Studies
B.S., J.D., University of Illinois.

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PEARL L. FORD, A.M.  Mathematics
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ROBERT FRIEDMANN, Ph.D.  History and Philosophy
A.B., Goshen College; Ph.D., University of Vienna, Austria.

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B.Ed., Southern Illinois State Teachers College; M.S., University
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University.

HARRY P. GREENWALL, A.M.  Languages
B.L., Ohio Wesleyan University; A.B., Western Michigan
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*WILLIAM HALNON, PhD.  Mathematics
A.B., Dublin College; Ph.D., Indiana University.

JOHN B. HEALEY, J.D.  Business Studies
B.C.S., Ph.B., A.M., J.D., DePaul University.

H. GLENN HENDerson  Music

FRANK J. HINDS, A.M.  Biology
A.B., Western Michigan College of Education; A.M., University
of Michigan.

PAUL B. HORTON, Ph.D.  Sociology
A.B., Kent State University; Ph.D., Ohio State University.

FRED S. HUFF, A.M.  Industrial Education
A.B., Western Michigan College of Education; A.M., University
of Michigan.

*Deceased May 17, 1951
ASSOCIATE PROFESSORS

CHESTER L. HUNT, Ph.D.
A.B., Nebraska Wesleyan College; A.M., Washington University; Ph.D., University of Nebraska.

MATE GRAYE HUNT, A.M.
B.S.L.S., George Peabody College for Teachers; A.B., A.M., Southern Methodist University.

GEORGE A. KIRBY, A.M.
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LAWRENCE G. KNOWLTON, Ph.D.
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ANNA E. LINDBLOM, A.M.
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LESTER R. LINDQUIST, A.M.
B.S., A.M., University of Michigan.

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CHARLES H. MAHER, A.M.
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HOLON MATTHEWS, Ph.D.
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CLAYTON J. MAUS, M.S.
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LEONARD V. MERETTA, M.M.
B.M., M.M., University of Michigan.

LILLIAN H. MEYER, Ph.D.
A.B., M.S., Washington University; Ph.D., University of Illinois.

GEORGE R. MILLER
INDUSTRIAL EDUCATION

RALPH N. MILLER, Ph.D.
A.B., Wayne University; A.M., University of Michigan; Ph.D., Northwestern University.

CHEMISTRY

SOCIOMETRY

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BUSINESS STUDIES

PHYSICAL EDUCATION FOR MEN

MUSIC

LANGUAGE

SPEECH

PHYSICAL EDUCATION FOR MEN

ENGLISH

GEOGRAPHY AND GEOLOGY

HISTORY
FACULTY

JACK W. MURPHY, M.S.
B.S., M.S., University of Wisconsin.

CHARLES S. NICHOLS, A.M.
A.B., Western Michigan College of Education; A.M., University of Michigan.

FRANCES E. NOBLE, Ph.D.
A.B., A.M., Ph.D., Northwestern University.

THOMAS W. NULL, A.M.
A.B., Ottawa University; A.M., State University of Iowa.

MATTHEW L. PATANELLI, A.B.
A.B., University of Michigan.

Wm. JAMES PERIGO, B.S.
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DON O. PULLIN, A.M.
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GLEN C. RICE, B.S.
B.S., Western Michigan College of Education.

HERMANN E. ROTHFUSS, Ph.D.
B.S., A.M., Ph.D., University of Minnesota.

ESTHER D. SCHROEDER, A.M.
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THOMAS C. SLAUGHTER, A.M.
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CHARLES A. SMITH, A.M.
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RAYMOND F. SORENSON, A.M.
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CHARLES R. STARRING, A.M.
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ROXANA A. STEELE, A.M.

EDWIN B. STEEN, Ph.D.
A.B., Wabash College; A.M., Columbia University; Ph.D., Purdue University.
ASSISTANT PROFESSORS

Cyril L. Stout, Ph.D.  
**Geography and Geology**  
B.S., Knox College; Ph.M., University of Wisconsin; Ph.D., George Peabody College for Teachers.

Julius Stulberg, A.M.  
**Music**  
B.S., A.M., Michigan State College.

Adrian Trimpe, A.M.  
**Business Studies**  
B.S., Western Michigan College of Education; A.M., University of Michigan.

Reva Volle, A.M.  
**Home Economics**  
B.S., University of Illinois; A.M., Teachers College, Columbia University.

Roy J. Wietz, A.M.  
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B.S., University of Illinois; A.M., Columbia University.

Zack L. York, Ph.D.  
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A.B., Western Michigan College of Education; Ph.D., University of Wisconsin.

ASSISTANT PROFESSORS

Sam B. Adams, A.M.  
**Music**  
A.B., University of Kentucky; A.M., Teachers College, Columbia University.

Paul M. Amerpohl, B.S.  
**Industrial Education**  
B.S., Parks Air College.

John D. Amey, Jr., M.B.A.  
**Economics**  
A.B., Western Michigan College of Education; M.B.A., University of Michigan.

Agnes E. Anderson, M.S.  
**Business Studies**  
B.S., Ferris Institute; M.S., University of Tennessee.

James O. Ansel, Ed.D.  
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A.B., Western Michigan College of Education; A.M., Northwestern University; Ed.D., Teachers College, Columbia University.

Thelma E. Anton, A.M.  
**English**  
A.B., University of Michigan; A.M., Middlebury College.

Grover C. Baker, A.M.  
**Physics**  
A.B., Michigan State Normal College; A.M., University of Michigan.

Harriette V. Bartoo, Ph.D.  
**Biology**  
A.B., Hiram College; Ph.D., The University of Chicago.
<table>
<thead>
<tr>
<th>Name</th>
<th>Degree/Course</th>
<th>Institution/Program</th>
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<tbody>
<tr>
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<tr>
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<td>Field</td>
<td>Degree(s)</td>
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GENERAL INFORMATION

PURPOSE

The original purpose of Western Michigan College of Education, as stated in the act establishing it in 1903, was to prepare teachers for the public schools. The College ever has held that purpose in mind. But as the years have come and gone the original purpose has been expanded and modified. While most of its students still are in training for the teaching profession, Western now counts significant numbers who are pursuing courses of a pre-professional and vocational nature. Liberal Arts work leading to the degree either of Bachelor of Arts or of Bachelor of Science is available in every department.

The college seeks to attract young men and women of vigorous health, high mentality, thorough scholarship, strong professional spirit, broad culture in the amenities of life, winning personality, and proved character.

By encouraging the formation of habits which make for good health and by promoting the development of sound bodies through physical education, the college aims to send into the various professions those physically fit for their tasks. Courses of study are planned with the purpose of developing an appreciation of thorough scholarship, by introducing students to the best in thought and life, and giving as thorough knowledge of the various branches of study as possible. A high professional spirit is fostered in those expecting to teach through instruction in the principles underlying the teaching process and through the provision of ample opportunity for prospective teachers to become acquainted with children, to observe them in the classroom, and to teach them under supervision in the training schools connected with the college. Opportunity for the development of initiative, self-reliance, and community spirit is found in voluntary participation, according to the interests of the students, in a wide range of extra-curricular activities. A sane, wholesome social life is encouraged through membership in clubs and attendance at social functions of the college. In all these ways the college aims to develop in its students essential qualities and, as a consequence, to do its part in giving the state of Michigan a body of citizens thoroughly trained for every phase of their work. In a word, Western Michigan College of Education is progressive in educational policy and practice; it fosters a wholesome spirit of democracy; by every means at its command it seeks to keep constantly before its teachers and students the idea that character and service are the highest aims of education and the noblest ideals of life.

HISTORICAL SKETCH

Western Michigan College of Education was established by an act of the Legislature of 1903. The first school year was begun in June, 1904, under the presidency of Dwight B. Waldo. Rented quarters in the city high-school building and in the Kalamazoo College building housed the school for a year
and two summer terms. In 1905 the Administration Building was completed, and in 1907 a gymnasium, the two buildings being connected by an intervening section of classrooms. The Training School Building was ready for occupancy in 1909, the Science Building in 1914, the Manual Arts Building in 1921, the Library in 1924, and the Men's Gymnasium in 1925. The Temporary Building, erected for the S.A.T.C. in 1918, has been used as a classroom building since 1923.

Walwood Hall, combined women's dormitory and Union Building, was opened in September, 1938. The Waldo Stadium and the new baseball field and stands were completed in 1939, and the Vandercook Hall for Men and the Student Health and Personnel Building were ready in the fall of that year. Lavina Spindler Residence Hall for Women was opened in September, 1940. The Mechanical Trades Building became available in 1941 and the Theatre in 1942. William McCracken Hall, Burnham Halls for Men, and Harper Maybee Music Hall were all opened in 1949. Blanche Draper Hall for Women and Lydia Siedschlag Hall for Women were opened in 1950. Kanley Memorial Chapel was completed in 1950.

Successive land purchases have increased the original campus of 20 acres to one of 280 acres.

In the first academic year, 1904-1905, 116 students were enrolled. Ten full-time and three part-time instructors composed the faculty. In the year 1948-1949 there were 6,661 different undergraduate students enrolled. The faculty, including the teaching staffs of the affiliated training schools, totaled more than 200 persons.

Graduation from an approved high school has always been a prerequisite to admission.

In 1926 the curricula in art, music, commerce, manual arts, home economics, and physical education were lengthened to three years. The conferring of the degree of Bachelor of Arts upon the completion of a four-year curriculum was authorized in 1917. A curriculum for the degree of Bachelor of Science was formulated in 1925.

From June 30, 1932, to June 30, 1939, all life-certificate curricula required four years of training. The provisional certificate now replaces the life certificate.

The increase in enrollment has made necessary larger training-school facilities; these have been secured by affiliation with the Paw Paw village district, the Portage rural-agricultural district, and Rural District No. 9.

The two-semester plan was authorized by the State Board of Education in December, 1938, and the three-semester plan, in May, 1943. The two-semester plan was reauthorized in 1945.

In July, 1938, the State Board of Education and the University of Michigan Board of Regents agreed upon a plan for graduate study in the teachers colleges of Michigan which has operated successfully in this institution since that time.

In 1927, the North Central Association of Colleges and Secondary Schools placed the college on its approved list. In 1928, approval of the college was given by the American Association of Teachers Colleges. In 1941, the college was placed on the approved list of the Association of American Universities.
In the summer of 1939, the college was selected as one of the twenty colleges and universities in the United States to cooperate in the National Study of Teacher Education under the auspices of the American Council on Education. That study, designed to revise and improve the program of teacher preparation in this college and indirectly in other colleges throughout the country, has been energetically pursued.

On August 5, 1936, President Waldo tendered his resignation to the State Board of Education. His resignation was accepted by the Board, and President Waldo became President Emeritus, in which capacity he served until his death on October 29, 1939.

At the same meeting Dr. Paul V. Sangren, who had been serving in the capacity of Dean of Administration, was elected to the presidency. Formal inaugural exercises for Dr. Sangren as the second president of the institution were held on November 7, 1936.

**COMMUNITY ADVANTAGES**

The city of Kalamazoo is generous in offering its unusual cultural advantages to students, often at a merely nominal cost. Kalamazoo has its own symphony orchestra, which may be heard with enjoyment on Sunday afternoons. Each season the Community Concert Series brings some of the world's foremost musical artists. The drama is well produced by the Kalamazoo Civic Theatre group in their beautiful experimental theatre. Somewhat before Christmas of each year community choruses from southwestern Michigan join with the Kalamazoo and Western Michigan College of Education choruses under the direction of the head of the Department of Music in a festival performance of Handel's *Messiah*, with soloists and orchestra. The exhibits of the Kalamazoo Art Institute are always an attraction. And added to these opportunities there are those offered by the churches. The leadership in the various denominations is naturally rather strong in a city the size of Kalamazoo and has helped to produce a lively Christian consciousness.

**SUMMARY OF ENROLLMENT**

**JULY 1, 1949-JUNE 30, 1950**

<table>
<thead>
<tr>
<th>Students Enrolled for Undergraduate Work:</th>
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<table>
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<tr>
<td>Fall</td>
<td>208</td>
</tr>
<tr>
<td>Spring</td>
<td>236</td>
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</table>
Western Michigan College of Education is located at Kalamazoo, Michigan, a city of 60,000 people situated midway between Chicago and Detroit on the Michigan Central Railroad. Other railroads and three major highways make the College readily accessible from all points in the Middle West. The city offers students many cultural advantages such as strong churches, community concerts and lectures, a civic orchestra, and a civic theatre.

The campus comprises more than two hundred acres. The site is rolling and beautiful. The grounds are spacious enough, not only for the present facilities, but also for the new classroom buildings and dormitories now under construction. One of the unusual features of the campus is a nine-hole golf course available to students. Another is the Kleinstueck Wild Life Preserve deeded to the State Board of Education by the late Mrs. Caroline Hubbard Kleinstueck. This preserve of nearly fifty acres is freely used by classes and student groups for instructional and recreational purposes.

The Administration Building—This contains the administrative offices, the Campus Store, the Graduate Division, the Department of Rural Education, and Western State High School.

The Library Building—The main reading room on the first floor accommodates 300 readers. A periodical reading room in the basement has seats for 50 readers. The departments of Mathematics, Political Science and Librarianship have offices and classrooms in the basement and on the second floor. The library's book collection consists of 80,000 volumes. Some 675 periodicals are currently received and over 300 of them are bound regularly.

The Science Building—This houses the departments of Agriculture, Biology, and Geography and Geology. Adjoining is a commodious greenhouse stocked with more than 200 species of plants from all parts of the world. Students in Biology also have available the Kleinstueck Wild Life Preserve and the Kellogg Bird Sanctuary.

Student Health and Personnel Building—This is a three-story building housing the Health Service and certain student personnel activities. The Health Service includes examining rooms, treatment rooms, and infirmary rooms. The building also contains offices for the Deans of Men and of Women and the Director of the Division of Personnel and Guidance. In addition there are quarters for the Psycho-Educational and the Speech Correction Clinics as well as the Educational Service Library.

The Theatre—This building contains an auditorium with a seating capacity of 350, two classrooms, dressing rooms and rehearsal rooms.
THE INDUSTRIAL ARTS BUILDING—This is a modern fireproof structure offering facilities for specialization in the various industrial arts.

THE MECHANICAL TRADES BUILDING—This building was constructed with funds donated by a local Foundation. Its total floor area of 20,000 square feet is utilized in the teaching of the metal trades and aviation mechanics.

WALWOOD HALL UNION is the campus social center. It has all the modern dining and recreational features usually found in Union Buildings, such as a soda bar, cafeteria, private dining rooms, ballroom, committee rooms, etc.

WILLIAM McCracken HALL—This new four-story classroom building on the west campus provides lecture room and laboratory facilities for the departments of Chemistry, Physics, Art, Home Economics, Occupational Therapy, and Pulp and Paper Technology.

HARPER MAYBEE MUSIC HALL—A new music building on the west campus houses choral and instrumental rehearsal rooms, rehearsal rooms for small ensembles, studios, practice cubicles, classrooms, music library, social room, offices for the Music Department, and the FM Radio Broadcasting studio.

KANLEY MEMORIAL CHAPEL—Made possible by a bequest from the estate of the late William Kanley, this building provides a chapel for students of all faiths, organ practice rooms, robing rooms, and offices for the director of religious education, and those officiating in the chapel.

THE DORMITORIES—In recent years, the College has constructed several modern and beautiful dormitories.

HENRY B. VANDERCOOK HALL FOR MEN houses 200 residents.

LAVINA SPINDLER HALL FOR WOMEN houses 193 residents. Its exterior and interior designs conform to the contour of the hill on which it is located. It has a most attractive lobby, three reception rooms, a large dining room, and special facilities such as recreation rooms, music practice rooms, a laundry, three kitchenettes, two sunrooms, and an infirmary.

WALWOOD HALL RESIDENCE FOR WOMEN accommodates 115 girls. The rooms are double and the furniture is modern in style. Besides the beautiful lounge and a well-lighted dining room, there are reception rooms, a library, a sunroom and several recreation rooms.

BURNHAM HALLS FOR MEN—This new dormitory for men is in two units located in the west campus area. It provides accommodation for five hundred residents.

BLANCHE DRAPER HALL and LYDIA SIEDSCHLAG HALL FOR WOMEN are new dormitories opened in 1950. They are located on the west campus and provide gracious living for 500 girls. The twin dormitories are connected by a wide landscaped terrace. A common kitchen serves both units, but otherwise the dormitories are separate with separate directors and counselors.
The Training Schools—The Training Schools of Western Michigan College of Education are unique in that they include a wide range of typical schools; a one-room rural school, a consolidated school, a large-village school, a city graded school, and a high school—thus approximating the types of schools students may expect to work in after graduation. These schools give the student an opportunity for observation of and directed teaching in any subject and in any grade from kindergarten to the twelfth grade inclusive. Transportation to the outlying schools is afforded by the college busses.

The Campus Elementary School includes a kindergarten; a room each for grades one to eight; a library; a gymnasium; and special rooms for art, music, and home economics.

The Campus High School serves a twofold purpose in the field of secondary education. One major function of the school is to offer a broad curriculum in which teaching procedures designed by the leaders in the field of secondary education are put into practice. Another function is to offer an effective laboratory situation for training prospective teachers for secondary schools.

The Hurd One-Teacher Rural School is housed in a modern building, equipped with electric lights, running water, an extra room for directed teaching and a basement community room with a stage, which may be used for indoor play.

The Paw Paw Large-Village School, organized on the six-three-three plan, is one of the best of its kind. Western Michigan College of Education and the Paw Paw Board of Education unite to make this school a progressive one in every particular.

The Portage Center Consolidated School, a twenty-three teacher school, organized on the eight-four plan, includes a kindergarten, all the elementary grades, and a high school.

The Athletic Plant—The Athletic Plant comprises the following:

Hyames Baseball Field with concrete stands seating 2500 spectators. The Men’s Gymnasium has adequate facilities for all indoor sports and for the programs in Physical Education. About 3000 can be seated around the basketball court.

For their work in physical education the women of the college have the exclusive use of a gymnasium with a floor space of 119 feet by 68 feet. In the basement are lockers, shower baths, and a swimming pool. Twelve tennis courts are available. Six of these are Har-T-ru. Around the football field runs an eight-lane quarter-mile cinder track. The straightaway is 220 yards.

Waldo Stadium has two concrete stands each capable of seating 7500 people and reaching from goal line to goal line. There are a modern pressbox, locker rooms, officials’ rooms and concession stands.

Arcadia Brook Clubhouse and Dining Hall—This recently remodelled building in the new campus area contains faculty club rooms and a
cafeteria dining hall with a capacity for serving one hundred persons at a time.

Maintenance Building—This is a substantial two-story fireproof building containing offices of the maintenance staff, maintenance shops, and adequate storage space for maintenance equipment and supplies.

Hillside Apartments—These two buildings contain thirty-two modern faculty apartments. These vary in size from bachelor apartments to one and two bedroom apartments.

Temporary Building—The Federal Government has provided six buildings for instructional purposes with 45,000 sq. ft. of floor space. These buildings provide facilities for:

- Freshman English classes
- Business Education
- Speech and Dramatics
- Industrial and Vocational Training
- Intramural and Recreation.

Kleinstueck Wild-life Preserve

In 1922, the late Mrs. Caroline Hubbard Kleinstueck deeded to the State Board of Education nearly fifty acres, including woodland, grassland, and a lake, about one mile from the campus, to be used as a wild-life preserve. The preserve is freely used by classes and student groups for instructional and recreational purposes.

A twenty-four-year-old stand of pines covers portions of the area, while other portions are occupied by hardwood forest, swamp, and lake.

The area abounds in land and water birds and includes many of the native plant species of southern Michigan.

Michigan Veterans Vocational School

The Michigan Veterans Vocational School originated in 1944 through a lease drawn between the W. K. Kellogg Foundation, the State Office of Veterans' Affairs, and the State Board of Control for Vocational Education, whereby the Foundation's Pine Lake Camp was turned over to the state for the purpose of a rehabilitation center for veterans of World War II, providing physical and occupational therapy, medical care, and vocational training. It is located 10 miles north and east of Plainwell, on the north side of Pine Lake, 22 miles from Kalamazoo. Western Michigan College of Education assumed the responsibility of operating the school on November 1, 1945.

Instruction is available in machine shop, watch and clock repair, machine and architectural drafting, radio service and television, office practice including business administration, typing, office machines, bookkeeping and accounting, typewriter servicing, printing, appliance servicing, woodworking, and upholstering. Other vocational training courses will be added as needed.
Enrollment is a very simple procedure. Prompt consideration is given to any World War II veteran who is interested in any of the rehabilitation opportunities available at the Michigan Veterans Vocational School. One of the local Veterans' Administration Counselors or Rehabilitation Field Agents will assist the interested veteran to secure admission. The veteran may also enter through direct application to the school, Michigan Veterans Vocational School, Pine Lake, Doster, Michigan.
STUDENT SERVICE FACILITIES

STUDENT WELFARE

Conduct in harmony with the ideals for which the institution stands is expected of each student. Effort is made to stimulate the student to earnest, honest endeavor, and to develop new and worthy interests. In order to foster his best impulses and ideals, the administration follows the policy of dealing with him as an individual. In the furtherance of this policy, a Dean of Women and a Dean of Men devote their time to matters pertaining to the welfare of the student body. They may be consulted freely on any matter in which they can be of assistance.

The college has never assumed an attitude of paternalism toward its students. On the assumption, however, that the student has entered the institution for the definite purpose of educational advancement, regularity of class attendance, reasonable evening hours, and a sane social program are required.

STUDENT PERSONNEL AND GUIDANCE SERVICES

During the regular year freshmen, sophomores, and first year transfer students are assigned to counselors, according to the curriculum chosen, for advice and counsel in planning their academic schedules. Such counseling is available for juniors and seniors when requested. It is also available for students of the summer session upon application to the Director of Student Personnel and Guidance.

Assistance is given to students on the content of major and minors by a staff of departmental advisers. Students are urged to avail themselves of the services of their departmental advisers as soon as a choice of major and minors has been made but, in any case, before the opening of their junior year. Departmental advisers with their office number and schedule of office hours will be found listed in the Schedule of Classes for each semester.

EMPLOYMENT FOR MEN AND WOMEN

Students interested in earning money with which to pay in part their expenses will be given advice and detailed information upon application. Students whose point-hour ratio is less than .8 are not eligible for campus employment. Off-campus employment for students is handled through the offices of the Dean of Men and the Dean of Women.

VETERANS COUNSELING SERVICES

A complete counseling service is maintained exclusively for veterans of World War II. Counselors assist veterans in enrolling and preparing the necessary papers for securing Veterans Administration subsistence.

The service is available throughout the school year, and veterans avail themselves of the opportunity to secure information, gain assistance in preparing papers and reports demanded by the Veterans Administration,
filing applications for loans, and checking on many other matters in which they are interested.

**OCCUPATIONAL COUNSELING SERVICES**

The Occupational Counseling Clinic has as its primary objective the assistance of individuals in making suitable occupational choices. The Clinic serves both those who have not started a training program and those who desire a change to another course of training. Counseling covers all occupations and is not limited to those requiring degree training.

Any individuals desiring a complete discussion of their interests, aptitudes and abilities as shown by educational or work experiences and by scores on standard tests may seek help from this Clinic. Referrals are being made by college counselors, teachers, and employers who believe the person referred is not well placed occupationally. Individuals may also seek occupational counseling either general, or for a specific objective.

It is also the plan of this Clinic to allow a few selected students the opportunity for observing and participating in the various phases of occupational counseling. Students who have not made their specific vocational plans are urged to contact the Clinic early in their college careers.

**HOUSING FOR MEN**

All Freshmen men not living at home are required to live in College dormitories, in so far as facilities are available. Any deviation from the above will be carefully considered through the office of the Dean of Men. Other men are required to live in residences approved by the office of the Dean of Men. A list of approved rooms is available and will be furnished upon request.

**Burnham Halls — Room and Board**

Request for reservation should be addressed to Dr. Ray C. Pellett, Dean of Men. Applications must be accompanied by a ten-dollar room deposit. This deposit does not apply on the rental charge but is held through the college year and is returned to the resident when he leaves at the end of the semester, provided he has no outstanding account with the College. The last day for requesting deposit refunds, if application to live in the dormitory is cancelled, is September 1 for the first semester or January 15 for the second semester. The rate per student in Burnham Halls for room and board is $261.00 per semester. Room and board payments must be made in advance in three installments: $125.00 prior to occupancy and two additional payments of $68.00 each at specified periods according to contract. Make all checks payable to Western Michigan College. A 5% collection fee will be added to bills not paid within one week after payment date and an additional 5% will be added to payments more than three weeks late.

**Note:** Due to the unsettled conditions of prices for food and labor, the College reserves the right to increase the charge during the year if, in its opinion, such increase is necessary.
Henry B. Vandercook Hall — Room only

Request for reservation should be addressed to Dr. Ray C. Pellett, Dean of Men. Application must be accompanied by a ten-dollar room deposit. This deposit does not apply on the rental charge but is held through the college year and is returned to the resident when he leaves at the end of the semester, provided he has no outstanding account with the college. The last day for requesting deposit refunds, if application to live in the dormitory is cancelled, is September 1 for the first semester or January 15 for the second semester.

The rate per student in Vandercook Hall is $76.50 per semester. There are a few single rooms at an additional charge. Room rent for the entire semester must be paid prior to occupancy.

HOUSING FOR WOMEN

All undergraduate women students under 25 years of age enrolled at Western Michigan College are required to live in College Residence Halls insofar as space is available, unless they are living in their own homes, or with close relatives, or unless other arrangements are approved for them, in writing, by the Housing Committee. This is in accordance with the ruling of the State Board of Education of July 15, 1949.

Residence Halls for Women

Western’s Residence Halls for Women are: Walwood Hall, Lavina Spindler Hall, Blanche Draper Hall, and Lydia Siedschlag Hall. Rates for room and board are $261.00 per semester.

Room and board payments must be paid in advance in three installments: $125.00 prior to occupancy and two additional payments of $68.00 each at specified periods according to contract. A 5% collection fee will be added to bills not paid within one week after payment date and an additional 5% will be added on payments more than 3 weeks late.

Request for reservation should be addressed to Dr. Elizabeth E. Lichty, Dean of Women. Application must be accompanied by a ten-dollar room deposit. (Please send this deposit by check or money order, made out to Western Michigan College). The deposit does not apply on the rental charge, and is returned to the resident when she leaves the dormitory, provided she has no outstanding account with the College, or does not withdraw during the semester. The last day for requesting deposit refunds, if application to live in the dormitory is cancelled, is August 1 for the first semester, or January 15 for the second semester.

Due to the unsettled conditions of prices of food and labor, the College reserves the right to increase the charge during the year, if, in its opinion, such increase is necessary.
THE COLLEGE CAFETERIAS

Walwood Hall Cafeteria

The Cafeteria hours are:

Breakfast:
Monday through Friday .................................. 7:15 A.M. to 8:30 A.M.

Lunch:
Monday through Saturday .................................. 11:00 A.M. to 1:15 P.M.

Dinner:
Sunday .......................................................... 12:15 P.M. to 1:45 P.M.
Monday through Saturday .................................. 5:00 P.M. to 6:30 P.M.

Arcadia Brook Cafeteria and Snack Bar

Lunch:
Monday through Friday .................................. 11:00 A.M. to 1:15 P.M.

Dinner:
Sunday through Thursday .................................. 5:00 P.M. to 6:30 P.M.

STUDENT HEALTH SERVICE

The purpose of the student health service at Western Michigan is to help students develop an appreciation of the essentials of healthful living, to assume the responsibility for intelligent self-direction, and to provide a knowledge of when to ask for expert advice.

All students, on entering college for the first time (except for the Summer Session only), are required to have a physical examination by the Health Service physicians. This examination is a part of the registration process, and special clinics are arranged at the beginning of each semester. Failure to complete the examination during the time assigned will necessitate another appointment, and this can be obtained only upon payment of a $2.00 penalty, at the Health Service.

The health fee, paid upon admission, entitles the student to the following services:

1. Medical examinations and conferences.
2. Dental examinations and conferences.
3. First-aid emergencies.
4. Care of minor ailments and follow-up treatments, as advised by the doctor during clinic hours.
5. Infirmary care at a moderate cost, if advised by the physician.
6. X-ray pictures, taken for a minimum fee.
7. Laboratory services and other clinical tests for diagnostic purposes.

The clinic is open for consultation and treatments from 8:00 A.M. until 4:30 P.M. from Monday through Friday, and from 9:00 A.M. until 12:00 noon on Saturday. The college physician is in the office for consultation from 8:30 until 10:00 A.M., Monday through Friday. Other services are
available as follows: a surgical clinic from 2:00 until 4:00 P.M. Tuesday and Thursday, a dental clinic on Tuesday and Thursday mornings, a special skin clinic is held twice a month, and psychiatric counseling is available by appointment.

Consultations and treatments given in the Health Service are free to the students, except for special medications and the materials used by the dentist; even these are purchased at wholesale rates, when possible, and the student is given the benefit of the lower cost.

THE GENERAL LIBRARY

The General Library on the east campus provides seating for 300 in the Reading Room on the first floor where the reference collection is shelved, and the Periodical Room in the basement provides 50 seats.

The General Library's collection consists of about 80,000 volumes. Approximately 575 periodicals are currently received and of these more than 300 are bound for permanent retention.

About 1,000 volumes are housed on the west campus in Room 206, Maybee Hall, where a Music Library with a seating capacity of 50 is supervised by a member of the professional library staff as a branch of the General Library. This branch receives a dozen current periodicals and has a collection of 1,800 phonograph records which can be used in the adjoining listening room.

In Room 116, McCracken Hall on the west campus, a Physical Science Library with a seating capacity of 50 houses 900 volumes and 67 currently received periodicals. This library also is a branch of the General Library and is supervised by a member of the professional library staff.

During the academic year the General Library is open for service from 7:30 A.M. to 10:00 P.M. Mondays through Thursdays; 7:30 A.M. to 9:00 P.M. Fridays; 8:00 A.M. to 5:00 P.M. Saturdays; and 2:30 P.M. to 5:30 P.M. Sundays.

The Music Library is open through the academic year from 8:15 A.M. to 4:00 P.M. Monday through Friday and 6:30 P.M. to 9:00 P.M. Monday through Thursday.

The Physical Sciences Library is open from 8:00 A.M. to 5:30 P.M., Monday through Friday.

EDUCATIONAL SERVICE LIBRARY

The Educational Service Library provides for students of teaching and education a representative collection of the latest editions of textbooks both in the elementary and secondary fields, texts for each of the common branches and special subjects, books in general education, professional books in the different subject areas, teaching and curriculum aids, source and reference material, a fine collection of elementary and secondary courses of study in all subject fields, children's literature, ephemeral materials in all subject fields, and current educational magazines. Loan service is provided and the open shelves aid in reference and research work.
The library serves not only the various departments on the campus, the undergraduate and graduate students in the various subject fields, but also students and teachers who desire help in the solving of problems in the workshop or in the field. Teachers and administrators find the collection of elementary and secondary textbooks helpful when evaluating and selecting new texts. In-service use is extended to conferences, visiting teachers, and correspondents.

CARNEGIE GIFT OF BOOKS AND PICTURES

A gift from the Carnegie Corporation of New York of books, photographic prints, color facsimiles, and etchings was presented to Western Michigan College of Education in the summer of 1939. This teaching and reference material has been carefully selected with a view to enriching a college library with books and illustrations not ordinarily afforded by colleges. The collection consists of 831 large, well-mounted photographs and 125 books, together with 30 colored reproductions, and portfolios containing illustrations of prints. This collection is housed in McCracken Hall.

ART COLLECTION

Through the courtesy of the family of the late Hon. Albert M. Todd an interesting collection of paintings, sculpturing, and fine ceramics gathered by Mr. Todd in many years of travel has been presented to the College. These were formerly concentrated in an exhibition room in the Library, but through the extensive building program they have been distributed among different buildings to provide distinctive decorative notes appropriate to the building.

PSYCHO-EDUCATIONAL CLINIC

The purpose of the Psycho-Educational Clinic at Western Michigan College of Education is to provide psychological service for maladjusted children and adults, centering not only upon diagnosis but upon remedial measures as well. It is the plan of the clinic, whose laboratory is equipped with modern psychological apparatus, to train a number of competent students to deal with psycho-educational problems involving academic, social, and emotional maladjustment and with educational and vocational counseling. The personnel cooperating in these clinical studies consists of a director, associate directors, and assistants, members of the Health Service, members of the Speech Clinic, local psychiatrists, pediatricians, and ophthalmologists.

READING LABORATORY

Individuals wishing to improve their reading skill may spend from one to two hours in the Reading Laboratory on Tuesday and Thursday of each week. The personnel of the laboratory consists of the director and three technicians. Twenty-two assignments have been prepared, and each
student is expected to proceed from assignment to assignment as his ability permits. These assignments show the student how to improve his reading ability as he does his regular college work. There are no lectures or discussion periods. The facilities of the Psycho-Educational Clinic will be drawn upon to provide clinical service whenever the student's needs warrant.

**PLACEMENT SERVICE**

The Office of Placement and Alumni Relations is designed to give service to all graduating students and alumni of Western Michigan College of Education. The placement work of the office is divided into four main fields, (a) teacher placement for those entering the teaching profession, (b) vocational placement for those graduating from technical and vocational courses, (c) placement for graduates with the general degree, and (d) replacement of alumni who are seeking new positions.

(a) **TEACHER PLACEMENT**—Candidates for teaching positions enroll with the placement bureau early in the year in which their teaching certificate will be granted. The credentials compiled for each student include, (1) a statement of his choice of teaching fields, (2) a short autobiography of the candidate, (3) letters of recommendation from faculty members selected by the student, (4) a copy of the student's academic record, (5) a departmental recommendation, and (6) the report from the supervisor of the student's directed teaching. Recommendations from former employers are often included. Photographs of the candidates are also required.

These placement credentials are supplied to superintendents and boards of education who are searching for teachers. Direct contacts between the teacher candidate and employing officials are established.

(b) **VOCATIONAL PLACEMENT**—Graduating students in the Division of Vocational and Practical Arts Education also enroll for placement service with the Office of Placement and Alumni Relations. Credentials quite similar to those compiled for teacher candidates are assembled for each enrollee. Special emphasis is placed upon recommendations in the candidate's field of specialization. Close cooperation is maintained between the Office of Placement and Alumni Relations and the Vocational Division which counsels students generally on occupational matters. Contacts are maintained with large numbers of employers in industrial, business, technical and professional fields. These employers are advised of the quality and amount of training our vocational students are given. Names and credentials of prospective employees are furnished upon the employer's request.

(c) **PLACEMENT OF GENERAL DEGREE GRADUATES**—General Degree students who are not pursuing a vocational curriculum should also use the services of the Office of Placement and Alumni Relations. Many calls come from prospective employers that college-trained people can readily fill.

(d) **ALUMNI PLACEMENT**—Alumni of Western in any field who have qualified themselves for promotion by successful experience and by ad-
vanced study are urged to use the facilities of the Placement and Alumni Relations Office when change of position or promotion is desired. The alumnus who seeks such advancement should furnish the Office of Placement and Alumni Relations with records that show his progress, and with letters of recommendation from those who can speak with authority regarding his accomplishments and abilities. Experienced candidates in all fields are frequently in demand. The alumnus who desires to be considered when opportunity for placement arrives should keep his credentials up-to-date and currently active.

ALUMNI ORGANIZATION

A large portion of the work of the Office of Placement and Alumni Relations deals with the problem of maintaining mutually helpful communication between Western Michigan College and her graduates and ex-students.

In its brief history of less than a half century, Western Michigan College has granted degrees and/or certificates to approximately 20,000 individuals. More than 50,000 ex-students who did not take a degree or certificate have had part of their educational training at Western. This constantly growing body of alumni increases the stature and significance of Western Michigan College with every succeeding year. Her sons and daughters are to be found in many lands pursuing many walks in life. More of her alumni are engaged in teaching than any other single occupation but others have entered business, agriculture and the various professions.

Western Michigan College benefits immeasurably by the spirit of good will her alumni are building. Numbers of fine students are sent to Western's campus every year by former graduates. Several of these students are the recipients of scholarships provided by these interested and loyal alumni.

A main function of the Office of Placement and Alumni Relations is to keep as accurate mailing lists as possible of our alumni and to supply them periodically with information concerning changes and developments at the college. Another important project is to provide two annual reunion occasions upon which the members of the Alumni Association, first formed in 1906, may return to the campus to renew old friendships. These are the annual Homecoming held on the week-end of an important football game in the fall, and the annual alumni day held in the spring.

Numerous local units of Western Alumni have been formed in areas where there are enough alumni members to warrant such organization. Plans are being projected to increase the number of these considerably.

The placement service for alumni by the Office of Placement and Alumni Relations has been fully discussed in the section on "Placement Service."

TRAINING SCHOOL FACILITIES

The Training Schools of Western Michigan College of Education are unique in that they include a wide range of typical schools: a one-room rural school, a township-unit school, a large-village school, a city graded school, and a high school—thus approximating the types of schools students
may expect to work in after graduation. These schools give the student an opportunity for observation of and directed teaching in any subject and in any grade from kindergarten to the twelfth grade inclusive. Transportation to the outlying schools is afforded by the college busses.

EXTENSION DIVISION

Through the Extension Division, Western Michigan College of Education offers to capable students who are unable to be in residence opportunities to study for credit in absentia. Such credit, when combined with residence credit earned during a regular semester or a summer session, is accepted on certificate and degree-curriculum requirements. Non-credit enrollment is permissible for approved adults.

Special announcements bearing on the work of the Extension Division will be mailed to those interested if they address the Director of Extension, Western Michigan College of Education, Kalamazoo, Michigan.

RURAL DIVISION

The Division of Rural Life and Education is concerned with the professional preparation of county superintendents, supervisors, principals and superintendents of community and village schools, as well as with teachers—elementary and secondary, especially of agriculture and farm shop—preparing to work in rural areas; i.e., the open country or centers of less than 2,500 in population. Ministers, librarians, social workers, recreational and cultural leaders of music, art, and drama, etc., looking toward service in rural communities, will find guidance and helpful courses in this Division.

SPECIAL EDUCATION

There are curricula at Western Michigan College of Education in three areas of Special Education. These curricula are for the preparation of teachers of (1) mentally retarded and backward children, (2) occupational therapy, and (3) speech correction. Adequate course offerings and clinical facilities are provided in all of the curricula attempted, plus numerous other courses in collateral fields which are necessary or recommended for special-education students. The curriculum in speech correction is conducted in connection with the Speech Clinic of Western Michigan College of Education.

AVIATION TEACHER EDUCATION

Due to the importance of aviation and its effect on the social, economic and political structure of the world at large, all teachers should have some understanding of aviation. In order that prospective and in-service teachers may secure a basic knowledge of aviation and be prepared to infuse pertinent aviation materials in the courses which they expect to teach, a sequence of aviation courses has been arranged for this purpose. Those who are particularly interested in aviation may take a minor in this area. For many students, one or two aviation courses are recommended.
MILITARY SCIENCE AND TACTICS

The United States Army has established a Quartermaster Reserve Officers' Training Corps Unit at Western Michigan College of Education. Enrollment in this unit is on a voluntary basis. The course consists of four years of academic work including drill. Upon successful completion of the four year course and after attending a six-weeks summer camp, graduates are commissioned as Second Lieutenants in the Quartermaster Corps Reserve.

The course in Military Science is divided into two years of basic work and two years of advanced work. Basic students are issued a complete uniform and all required text-books. Advanced students in addition to receiving a uniform and all text-books are paid a monetary allowance in lieu of subsistence. Uniforms and text-books remain the property of the Army and must be returned at the end of each school year.

For full details and advantages, consult the Registrar.

MILITARY TRAINING

In view of the tense international situation, which in all likelihood will continue for some time, the administration of Western Michigan College strongly advises every entering freshman to consider seriously the advantages offered by the ROTC program, which prepares young men for commissions in the Army of the United States. It is the obligation of every citizen not only to serve his country but to serve in the highest capacity for which he is qualified. Almost every young man may expect to experience some form of military service, either during or after college. He may receive military training while attending Western Michigan College through its ROTC Unit without affecting his normal college curriculum. Enrollment in Western's ROTC Unit is purely voluntary and the student assumes no obligation for military service by enrolling in the first two years (Basic course). Later, if he is found qualified, he may apply for admission to the second two years (Advanced course). Upon satisfactory completion of the Advanced Course, he may be commissioned in the Organized Reserve Corps. During the period of enrollment in ROTC, most students will be deferred from Selective Service.

It is important that students wishing to avail themselves of ROTC training do so in their freshman year. The ROTC course is a four-year program and cannot be consolidated, therefore, failure to enter in the first year will deny the student the advantages of any military training while in college.
STUDENT ORGANIZATIONS AND ACTIVITIES

In order to meet adequately the social, physical, emotional, and mental needs of students, opportunity is afforded for participation in many and varied extra-curricula activities. In the main, these are student initiated and planned, with faculty counsel available when desired. This policy results in the organization of new groups and occasionally the dissolution of others. At present the following successfully functioning organizations have been chartered by the Student Activities and Charters Committee consisting of both students and faculty members:

I. GENERAL ORGANIZATIONS

STUDENT ASSOCIATION

Every student upon paying his fees becomes a member of the Student Association of Western Michigan College of Education.

This organization is governed by an executive group known as the Student Council, the personnel of which consists of the officers of the association, representatives from each class, and representatives from the major student organizations. The council conducts two student elections annually, in which class officers and class representatives, as well as Association officers, are elected.

As a responsible, self-governing body, the association unifies and inspires a fine type of spirit in the college.

MEN'S UNION

All of the men of the student body, the faculty, and the administration are members of the Men's Union. Since its organization in 1936, the Union has striven to create closer fellowship, spirit, and cooperation among the men of Western Michigan College of Education. A lounge and recreation room with ping-pong, pool tables, checkers, and chess are located in the Union Building, for the use of the men during their leisure. Dues paid at enrollment by men of the college support the Union.

WOMEN'S LEAGUE

The Women's League was organized in 1913 to look after the social welfare of the women of the college. It aims to aid new students in every possible manner and to promote closer acquaintances. Women students automatically become members through paying a fee of twenty-five cents each semester at the time of registration. The women students are represented on the Women's League Cabinet through their departmental organizations.

Among the annual social activities of the League are the Women's League Formal, the Christmas Chocolate, the June Breakfast with the Daisy Chain, and the Senior Sister activities, during which the Who's Who Party is given.
The League has as its headquarters the beautiful Davis Room in Walwood Hall. Here girls drop in for informal visiting, and many social events take place, prominent among them the weekly afternoon tea that has become a Wednesday tradition.

II. DEPARTMENTAL CLUBS

AIR TRANSPORTATION CLUB

The Air Transportation Club is organized for students who are preparing themselves for specific occupations in aviation. The purpose of the club is to promote fellowship and to provide opportunities for acquiring a better understanding of the significance of aviation in the world of today.

ART CLUB

The Art Club is a social club whose aim is to broaden the student’s art experience. The club is open to anyone interested in art. It gives the members contact with art through lectures, gallery tours, and trips to art centers. It gives them, as well, valuable contact with other students interested in this subject. The club sponsors public exhibitions of students' art work.

CHI OMEGA RHO

Chi Omega Rho is an organization of cooperative retailing and office training students. The club gives the participants an opportunity for social expression, fosters higher employment standards, promotes interest in business occupations, and helps to interpret the cooperative educational program on and off campus.

CLASSICAL CLUB

The Classical Club holds monthly meetings. The active members are students specializing in Latin; other students, particularly those specializing in art, English, or history, are cordially welcomed as associate members.

An opportunity is offered of extending acquaintance with classical subjects, such as the private institutions of the Greeks and the Romans, their religion, art, theatre, and the topography and monuments of Athens and Rome. The programs consist of games, singing, illustrated talks, and the presentation of simple plays.

COLOPHON CLUB

The Colophon Club aims to widen the professional interests of students in library work and to open new horizons of knowledge in books and related materials.
COUNTRY LIFE CLUB (NATIONAL AFFILIATION)

The Country Life Club is open to students in the Department of Rural Life and Education and all others interested in rural life. The meetings, held bi-weekly, combine educational and recreational features of great variety, most of which either bear upon rural life and education or are of such type as to be usable in rural community groups. Outside talent is sometimes used, but student participation is encouraged in order that qualities of initiative, responsibility, and leadership may be developed.

Delegates are sent annually to the convention of the American Country Life Association. Joint meetings are held occasionally with the corresponding clubs in other Michigan colleges.

DER DEUTSCHE VEREIN

Der Deutsche Verein is an organization composed of students who have had the equivalent of at least one year of college German. It affords its members the opportunity to make a more informal study of German life, history, and politics and gives them an opportunity for more general practice in the spoken language. The programs consist of lectures, usually with slides and pictures, the presentation of German plays, and German songs and games.

EARLY ELEMENTARY CLUB

Students whose interest is in the early-elementary field meet together each month for social, professional, and practical purposes. The club takes a philanthropic interest in the young children of Kalamazoo and endeavors to promote their welfare through financial contributions at the Thanksgiving and Christmas seasons. Whenever possible, the club aids in bringing to Kalamazoo speakers of note in the early-elementary field. An effort is made to have faculty and students meet together in a purely social way; to this end, parties, picnics, and banquets are features of the year's program. The club identifies itself with the Association of Childhood Education through subscription to Childhood Education and through a vital first-hand interest in the annual conventions of the larger organizations.

ECOS ESPANOLES

Students specializing in Spanish, in the main, form this group. The purposes are to increase knowledge of Spanish culture, to promote fellowship and to give an opportunity for more general practice in the spoken language.

FUTURE TEACHERS OF AMERICA

The Dr. George H. Hilliard chapter of Future Teachers of America is open to both men and women students. The objectives of the organization center in the interests of the teaching profession. Both the National Education Association and the Michigan Education Association invite the membership of the local chapter to the work of advancing education in the state and nation.
GAMMA THETA UPSILON

Students specializing in geography form this group. The purposes are to increase knowledge of geography, to promote fellowship, and to carry on group investigations.

HOME ECONOMICS CLUB

The Home Economics Club is organized for the purpose of promoting professional interest and good fellowship among the students. Membership is open to any student of the department who is interested, upon the payment of a small fee for each semester. The club is affiliated with the Michigan and the American Home Economics Associations. Meetings are held two evenings each month during the college year.

INDUSTRIAL ARTS ASSOCIATION

The Industrial Arts Association is an outgrowth of the Industrial Arts Club, organized in 1917. The purpose of this group is to offer opportunity for individual expression and participation in educational programs of interest to the Department of Industrial Arts Education. Activities include social functions, discussion groups, trips, and educational gatherings.

INDUSTRIAL TECHNICAL SOCIETY

This organization was founded on the campus for the purpose of promoting the educational and social welfare, and aiding in the vocational preparation of its members. It is open to all students enrolled in the industrial technical curricula. Meetings are held bi-weekly during the school year.

INTERNATIONAL RELATIONS CLUB

This club was established under the auspices of the Carnegie Foundation for International Peace and is affiliated with similar clubs throughout the world. It is composed of students who are interested in the study of national and international affairs. It aims to develop in its members a better understanding of foreign peoples and their problems. The monthly meetings are devoted to lectures, discussions, or social diversions.

LATER ELEMENTARY CLUB

The Later Elementary Club is composed of students who are interested in the later-elementary field. Social or professional meetings are held each month.

LAW CLUB

The Law Club of Western is organized for the purpose of giving those students interested in law an insight into various fields of law and allied professions. The membership is open to anyone, man or woman, interested
in law and the fellowship of others with parallel interests. At the bi-weekly meetings a short business meeting is held after which a speaker, selected with the help of the Kalamazoo Bar Association, or a discussion by the members, forms the program. A library is maintained of catalogs of law schools and all aid is given by members towards helping new students both academically and socially.

LE CERCLE FRANCAIS

Le Cercle Francais is designed to create and extend interest in the life and literature of the French people, to encourage conversational French, and to give opportunities for activities not possible in the classroom. All students of French, except first-year students, are eligible. Meetings are held once a month.

MODERN DANCE CLUB

The purpose of the Dance Club is to promote interest in and appreciation of the modern dance. It is open to any student who has attended a specified number of meetings and has shown to the group some ability in rhythmic movement and dance composition. Initiation takes place during the winter.

NURSES CLUB

The purpose of the Nurses Club is to give the members a chance to discuss singular and group problems, and to acquaint each student with the activities and opportunities of nursing. Any pre-nurse or graduate nurse may become a member. The monthly meetings are devoted to discussion, planning of lectures and tours, or social diversion.

OCCUPATIONAL THERAPY CLUB

The Occupational Therapy Club is organized with a twofold purpose: to present programs and discussions of professional value in the field of occupational therapy and to promote better acquaintance among the students. Anyone who has been admitted to the Department of Occupational Therapy is eligible for membership. Several meetings a year will be open to freshmen who are prospective students, and to others in related studies.

PHILOSOPHICAL FORUM

The Philosophical Forum provides opportunity to discuss philosophical problems in an informal atmosphere and to build up a fellowship of those students who want to find some kind of world view.

PHI MU ALPHA SINFONIA

Phi Mu Alpha Sinfonia is a music fraternity to advance the cause of music in America, to foster the mutual welfare and brotherhood of students
of music, to develop the truest fraternal spirit among its members, to encourage loyalty to the Alma Mater, and to give recognition to outstanding worth in musical activity.

**PRE-MEDICAL CLUB**

会员 in this club is open to students who are interested in the medical profession and in the field of dentistry. The purpose of the club is both social and professional. Any persons interested are cordially invited to attend the meetings.

**SCIENCE CLUB**

The Student Science Club exists to instill in its members a scientific attitude and a spirit of research. Membership is limited to those students who have elected a year of science or mathematics and maintain high scholarship (B average) in those branches. The members are classified into groups according to the fields of science or mathematics in which their individual major interests lie. The meetings are bi-weekly. One meeting is devoted to a program given by some one of the student groups. The alternate meeting is given over to lectures by faculty members and speakers from outside the school. The programs are open to all students of the college.

**SOCIOLoGY CLUB**

The Sociology Club aims to stimulate an interest in and a study of concepts, theories, problems, and research in the field of sociology. It aims also to support projects that promote greater understanding of social problems among the student body at large. Its concern with fellowship is important but secondary. Its membership is open to all students and faculty with major or minor concentrations in sociology. The monthly meetings are devoted to lectures, forum discussions, and social events.

**SPEECH CLUB**

The Speech Club is an organization which promotes better speech for use in college and community activities. It also gives opportunity for the development of individual leadership.

**STRATFORD CLUB**

This club provides a medium through which the students and faculty members may come in contact with each other in order to discuss the many phases of the study of English.

**STUDENT AFFILIATE CHAPTER of the AMERICAN CHEMICAL SOCIETY**

This organization affords an opportunity for students of chemistry and chemical engineering to become better acquainted, to secure the intellectual
stimulation that arises from professional association, and to instill a professional pride in chemistry.

W CLUB

This organization is composed of men who have won an official letter in one of the major sports. Membership is by election. The objectives of the club are: To promote the interest of good citizenship, cleanliness, and fair play in athletics; to raise the general standard of athletics by means of friendly competition in inter-collegiate meetings, to develop and maintain a better standard of scholarship among athletes, and to help stimulate a high standard of sportsmanship both on and off the campus.

WESTERN MICHIGAN PLAYERS

The purpose of this organization is the promotion of appreciation of the art of the theatre among its members and among the members of the student body. Programs for entertainment and study are presented at each regular meeting. The public presentation of two long plays and several one-act plays during the year gives practical experience in acting, staging, and management. Membership is limited and is attained through try-outs held in the first semester.

III. SPECIAL INTEREST GROUPS

CAMERA CLUB

The Camera Club is an organization of students who have joined together in a cooperative effort to increase their knowledge and skill in photography.

FOREIGN STUDENTS' CLUB

The Foreign Students' Club is composed of students whose homes are outside of continental United States. The emphasis is largely social, but many meetings are devoted to a discussion of the conditions and customs in the countries which are represented. Guests are often invited to attend.

OMEGA CHI GAMMA

Omega Chi Gamma is an organization of women not living in dormitories. Problems peculiar to their situation are dealt with and programs of sociability are fostered.

OUTING CLUB

Students who enjoy hiking have formed themselves into the Outing Club.
SKY BRONCOS

This organization provides opportunity for actual flying experience at a minimum cost to its members and for studying all subjects relating to aviation, particularly those courses prescribed by the CAA as essential for a pilot's certificate.

SQUARE AND COMPASS CLUB

The aim and purpose of this organization is to provide a medium for the promotion of friendship and good fellowship among all men, but especially Western's Masons.

SWIMMING CLUB

The Swimming Club is a girls' organization which provides opportunity for those who are interested in participating in water activities.

WESTERN WIVES CLUB

The Western Wives Club promotes friendship and social activity among the wives of the students. It also provides an opportunity for Western wives to share in the experiences of college life.

IV. HONORARY SOCIETIES

ARISTA

Arista is an honorary society for senior women who are outstanding in leadership, scholarship, and service. Recognition for those junior women chosen is given at the annual June Breakfast.

BETA IOTA CHAPTER OF KAPPA DELTA PI

Beta Iota Chapter of Kappa Delta Pi is a national honor society in education, installed on the campus in 1928. It seeks to encourage high professional, intellectual, and personal standards. Membership is by invitation extended by the chapter to juniors and seniors ranking above the upper quartile point in scholarship, who have manifested leadership attributes and a continuing interest in education.

BETA ETA CHAPTER OF SIGMA ALPHA IOTA

Sigma Alpha Iota is a national honor fraternity for women in the field of music. Its objectives are to uphold the highest ideals of music education, to raise the standards of productive musical work among the women students, to further the development of music in America and to promote a stronger bond of musical interest and understanding between foreign countries and America, to give inspiration and material aid to its members, to organize the social life of its members as a contributing factor to
their educational program, to cooperate wholeheartedly with the ideals and aims of the Alma Mater, and to adhere to the highest standards of American citizenship and democracy.

**Kappa Rho Sigma**

Kappa Rho Sigma is composed of students who have shown marked excellence in the fields of mathematics and science. Election is by vote of members of the faculties of these departments.

**Pi Gamma Mu**

Pi Gamma Mu is a national honor fraternity in the fields of economics, government, geography, history, and sociology.

To be eligible for membership a student must be a junior or senior in full standing with a scholarship of at least a B average and must have completed 27 semester hours in the above fields.

Election is by vote of the members of the faculties of the mentioned fields.

**Psi Chi**

The Psychology Club was reorganized in the fall of 1947. The Club has monthly meetings which usually follow a cafeteria supper. Membership is open to all students having certain scholastic requirements and an interest in psychology, as well as to faculty members. The purpose of the organization is to become acquainted with and to discuss current theories, concepts, and literature in the field of psychology.

**Sigma Tau Chi**

Sigma Tau Chi is a national honorary fraternity for students in the Department of Business Education. Western's chapter, Beta, is the first organized in Michigan and the second in the United States.

The objectives of this club are to promote scholarship, to coordinate college training with actual business experiences, to facilitate favorable placement for members both in the business field and in the teaching field, and to promote fellowship and leadership among the students.

Members are elected from students in the Business Education Department who maintain high scholarship.

**Tau Kappa Alpha**

Tau Kappa Alpha is a national honorary forensic fraternity and elects its membership from the men and women whose work in intercollegiate public-speaking contests warrants such recognition.
V. FRATERNITIES AND SORORITIES

Beta Beta Beta

The Beta Beta Beta Fraternity is a local fraternity. Although the organization is comparatively young, it has gained considerable stature on campus. The main aims of the fraternity are to gain the social graces, and to promote superior scholarship among the members. The requirements are based on scholarship, desire to belong, and a willingness to work.

Delta Sigma Phi

Delta Sigma Phi is a men’s national social fraternity. The primary aim of the organization is to promote sustained interest and active participation in worthwhile college activities. Membership is based upon scholarship, personality, and leadership.

Social life is abundant but well directed with the innovation of our fraternity house. It is our goal that all members may be well-rounded gentlemen, scholastically as well as socially.

Delta Zeta

Gamma Pi chapter of Delta Zeta was the first national social sorority on Western’s campus. Gamma Pi was inaugurated on the campus at the end of the Fall semester in 1949, then went national, Delta Zeta, in October, 1950.

The objectives of this sorority are to unite in bonds of sincere and lasting friendship, to promote interest in knowledge, to promote moral and social culture, leadership, and character.

Membership is based upon scholastic standing, interest in school activities, and personality.

Kappa Alpha Psi

The Gamma Beta chapter of Kappa Alpha Psi was inaugurated on Western’s Campus at the start of the second semester in January, 1948. With a fundamental purpose of achievement, Kappa Alpha Psi strives to enrich the college experience of its members, and to create a feeling of fellowship and sense of accomplishment among its members.

Kappa Sigma Kappa

This social international fraternity is represented in the United States, England, Australia, and Canada. It attempts to hold every brother manfully to his task in the attainment of scholarship and encourages enduring friendships.

Pi Kappa Rho

Pi Kappa Rho, a women’s organization on the campus, has for its aim discussion, leadership, and friendly association. High scholarship and an active interest in campus life are among the requirements for membership.
The Senate is one of the oldest women’s organizations on the campus. It has for its purpose to develop leadership, to increase interest in school activities, and to give a greater appreciation of the fine arts. High scholastic standing and interest in school activities are requirements for its membership.

Sigma Alpha Delta

The Beta Chapter of Sigma Alpha Delta was inaugurated at Western in February, 1950, and is the newest national social fraternity on campus. Sigma Alpha Delta has as its object the intellectual, physical, social, and spiritual advancement of its members.

Sigma Kappa

The Gamma Beta chapter of Sigma Kappa is a Women’s international sorority. Formerly it was founded in 1921 as the local sorority, Academy. Its aim is to promote interest in scholarship, leadership, character, and personality, and to give more social opportunities to its members. Members are elected by the sorority.

Sigma Tau Gamma

Sigma Tau Gamma is a nationally affiliated fraternity, Chi chapter, and is one of the oldest fraternities on the campus. It developed originally from a debating society, and boasts among its alumni, members among the faculty of Western. This fraternity has always maintained student leadership in many organizations, and has been active in all campus affairs. At the start of this semester, it inaugurated a War Memorial Loan Fund for men above freshman classification.

Theta Chi Delta

Emerging from a background of many social and scholastic achievements, Theta Chi is reorganized to full strength after its wartime inactivity. Always known as a progressive fraternity, Theta Chi has had ten Student Council Presidents and is now going on to bigger and better things for Western’s campus.

The purposes of Theta Chi Delta are to develop character, encourage high scholastic achievement and maintain a spirit of fellowship.

Theta Pi Alpha

The cultivation of friendship and the spirit of cooperation among its members and with members of other organizations is the prime purpose of Theta Pi Alpha. Its secondary purpose is the study of contemporary literature and an appreciation of all of the fine arts. Candidates for membership must possess scholarship, leadership, and individuality.
VI. RELIGIOUS ORGANIZATIONS

CANTERBURY CLUB

The Canterbury Club is an organization of Episcopal students which meets regularly at St. Luke's Episcopal Church, Kalamazoo, in order to be associated in worship, education, and social activities. It is affiliated with the national organization of Episcopal students.

GAMMA DELTA

Alpha Psi chapter of Gamma Delta is an organization of Lutheran students united with many other chapters of other campuses in fostering fellowship and varied educational, religious, and social programs. Regular Sunday evening supper meetings are held in the parish house of Zion Lutheran Church, Kalamazoo.

HILLEL COUNSELORSHIP

Students of the Jewish faith in the main comprise this group. Regular meetings are held in which the ideals and philosophy of this faith group are explored and studied. Sociability too is fostered.

INTER-CHURCH STUDENT FELLOWSHIP

The Inter-Church Student Fellowship is an inter-denominational student group sponsored by four of Kalamazoo's churches: The First Methodist Church, the First Presbyterian Church, the First Baptist Church, and the First Congregational Church. Programs are educational and social, and include worship services on Sunday evenings during the supper hours. Meetings are held in the parish houses of the sponsoring churches.

INTER-VARSITY CHRISTIAN FELLOWSHIP

The purpose of this organization is to afford all students the opportunity of fellowship with others who adhere to the conservative Christian faith. The specific aims are to lead students to a personal faith in Jesus Christ and through Bible study, prayer, and social activities help them to grow into fruitful Christian lives.

NEWMAN CLUB

The Newman Club consists of Catholic students who meet regularly at St. Augustine parish house, Kalamazoo, for varied programs. It is affiliated with the National Catholic student group known as Newman clubs.

RELIGIOUS COUNCIL

Believing that the life of the spirit is an integral part of the life of man and that the college has an obligation to facilitate the participation of
students in activities of their respective faiths which make for the development of the whole man, the Religious Council functions as a coordinating agency to that end.

Y.W.C.A.

The Y.W.C.A. exists for the purpose of providing a fellowship to which every girl on the campus is eligible. It aims to help its members acquire a religious balance adequate to face the life problems that confront students and to help them apply their religious beliefs to world and community problems.

STUDENT ACTIVITIES

MUSIC

The Band meets twice a week for practice and furnishes music at athletic and other events. Students with a reasonable knowledge of band instruments are eligible to membership. The Orchestra meets twice a week throughout the year and gives concerts at various times. Any student with a reasonable degree of proficiency in the playing of some orchestral instrument is eligible for membership. The opportunity for ensemble work under capable direction is one of which all qualified students should take advantage.

The Glee clubs take an important part in the musical life of the college. Two are maintained: The Men's Glee Club and the Women's Glee Club. Two choirs are maintained: the College Choir and the Auxiliary Choir. The organizations aim to develop and perpetuate a high standard of choral ensemble singing. Each year they make a number of appearances on the campus and before high schools and other organizations. The Auxiliary Choir is designed for students of less choral experience. Many from this organization find their way into the Men's and Women's Glee Clubs and the College Choir.

DEBATING

The career of Western Michigan College of Education in intercollegiate debating, begun in 1921-1922, has been increasingly successful. A large number of students are interested in forensic work, and separate squads for men and women are formed every year and trained under faculty direction. From these squads, teams are chosen to represent the college in discussion and debate contests with teams of other colleges in Michigan and neighboring states. On several occasions Western's teams have debated visiting teams from foreign countries.

Freshmen are eligible for intercollegiate debate.

INTERCOLLEGIATE ATHLETICS AND PHYSICAL EDUCATION

The Department of Physical Education and Athletics has four major programs, athletics, courses for majors and minors in the Department of Physical Education, general physical education for all students who do not
participate in athletics and are neither majors nor minors in the department, and intramural athletics which are open to all.

The physical education and athletic program is considered an integral part of the educational program and is organized on that basis. All of the major coaches in athletics teach both classroom and activities classes in physical education in addition to their coaching activity.

Western Michigan College for many years has been very successful in all phases of intercollegiate athletics. All men students are encouraged and given an opportunity to become candidates for the major athletic teams. The College is represented by teams in football, baseball, basketball, indoor and outdoor track, cross country, tennis, and golf. Representative teams from all parts of the country are scheduled in these sports with the emphasis on mid-western teams. A balanced schedule of contests in all sports is maintained.

Students majoring in the department are prepared in the four fields of health, physical education, recreation, and coaching. Content of courses is reviewed and rearranged to care for the changing demands of placement in the field. As an example, the present demand for recreational leaders is being met by increased attention to organization and problems in recreation.

All men students must complete four semester hours of physical education beginning with the first semester of residence unless excused officially from participation. Requirements in general physical education for veterans of military service are waived because of military service. Fundamentals and rules in eight sports are taught in season in the general physical education classes, followed by participation. Each student is encouraged to participate in some form of physical education beyond the requirements of his particular curriculum. The student selects his own activity after requirements have been satisfied, except in cases where an adjusted program is recommended by the school physician.

An extensive intramural plan provides opportunity for students to engage in competitive sports as members of clubs, fraternities, or independent teams. Sports offered for men include basketball, bowling, hand ball, tennis, volley ball, indoor baseball, outdoor baseball, track, archery, horseshoe pitching, golf, and swimming. Any sport in which a sufficient number of students indicate an interest and for which facilities are available may be set up in the intramural schedule.

STUDENT PUBLICATIONS

The Brown and Gold is the college yearbook, written, edited, and published by the students of the college under the guidance of the Publications Committee. The editor-in-chief and business manager are appointed by the president of the Student Council, with the approval of the Student Council, the Publications Committee, and the faculty Committee on Student Activities.

The Western Herald is a weekly newspaper published by the students of the college under the guidance of the Publications Committee, which is made up of both students and faculty. The editor-in-chief and the business
manager are students appointed by the president of the Student Council, with the approval of the Student Council, the Publications Committee, and the faculty Committee on Student Activities. An interest in journalism and a willingness to work are the only prerequisites for staff members, who conform to the eligibility rules for college activities.

The Student Directory is an annual booklet published by the Student Council. It contains the addresses and telephone numbers of all students and faculty members, and includes information concerning the various student activities.

The Bronco Book is published annually by the Student Council for distribution at the opening of the fall semester among freshmen and transfer students. It contains information concerning the history of the college, the campus, its organization, and activities.

REGULATIONS GOVERNING STUDENT PARTICIPATION

I. General Policies Governing Participation

Western Michigan College fosters the following ideas as basic in student participation in extra-curricular activities:

A. Any regularly enrolled student is eligible for membership in any organization he wishes to join. (The only exception to this general principle is that raised by the fact that some organizations recruit membership by invitation.)

B. Because college students may be expected to be mature enough to exercise judgment regarding the extent to which they should join organizations, the Committee on Eligibility for Student Participation in Extra-curricula Activities does not place negative restraints upon the individual except for positions of leadership.

II. Specific Regulations Governing Positions of Leadership

A. No student may hold simultaneously more than one presidency or one salaried office in student organizations. No student may hold any other chief offices in more than two organizations. (Total Chief Offices—Two.)

B. Any officer or standing committee chairman must be a regularly enrolled student carrying 12 or more semester hours of class work for college credit.

C. No student whose academic average is less than “C” for the previous regular semester may hold any office or standing committee chairmanship. This includes all chief offices such as President, Vice-president, Treasurer, Editor, Business Manager, General Chairman, and chairman of standing committees.

D. No freshman and no transfer student with advanced standing (at least 12 semester hours) whose incoming academic transcript carries an average of less than “B” may hold any office or standing committee chairmanship during his first semester in residence.

E. No person on probation or on trial is eligible for election to a chief office during his first semester.
F. Credit-linked activities are excluded from these regulations.
G. Persons in special positions of leadership (Homecoming Queen, etc.) must conform to eligibility regulations.

III. Procedure for Checking Eligibility for Participation
A. The co-chairman of the Joint Student-Faculty Committee on Eligibility for Participation in Extra-curricular Activities, with the cooperation of the presidents and other heads of all student organizations, shall publicize fully at the beginning of each semester all rules pertaining to student participation.
B. Student members and student leaders of organizations are held responsible for knowing the rules for participation.
C. The presidents or other heads of student organizations shall be responsible for handing to a co-chairman of the Joint Student-Faculty Committee, on such date or dates to be designated each semester by the Committee, the names of officers and chairmen of standing committees and general chairmen in their respective organizations.
D. Checking the eligibility of persons participating in activities will be done within the rules set forth above in such manner as will be determined by the Joint Student-Faculty Committee. All names of persons holding chief positions as defined above must be filed within three days after their appointment or election. In cases of infraction of the regulations, the student concerned as well as the head officer and adviser of the organization will be informed. If the situation is not promptly corrected, the Joint Student-Faculty Committee may recommend to the Dean of Administration the suspension of the activities of the organization until such time as the situation is remedied.

IV. Exceptions and Appeals
A. In cases where an organization and/or a student feels justified in requesting an exception to the general regulations outlined above, such petition may be made in person at a meeting of the Joint Student-Faculty Committee.
B. Appeals arising from action of the Committee, both in regard to permitting certain participation and to deny certain participation, may be brought directly to the Dean of Administration, whose decision on such appeal shall be regarded as final.
C. Nothing in the above regulations shall be construed to deny any organization the right to set higher standards of membership than those herein described.
D. Questions of interpretation of the regulations as stated shall be referred to the Joint Student-Faculty Committee on Eligibility for Student Participation in Extra-curricular Activities. An appeal may be taken to the Dean of Administration.
V. Enforcement and Operation

A. The Committee on Eligibility for Student Participation in Extra-curricular Activities will have the responsibility of coordinating the general policies and specific requirements set up in the plan.

B. The committee is composed of an equal number of students and faculty members, serving staggered terms of two years, appointed by the Dean of Administration.

C. The co-chairmen shall have the following duties:

1. Taking the initiative in seeing to it that proper filing of names occurs within three days after election or appointment of officers for positions described above.

2. Reporting infractions of the regulations to the standing Committee on Eligibility for Participation in Extra-curricular Activities.

3. Arranging to set up in cooperation with the office of the Dean of Administration the necessary machinery to handle checking of eligibility for participation.

4. In cases of persistent lack of cooperation in compliance with the regulations, reporting to the Dean of Administration so that proper steps may be taken to suspend the individuals and/or activities of the organization.

Note.—The plan above was designed to go into effect at the opening of the Fall Semester, 1947.
STUDENT AWARDS AND SCHOLARSHIPS

AWARDS AND PRIZES

The following awards and prizes are available:

INSTITUTIONAL

Athletic Medal ........................................ A prize to the outstanding athlete.
The award is based on scholarship and participation.

DEPARTMENTAL

Biology .................................................. The Harold Cook Memorial Prize
An annual prize of $20.00 is given at the time of Commencement in June to the student judged most proficient during that year in the subjects in which the late Dr. Cook (Department of Biology) was most interested. The award is made by the Committee on Scholarship, in cooperation with the president of the Faculty Science Club.

Education ............................................. Election to membership in Kappa Delta Pi

Industrial Arts Education ......................... A plaque to the outstanding student in that department.

Physics .................................................. The Physics Prize
An annual prize of $50.00 is given at the Honors Convocation to the student judged most proficient during the year in the field of physics. The conditions under which the prize is awarded and the selection of the recipient of the prize shall rest in the Department of Physics. This prize is made possible through a gift of $1000 by Josephine C. Rood for the use of the Department of Physics.

Languages (French) .................................... The French Prize
An annual prize given by the French Embassy (Services du Conseiller Culturel) to the outstanding student of French in the graduating class.

Science ................................................. Election to membership in Kappa Rho Sigma

Speech (Debate) ....................................... Election to membership in Tau Kappa Alpha

ORGANIZATIONS

Kappa Delta Pi .......................................... A prize to the outstanding student

Men’s Union ........................................ A prize to the outstanding man student

Pi Kappa Rho ........................................ Scholarship cup to the outstanding women’s organization Awarded annually by the Committee on Scholarship.

Theta Chi Delta ...................................... Scholarship cup to the outstanding men’s organization Awarded annually by the Committee on Scholarship.

“W” Club ............................................... Election to Membership

Women’s League ...................................... A prize to the outstanding woman student
GRADUATE SCHOLARSHIPS AND FELLOWSHIPS

Every capable student who is looking forward to administrative, supervisory, or other special types of educational or professional work should be aware of the fact that graduate study is essential for adequate preparation. Western Michigan College of Education not only encourages its best students to continue in graduate work, but also recommends outstanding students for graduate scholarships, fellowships and assistantships in the leading universities of the country. Although it is not possible to promise every applicant that he will be able to secure such a fellowship or scholarship, it is true that a student who has made an excellent record and shows promise of an exceptional educational future will have the support of the institution in attempting to secure such assistance. In this connection the particular interests of the student need not lie in the professional field of specialized education, but may concern any field of academic or vocational study in which he has had ample opportunity to demonstrate his ability in undergraduate work.

The Graduate School of the University of Michigan grants to one of our graduates each year a fellowship carrying a stipend of $750. The student receiving this fellowship is recommended by Western Michigan College of Education as having met the qualifications described in the preceding paragraph. Graduate fellowships and scholarships are available at many other leading universities and in many different fields of study. Applicants for scholarships recommended by Western Michigan College of Education will receive consideration by the Scholarship Councils of such universities. Interested students should confer with the Committee on Scholarships, of which the registrar is chairman.

STATE BOARD OF EDUCATION SCHOLARSHIPS

At its meeting on March 23, 1948, the Michigan State Board of Education approved a plan by which approximately 1,000 scholarships will be granted annually to high school graduates in Michigan who wish to enter the profession of teaching. These scholarships will be handled at Western by the Dean of Administration. The scholarship involves the waiving of state tuition. Although the scholarships will be available for students wishing to enter any branch of teaching, the emphasis will be placed upon those interested in teaching in the elementary and rural schools. It is anticipated also that a reasonable portion of these scholarships will be granted to students at the beginning of the junior year in college. The scholarships will be good for two years, provided the student maintains satisfactory records in college.

For more complete details and application blanks, write to the Dean of Administration, Western Michigan College of Education, Kalamazoo, Michigan.
UNDERGRADUATE SCHOLARSHIPS

The Alpha Beta Epsilon Scholarship. Since 1938 the Alpha Beta Epsilon alumnae sorority of Western Michigan College of Education has given a scholarship to worthy women students. The scholarship fully covers all tuition and fees for each semester. A student who receives a scholarship must fill the requirements set by the chapter that is sponsoring her. The one common purpose in awarding this scholarship is to help a worthy woman student who would be unable to attend college without financial aid.

The Credit Bureau of Kalamazoo Honorary Scholarship. The Credit Bureau of Kalamazoo offers one scholarship of $100 to any young man or woman who has successfully completed three semesters in the Retail Curriculum. He must have an excellent scholastic ability, strong character, and have a real interest in credit sales management. The fund is administered by the Registrar, the manager of the Credit Bureau of Kalamazoo, and the Supervising Coordinator of Distributive Education.

The Emelia Goldsworthy Clark Art Fund was established in 1920 by Mrs. Emelia Goldsworthy Clark, former head of the Department of Art at Western Michigan College of Education. The fund, as long as money is available, is intended to provide tuition for a year for a gifted Kalamazoo High School or State High School art student. Administration of this fund is in charge of the Art Department.

The Ernest Burnham Rural Life Fund. Commemorating the twenty-fifth anniversary of Dr. Ernest Burnham's work at Western Michigan College of Education as the pioneer in rural education in teachers colleges in America, his students, colleagues, and friends established the Burnham Rural Life Fund. A part of this fund has been used to supplement the collection of books on rural life and education in the college library; the remainder has been invested to yield an annual income which may be used for the purchase of additional books, for scholarships in the Department of Rural Life and Education, or for such services in behalf of rural life as the committee in charge shall consider of most value.

The Exchange Club Memorial Scholarships. These scholarships, one for a man and one for a woman, are sponsored and administered by the Kalamazoo Exchange Club in memory of former faculty members of the Exchange Club. They are full-tuition scholarships and are limited to students from Kalamazoo County.

The French Student Scholarship Fund. This fund was started in 1944 by Miss Marion Tamin in tribute to the students of French who have made the supreme sacrifice on the battlefields of the world, insuring thus the liberation of France. It is hoped that it will help to renew an old tradition of Western Michigan College of Education in bringing a French student to the campus every year.

The Gilmore Brothers Department Store Honorary Scholarship. The Gilmore Brothers Department Store offers two scholarships of $100 each per
year to any young man or woman of the freshman or sophomore class who is interested in the Cooperative Retailing Course. He must be a graduate of one of the high schools in Kalamazoo County and not the recipient of another scholarship. The fund is administered by the registrar and the head of the Department of Business Education.

The Honorary Scholarships. Western Michigan College of Education annually grants a limited number of new scholarships to deserving high school graduates, as well as renewals to students in residence. Scholarships are granted upon evidence of superior scholastic ability, strong character, and pleasing personality. The scholarships, awarded annually, cover the cost of a year's tuition and a specified portion of fees at Western. Scholarships granted may be renewed three times, provided students continue to meet the conditions indicated. The college reserves the right to withdraw offers of scholarships for cause.

The Judson A. Hyames Memorial Scholarship Fund. Effective September 1, 1951 and until the principal sum and accumulated interest is exhausted, a scholarship grant covering one year's tuition costs and fees will be made annually to the student chosen by the Chairman of the Committee on Student Scholarships upon recommendation by the Head of the Department of Physical Education and Athletics. The Grant is payable semi-annually in equal installments. Only men majoring in physical education of Junior or Senior status are eligible. Evidence of need and of proved scholastic ability is considered. Grants are made for one year: they are not renewable automatically.

The Katherine Mulry Johnson Scholarships were founded in 1926 by Mrs. Johnson, for some time supervisor of the sixth grade in the Training School and later a member of the Department of History of Western Michigan College of Education, in honor of her mother. These scholarships are awarded annually by a committee from the Department of History to two upper-class women students of superior ability who plan to become teachers of history.

The Librarianship Scholarships. Ten special scholarships are being offered to qualified graduates in the June classes of the Junior Colleges of Michigan. The scholarships will cover the cost of tuition and a portion of the students' fees. They will be available only to candidates who qualify for a major in librarianship as evidenced by academic record, health, and personality. Candidates must have maintained a B average or better during their first two years of college work. Written application must be made on official blanks to the Dean of Administration or to the Department of Librarianship by April 1. A personal interview will be required. Appointments for interviews should be arranged with the Director of the Department before May 20. These scholarships are valid for one college year of two semesters, and are renewable for a second year, provided the students' records prove satisfactory.

The Music Scholarships. From special funds available to the college, Western Michigan College of Education offers the following scholarships, which are available each year: four in voice, four in piano, four in stringed
instruments, two in brass instruments, and two in woodwind instruments. These scholarships, which cover the cost of the student's comprehensive tuition fee, are available only to candidates for the Bachelor of Music degree. The need for the assistance of such a scholarship must be established. These applied music scholarships are awarded on a competitive basis, the applicants performing before the Committee on Music Scholarships.

Ten scholarships in band, ten in orchestra, and ten in choir are also offered. These ensemble scholarships cover the cost of the student's regular tuition and a portion of the student's activity fees. No student may hold more than one scholarship at one time. All scholarships are for one year's duration, but may be renewed upon re-examination.

Address all applications for scholarships on regular blanks to the registrar or to the head of the Department of Music, not later than April first, preceding the September in which the student wishes to enroll.

**Occupational Therapy Scholarships.** "Loans and grants have been provided by the Kellogg and Kalamazoo Foundations for the use of Occupational Therapy students. Loans up to $300 are available to these students at any time after the successful completion of their first year at Western Michigan College. The purpose of the scholarships is to help defray the cost of clinical training when necessary. They are available only to those who have completed their first year in Occupational Therapy, which is their second year in college."

The **Paul H. Todd Scholarship.** Through the generosity of Paul H. Todd there becomes available annually $200 for a scholarship "to help a needy, deserving student or students" during the college fiscal year. Applications for consideration for the award of this scholarship should reach the registrar by April 1. The scholarship grant becomes effective annually as of the beginning of the first semester.

The **Robert Graner Memorial Scholarship.** The scholarship was established by Mrs. Mary A. Graner of Bangor, Michigan, in the principal sum of $500 as a memorial to her son Lieut. Robert Emmert Graner who lost his life in the service of his country in the vicinity of Hainan Island, China, on May 19, 1945. Grants from this fund may be made to worthy students with the first consideration given to students in the aviation program. Application should be made to the Dean of Administration.

The **Rural Elementary Scholarships.** Scholarships covering tuition charges for the two years are available for students who enroll in the Rural Elementary Curriculum. Applications for these State Board of Education scholarships should be addressed to the local county superintendent or commissioner of schools or to Western's director of the Department of Rural Life and Education.

The **Wallace B. Marshall Memorial Fund** established in 1944 through a gift by his wife, Mrs. Blanche Marshall, provides an annual stipend of $100 for assistance to a needy student of excellent character, definite purpose,
and potential qualities of leadership. The fund was established in the memory of Lieutenant Wallace B. Marshall, United States Army Air Pilot, a graduate of Western Michigan College of Education, who lost his life in the defense of his country. The fund is administered by a committee under the chairmanship of the Dean of Men.

The W. M. C. E. Competitive Scholarship Fund. Through funds made available by the Campus Store, Western Michigan College of Education offers annually three scholarships on a competitive basis. To the prospective freshman scoring highest on a series of tests administered each spring, an award of $175 is made; to the one scoring second highest, an award of $125; to the one scoring third highest, an award of $100. Each award is renewed automatically annually during a period of three years, provided the student's record proves satisfactory.
Students may be admitted at the opening of any semester or summer session.

GENERAL QUALIFICATIONS

The college expects that those who are permitted to enter will have shown intellectual capacity, and will be able to apply themselves to their studies effectively and to work systematically. While definite evidence of intellectual capacity is indispensable, the college believes that, after such evidence is established, positive qualities of character and personality should operate as determining factors in admission. Each application will be carefully reviewed and much weight will be attached to character, personality, previous record, and promise, as well as to scholarly attainments. Satisfactory showing in scholarship alone is not of itself sufficient to guarantee admission. The college will arrange for personal interviews whenever it is deemed desirable.

Attendance at Western Michigan College of Education is considered a privilege and not a right. In order to safeguard its ideals of scholarship, character and personality, the college reserves the right, and the student concedes to the college the right, to require the withdrawal of any student at any time for any reason deemed sufficient to the college.

CREDENTIALS SHOULD BE SENT IN ADVANCE

A prospective student should confer with his high-school principal regarding the filling out of an “Application for Admission” blank.

All students desiring admission to the college are urged to submit their problems of eligibility for entrance to the registrar, who will act upon each case individually.

High-school credits should be sent to the registrar in advance, that there may be no delay when the student presents himself for registration and enrollment. A student who has not had a copy of his high-school credits filed in advance should present it at the time of registration.

ENTRANCE FROM HIGH SCHOOLS

Approved by the Michigan State Board of Education, October 2, 1942, and revised subsequently.

1. Admission on Certificate

A graduate of a four-year high school accredited by the University of Michigan will be admitted to Western Michigan College of Education provided he is recommended* by the principal of the high school and meets conditions indicated below.

*It is expected that the principal will recommend not all graduates, but only those whose character, scholarship interests and attainments, seriousness of purpose, and intellectual promise are so clearly superior that the school is willing to stand sponsor for their success. The grade required for recommendation should be distinctly higher than that for graduation.
I. Prescribed Preparatory Work

A minimum of fifteen units is required for admission. Among these must be included certain major and minor sequences from the seven groups of subjects listed below, a major sequence consisting of three or more units, a minor sequence consisting of two or two and one-half units.

A minimum of four sequences must be presented, which must include a major sequence from Group A and at least one other major sequence. Not more than one of these required sequences will be accepted from any one group except Group B. Sequences may be presented from two languages.

A. English
   A major sequence of three or more units
      Speech, Journalism, Dramatics

B. Foreign Language Group
   A major sequence consists of three or more units of a single language; a minor sequence consists of two or two and one-half units of a single language. The foreign languages acceptable for a sequence are Greek, Latin, French, German, Spanish and any other modern language.

C. Mathematics—Physics Group
   A minor sequence in this group must include 1 unit of Algebra and 1 unit of Geometry. A major sequence is formed by adding to this minor sequence one or more from the following:
      Advanced Algebra ½ or 1 unit, Solid Geometry ½ unit,
      Trigonometry ½ unit, ¹Physics 1 unit.
      General Mathematics, Senior Mathematics

D. Science Group
   Any two units selected from the following constitute a minor sequence and any three or more units constitute a major sequence.
      ¹Physics 1 unit
      Chemistry 1 unit
      Botany 1 unit
      Algebra 1 unit, Zoology 1 unit
      Biology (Botany ½ unit and Zoology ½ unit) 1 unit
   If biology is counted in these sequences, neither botany nor zoology can be counted.
      Health Education
      Geography (may be counted in Group E)
      General Science

E. Social Studies Group
   A total of two or two and one-half units selected from the following constitutes a minor sequence; a total of three or more units constitutes a major sequence.
      Ancient History 1 unit
      ²European History 1, 1½ units, or 2 units

¹ Physics may not be counted in both Groups C and D.
² English History may be included under European History.
American History ½ or 1 unit
American Government ½ unit
Civics—Ninth Grade
Economics ½ unit
Geography (may be counted in Group D)
Home and Family Living—Life Adjustments, etc.
Sociology ½ unit

F. Vocational Studies
A total of two or two and one-half units selected from any one of the following constitutes a minor sequence; a total of three units of any one constitutes a major sequence.
Agriculture
Commerce
Home Economics
Industrial Arts
Related Mathematics

G. Fine Arts
A total of two or two and one-half units selected from any of the following constitutes a minor sequence; a total of three units of any one constitutes a major sequence.
Music
Art

The remaining units, required to make up the necessary fifteen units, are entirely elective from among the subjects listed above and from any others which are counted toward graduation by the accredited school, except that single half units in language and quarter units in any subject will not be accepted and at least ten of the total units must be from Groups A to E inclusive.

The registrar shall have the authority, with the consent and approval of the departments of instruction most immediately concerned, to accept other

3 Half units in the social studies are acceptable as part of a sequence only if taken in the 11th or 12th grade.
4 Commercial subjects will be accepted as follows:
   Typing, ½ or 1 unit
   Elementary Business Training, 1 unit
   Bookkeeping, 1 or 2 units
   Shorthand, 1 or 2 units
   Commercial Arithmetic, ½ unit
   Commercial Law, ½ unit
   Office Practice, ½ unit
   Commercial Geography ½ to 1 unit
5 Music subjects will be accepted as follows:
   Band, 1 unit
   Orchestra, 1 unit
   Choir, 1 unit
   Glee Club, ½ unit
   Theory Class, 1 unit
   History and Appreciation, 1 unit
   Vocal or Instrumental Class Instruction, 1 unit
6 Art subjects will be accepted as follows:
   General Art, 1 to 2 units
   School Art Activities, ½ unit
   Studio Art, 1 to 2 units
ADMISSION

courses as substitutes for certain of the units listed in the various groups. Only courses well organized and competently taught will be considered, and any school desiring the privilege of such substitution for its graduates should furnish the registrar with detailed descriptions.

II. Approved Vocational Curricula

Michigan Colleges of Education admit graduates of high schools, without regard to major and minor sequences, to approved vocational curricula not leading to a degree.

2. Admission by Examination

The fifteen units required for admission by examination must all be chosen from the five groups listed above and must meet the prescribed sequence requirement.

3. Partial Certificate — Partial Examination Plan

This plan is available only to a graduate of an accredited high school whose principal is willing to recommend him in a part of the required fifteen units. The candidate may, at the discretion of the registrar, be admitted on the basis of the principal's recommendation covering the units satisfactorily completed, plus examination covering the units in which he is deficient. For this purpose examinations will be provided only in the subjects listed in the five groups.

4. Admission under the College Agreement Plan

The College agrees to admit the graduates of accredited high schools who have accepted the College Agreement of April 8, 1947, between the Michigan College Association and the Michigan Secondary School Association without reference to the pattern of subjects which they have pursued, provided they are recommended by the school from among the more able students in the graduating class. This agreement does not imply that students must be admitted to certain college courses or curricula for which they cannot give evidence of adequate preparation.

ADMISSION AS A STUDENT NOT A CANDIDATE FOR A DEGREE

Applicants who meet all the specific requirements for admission to this college, and who wish to pursue special studies not leading to one of the degrees of this college, may, with the consent of the registrar, be permitted to enroll. Such students may elect courses totaling not less than twelve hours during each semester, for which they have the proper prerequisites. These students are subject to all of the general regulations covering scholarships and conduct.

TRANSFERRING STUDENTS

Western Michigan College of Education accepts students with advanced standing from other regularly accredited institutions. They are required to
have had mailed to the registrar, in advance, official transcripts of their credits, including statements of honorable dismissal. Students entering by transfer are required to maintain at least a “C” average while in residence, and, in addition, to remove any deficiency in honor points which may be involved.

The maximum amount of credit which may be accepted from a junior college is 60 semester hours.

Students desiring to transfer to this college from other institutions of higher education must furnish complete official transcripts of their records, listing all credits earned by them up to the beginning of the session they wish to attend. The student should request the registrar of each institution attended to submit the official transcript directly to the admission officer named above. These transcripts should include (1) a complete list of and the record obtained in the college courses pursued and (2) statements of honorable dismissal from the institutions attended. It is also necessary for the student to submit a personal application blank and to request his high-school principal to submit an official statement of his preparatory record. Blanks for personal application and for the high-school record may be secured from the admission officer named above. Consideration of admission on transfer is on the basis of the entire record of the student, both high-school and collegiate. No part of the record may be disregarded. There are no exceptions to this regulation. Students applying for admission for the first semester are urged to submit their credentials as early as possible.

Inquiries concerning admission from other institutions of higher education should be addressed to Mr. John C. Hoekje, Registrar, in charge of admissions on advanced standing.

Students with unsatisfactory scholarship or conduct records will not be admitted.

**TRANSIENT STUDENTS**

A student from another institution who is not transferring permanently to this college is required to submit an official statement from his college to the effect that he is in good standing at that institution. Those wishing to transfer permanently are, of course, required to submit official transcripts of credits earned in other institutions.

**TRANSFER TO OTHER COLLEGES AND UNIVERSITIES**

Graduates who have received the former five-year certificate or the new State Limited Certificate usually are granted junior standing in colleges and universities. They are able to fulfill the requirements for a degree by an additional two years of work. Senior standing usually is granted to graduates who have received a life certificate. A student who desires to earn a provisional certificate in the college and then complete the work for a degree in some other college or university should plan his work with the requirements of the particular institution in mind.
Admission to graduate schools is granted to students completing a four-year curriculum who have made their elections of courses conform to the requirements of such schools. Western Michigan College of Education is fully accredited by the American Association of Teachers Colleges and by the North Central Association. The college is also on the approved list of the Association of American Universities.

TRANSCRIPTS

A student desiring a transcript of his record in this college should write to the registrar, giving dates of attendance and, if a graduate, the date of graduation. He should give the full name under which he was enrolled. Each student is entitled to one transcript of his record without charge, but all additional copies are charged for at the rate of one dollar a copy. Schools and boards of education desiring transcripts of records of students of Western Michigan College of Education should furnish, together with their request, as much of the information indicated as possible.

IDENTIFICATION PHOTOGRAPH

When a student enrolls for the first time, he is required to have taken an identification photograph of which three copies are made. One copy becomes part of the student's permanent record, another copy is given to the student to serve to identify him at college functions, while a third copy is filed in the Dean's Office.

COLLEGE-ABILITY TEST

Tests of ability to do college work acceptably are required of each student upon entrance. This applies not only to freshmen but to upperclassmen as well. The results of these tests are not used as a part of the entrance qualifications, but are of service in advising students regarding their scholastic work. These qualifying examinations are used to predict the student's ability to do satisfactory academic work. The tests are also a measure of the student's ability to read and interpret content material at the college level. The ability to use language is the criterion for the predictions and interpretations of the tests. The examinations do not deal with specific subject-matter areas and no intensive preparation should be made by the examinee. Credits will be withheld from students for whom there is no record of such entrance tests acceptable to this institution.

REGISTRATION, CLASSIFICATION, ETC.

All students are required, at the beginning of each semester or summer session, to enroll with the registrar of the college, to pay their fees to the cashier of the college, and to file an election blank properly filled out, showing the courses they expect to pursue during the semester. The completion of the foregoing constitutes registration in this college. No credit will be given for a course (even if pursued successfully) for which the student is not officially registered.
GENERAL INSTRUCTIONS FOR ENROLLMENT

Before the beginning of each semester or summer session the registrar prepares a special form, giving full information for enrollment. A copy of this form may be obtained at the Information Desk in the Women's Gymnasium or at the Administration Office.

CLASS LOAD

A student may not enroll for less than twelve, or for more than seventeen, semester hours of work during any semester, except by special permission, unless curriculum requirements indicate otherwise. (This is considered to be a "normal load.") This regulation applies to total credit for work taken by extension or in some other institution, in addition to credit desired in residence at Western.

A student may make application for "extra hours" or for a "subminimum load" by securing an application blank from the Dean of Administration, filling it out, and filing it with him. The maximum load for a given student is regulated on the basis of apparent ability and other pertinent factors.

A student in his first semester at Western rarely is permitted to carry "extra hours."

The normal maximum load for summer session students is six semester hours; the unadjusted minimum is four hours.

If a student works full time, his academic load should not exceed 10 to 12 hours. Students employed part-time should reduce their class loads proportionately.

By special permission, a student who received a point-hour ratio of 2 or more in the preceding semester or summer session, and who had no "incompletes," may carry a program rising to a maximum of 19 semester hours.

For persons teaching or otherwise employed who can attend classes only evenings or Saturdays the normal maximum load is 6 semester hours. This regulation applies equally to resident and to extension work.

No student may enroll at any time in more than two courses offered by the Extension Division.

Students who attend a summer session will not be granted credit for more than 15 semester hours in one calendar year in courses offered by the Extension Division.

Students who do not attend a summer session will be allowed credit up to 18 semester hours in one calendar year in courses offered by the Extension Division.

CLASSIFICATION OF STUDENTS

Students at Western Michigan College of Education are classified officially as follows:

Freshmen—Students credited with 0–30 semester hours inclusive.
Sophomores—Students credited with 30–60 semester hours inclusive.
Juniors—Students credited with 60–90 semester hours inclusive.
Seniors—Students credited with more than 90 semester hours.
The above classification relates to eligibility for participation:

a. In class activities
b. As officers
c. In social affairs

WITHDRAWAL FROM COURSES

1. Necessary changes in enrollment must have been made by the end of the first complete week of a semester.

2. Permission to drop courses will be given to upperclassmen for adequate reasons through the third complete week of a semester; to freshmen, through the fourth week.

   Deviations from this regulation may be permitted by the Dean of Administration in unusual circumstances.

3. A mark of W will be recorded for a subject dropped after the above time limits, if the student is then doing passing work; a mark of E, if the student is then failing; and a mark of F, if the course is dropped without the written permission of the Dean of Administration.

ABSENCES AND EXCUSES

The following constitutes the official rulings covering absences and excuses as authorized by the President, following discussion with the Faculty Council and Scholarship Committee.

1. Students are responsible directly to their instructors for class and laboratory attendance as well as for petitions for excuses for absences.

2. Instructors must file weekly with the Deans detailed records of absences for a given week.

3. The Deans will maintain a cumulative record of absences, but will not issue excuses. These absences will be recorded also on the permanent record and in the Placement Bureau.

   It is to be noted that students who anticipate being absent or who have had prolonged periods of absence should confer with the appropriate dean and give explanation concerning their cases. But such “explanations of absences” are not to be construed by instructors as constituting “excuses for absences.”

HONORS IN COURSE

Honors in Course are bestowed upon graduating students who have displayed special attainments in scholarship. Such honors are announced at a special convocation.

   Recipients of honors receive their degrees:

   * Cum laude* When having a point-hour ratio of 2.5 to 2.69 inclusive
   * Magna cum laude* When having a point-hour ratio of 2.7 to 2.89 inclusive
   * Summa cum laude* When having a point-hour ratio of 2.9 to 3.0 inclusive
In figuring point-hour ratios the following method will be used:
For all students attending from the beginning of the freshman or the sophomore year, semesters 3 to 7 inclusive will be counted.
For all students a minimum of 120 honor points earned here will be required.
Credits earned in correspondence and extension classes and transferred credits will not be counted toward honors.

REGULATIONS RELATING TO EXAMINATIONS

1. A final examination is given in every course in accordance with the official schedule issued each semester. No examination may be held except as announced in this schedule, and no date of examination may be changed without special permission of the Examination Schedule Committee.

2. Students are required to take the examinations in all courses except such as they may have dropped with consent of the Dean of Administration.

3. Students should not plan to be examined at any other time than that set for the examination of the class in which the work has been done. In case of unavoidable conflicts, a special examination may be arranged by the instructor with the consent of the Dean of Administration.

4. A student desiring to take a second examination in a given subject must make formal application to the Dean of Administration at least ten days before the time for the second examination.

MARKING SYSTEM

Each course receives one grade, which combines the results of class work, tests, and examinations.

Grades are indicated by letters, to each of which is given a certain value in honor points.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Significance</th>
<th>Honor Points (Per hour of credit)</th>
</tr>
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<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>3</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>2</td>
</tr>
<tr>
<td>C</td>
<td>Fair</td>
<td>1</td>
</tr>
<tr>
<td>D</td>
<td>Passing</td>
<td>0</td>
</tr>
<tr>
<td>*U</td>
<td>Unsatisfactory</td>
<td>Not to be counted</td>
</tr>
<tr>
<td>E</td>
<td>Failure</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td></td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn</td>
<td></td>
</tr>
</tbody>
</table>

I (Incomplete) applies to work of acceptable quality when the full amount is not done because of illness, necessary absence, or other satisfactory reasons. It is never applied to poor work.

I's must be removed by the middle of the succeeding semester (except when the student does not return, in which case the work must be completed within one year) or they automatically become E's.

*For Directed Teaching only.
The mark E means that the student has failed. E's and W's can be removed only by taking again all the work involved. Upon his entrance to the institution, after the acceptance of his entrance credentials, a Student's Credit Book is made out for each student. It may be secured at the Records Office (Room 109, Administration Building). Freshman grades are mailed directly to parents by the registrar.

ATTENDANCE AT COMMENCEMENT

All students who complete the requirements for graduation and are entitled to receive degrees and/or certificates are expected to be present at the commencement exercises.

SCHOLARSHIP INDEX

The total number of honor points acquired divided by the total number of semester hours taken gives the scholarship index (courses repeated are counted each time taken).

STANDARD FOR GRADUATION

No student will be graduated on any curriculum if his scholarship index based on the work required in that curriculum is less than 1.0.

HIGH SCHOLARSHIP LIST

To have his name placed on the High Scholarship List for a semester a student must have a point-hour ratio of 2.64 or more. No grade below B may be counted. No more than eight semester hours in any one department may be counted. No more than five semester hours of B credit may be counted. The minimum number of hours to be taken must be fourteen semester hours.

LOW SCHOLARSHIP LIST

1. Any freshman whose point-hour ratio for any semester or summer session falls below 1.0 shall be warned; if the ratio falls below 0.6, he shall be automatically placed on probation. If, during this first semester of probation, his point-hour ratio rises above the 0.6 but falls below 1.0 he may, at the discretion of the Dean of Administration, be continued on probation for one more semester.

2. Any student beyond freshman standing whose point-hour ratio for any semester or summer session falls below 0.8, shall be automatically placed on probation. If he fails to maintain a 1.0 ratio during the first semester of probation but achieves a ratio of 0.8 or higher, he may, at the discretion of the Dean of Administration, be granted one more semester of probation.

3. No student may be restored to good standing until the point-hour ratio for any probationary semester has been raised to a minimum of 1.0.

4. No student may be granted a third consecutive semester of probation.
5. Any student who receives E in 75 percent or more of the work attempted during a semester shall be automatically dropped from college.

6. In the case of a student who is dropped, at least one full semester shall elapse before the student is eligible for consideration for re-admission.

7. In administering the above regulations, the Dean of Administration has authority to permit deviations in unusual circumstances. He will, each semester, report to the President the progress of students granted such special dispensation.

CREDIT FOR BAND, GLEE CLUB, AND ORCHESTRA WORK

1. A maximum of two semester hours of academic credit annually is given for one year's regular participation in each of the following activities: Band, Glee Club, Orchestra, College Choir, and Auxiliary Choir.

2. Eight semester hours of academic credit is the maximum allowed for participation in any one of the five activities indicated.

3. A grand total of not to exceed twelve semester hours of academic credit is allowed for participation in the five activities noted.

4. Participation in Band may be substituted for physical education credit up to a maximum of three semester hours. A minimum of one semester hour of credit must be earned by actual participation in general physical education classes by each student who is participating in Band. Substitution of Band participation for physical education credit during second semester is possible only if the student has participated in the marching Band during the first semester.

5. Official enrollment cards must bear notations of the work in music the student wishes to carry. Semester-hour values must be indicated.

SIGNIFICANCE OF COURSE NUMBERS

I. Course numbering and availability

1. Courses numbered
   a. 100-199, inclusive, are primarily for freshmen;
   b. 200-299, inclusive, are primarily for sophomores;
   c. 300-399, inclusive, are primarily for juniors and seniors;
   d. 400-499, inclusive, are for seniors and graduate students;
   e. 500-599, inclusive, are for graduate students.

2. In general, students will be permitted to carry only courses numbered to correspond with their official classification. But exceptions may be made, with the approval of curricula advisers, for such reasons as maturity, experience, necessity of meeting prerequisites to other courses, etc.

Note.—The courses under d and e above give, within parentheses, the University of Michigan numbers.

II. Explanation of numbering

1. All consecutive, coherent courses are numbered similarly and lettered sequentially.
2. All fundamental, consecutive, coherent courses are numbered as follows:
   a. The number 100 is reserved for fundamental courses having no high-school prerequisite.
   b. The number 101 is reserved for fundamental courses having as prerequisite one year (or fraction thereof) of high-school work.
   c. The number 102 is reserved for fundamental courses having as prerequisite two years of high-school work.
   d. The number 103 is reserved for fundamental courses having as prerequisite three years of high-school work.
   e. The number 104 is reserved for fundamental courses having as prerequisite four years of high-school work.
3. All other courses primarily intended for freshmen are numbered serially beginning with 105.
4. Prerequisites for all courses numbered 200-399, inclusive, may be found in the Description of Courses as printed in the current college catalog.
5. All consecutive courses are numbered sequentially.
6. Numbers 300-302 inclusive are reserved for methods courses which are offered in departments other than the Department of Education, the so-called “professional courses.”
7. Courses offered as subdivisions of a given department are designated by numbers grouped by decades.
8. To the number of a course offered by extension for residence credit in the field there is added *R.Cl*.
9. To the number of a course available by class extension there is added *Cl*.
10. To the number of a course available by correspondence there is added *Co*.

**CREDIT IN SEMESTER HOURS**

The unit of credit is the semester hour; the number of semester hours credit given for a course generally indicates the number of class periods a week.

Classes which meet one hour a week for one regular semester will be given 1 semester hour of credit.

Classes which meet two hours a week for one regular semester will be given 2 semester hours of credit.

Classes which meet three hours a week for one regular semester will be given 3 semester hours of credit.

Classes which meet four hours a week for one regular semester will be given 4 semester hours of credit.
A minimum of 60 semester hours of credit is required for a State Limited Certificate in the two-year Rural Elementary Curriculum, and 120 semester hours of credit for the A.B. or the B.S. degree.

EXPENSES

FEES FOR UNDERGRADUATES

Schedule of Fees effective Semester I, 1951-1952.

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Tuition Fees</th>
<th>Local Fees*</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Resident</td>
<td>Non-Resident</td>
<td></td>
</tr>
<tr>
<td>1-3 ...........</td>
<td>$ 7.50</td>
<td>$15.00</td>
<td>$22.50</td>
</tr>
<tr>
<td>4-6 ...........</td>
<td>15.00</td>
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<tr>
<td>7-9 ...........</td>
<td>22.50</td>
<td>45.00</td>
<td>42.50</td>
</tr>
<tr>
<td>10 or more hrs.</td>
<td>37.50</td>
<td>75.00</td>
<td>70.00</td>
</tr>
</tbody>
</table>

*These local fees are collected each semester for the support of student activities, health service, student union, library purposes, departmental laboratories, identification photograph, cap and gown, diploma, etc.

There is a special departmental music fee for Applied Music of $60.00 per semester for one hour per week of private instruction, or $30.00 per semester for one-half hour per week of private instruction. A $5.00 deposit on all instruments used. This deposit is refunded upon return of the instrument.

Residence Requirements

Residences in Michigan for the purpose of registration shall be determined according to the state constitution provision governing the residence of electors (See Article III, Sections 1 and 2); that is, no one shall be deemed a resident of Michigan for the purpose of registration in the college, unless he has resided in this state six months next preceding the date of his proposed enrollment, and no person shall be deemed to have gained or lost a residence in this state while a student in the college.

The residence of minors shall follow that of the legal guardian.

The residence of wives shall follow that of their husbands.

Persons of other countries who have taken out their first citizenship papers and who have otherwise met these requirements for residence shall be regarded as eligible for registration as residents of Michigan.

It shall be the duty of every student at registration, if there be any possible question as to his right to legal residence in Michigan under rules stated above, to raise the question with the registration officer and have such question passed upon and settled previous to registration.

Late Enrollment Fee

By action of the State Board of Education all students who enroll after the opening day of a semester will be charged an additional fee of $2.00.
Auditors' Fees

Auditors (students who attend classes but do not desire credit) are governed by the same regulations as are students desiring credit.

Refunds

1. No refund of fees will be granted unless applied for within one month after withdrawal.

2. A student who withdraws not more than two weeks after registration will be entitled to a refund of the entire fee.

3. A student who withdraws more than two weeks and less than four weeks after the beginning of the semester shall be entitled to a refund of one-half the fee.

4. A student who withdraws more than four weeks and not later than eight weeks after the beginning of the semester will be entitled to a refund of forty per cent of the fee.

5. No refunds will be made for withdrawal after the eighth week of a semester.

6. No refund will be made to a student eligible for benefits under Act 245 of the Public Acts of 1935, as amended, unless request is made not more than one week after registration.

Estimate of Expense

<table>
<thead>
<tr>
<th>Item</th>
<th>Estimate</th>
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</thead>
<tbody>
<tr>
<td>Room</td>
<td>$63.00 to $90.00</td>
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<tr>
<td>Board</td>
<td>160.00 to 250.00</td>
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<tr>
<td>Laundry</td>
<td>0.00 to 36.00</td>
</tr>
<tr>
<td>Textbooks and supplies</td>
<td>20.00 to 40.00</td>
</tr>
<tr>
<td>Incidentals</td>
<td>25.00 to 50.00</td>
</tr>
<tr>
<td>Tuition and fees (approximately)</td>
<td>55.00 to 85.00</td>
</tr>
</tbody>
</table>

Total for one semester of 18 weeks: $323.00 to $551.00
The Constitution of the State of Michigan places the Michigan Colleges of Education under the authority of the State Board of Education. From time to time the Legislature has defined the objectives and scope of work of the Colleges of Education. It has repeatedly declared that the purpose of these institutions “shall be the instruction of persons in the art of teaching and in all the various branches pertaining to the public schools of the state of Michigan.”

The Michigan Colleges of Education have always stood and do now stand for two things paramount and inseparable in an institution for the training of teachers:

1. A thorough grounding in such fields of study as may lead to the intellectual growth of the student.
2. A thorough grounding in the science and art of teaching attained by sufficient actual teaching under direction.

The program of study outlined for the first and second years in the curricula of the Michigan Colleges of Education is organized to serve, among others, the following purposes:

1. To provide the student with essential factual information; to give him an introduction to methods of thought and work and to provide such opportunities for study and growth as may lead to a well-rounded general education.
2. To prepare the student for undertaking the more advanced and specialized work embraced in the curricula of the third and fourth years of the Colleges of Education or for more advanced work elsewhere.

This program represents sixty semester hours of work, at least half of which must fall in Groups I, II, III. The student must complete during the first year at least six semester hours of Rhetoric and at least fifteen semester hours from Groups I, II, III.

The program for the third and fourth years is designed to enable the student:

1. To pursue more extensively and intensively courses which acquaint him with the fields of his special interest and which broaden his general education.
2. To pursue a curriculum designed to give him the knowledge and skills necessary for teaching in a specific field.

Admission to the program of the third and fourth years is based upon the satisfactory completion of the work outlined above or upon evidence of equivalent work done satisfactorily elsewhere. In addition the student must satisfy such special tests or examinations as may be prescribed to determine his general intelligence, scholastic aptitude, and fitness for the teaching profession.
SUBJECT GROUPINGS

The Instructional Departments of the Michigan Colleges of Education are classified in groups as follows:

Group I. Language and Literature
Ancient language and literature, English language and literature, modern language and literature, certain courses as indicated in the Departments of Librarianship and speech

Group II. Science
Anatomy, astronomy, biology, botany, chemistry, geography, geology, hygiene, mathematics, nature study, physics, physiology, psychology, zoology, certain courses as indicated in the Department of Agriculture

Group III. Social Science
Economics, history, philosophy, political science, sociology, certain courses as indicated in the Department of Librarianship

Group IV. Education
Education (includes methods courses and directed teaching), certain courses as indicated in the Department of Librarianship

Group V. Fine Arts
Art, music, and certain courses in occupational therapy

Group VI. Practical Arts
Agriculture, business education, home economics, industrial arts, military science, certain courses as indicated in the Department of Librarianship, and certain courses in occupational therapy

Group VII. Physical Education and Health
Health, physical education

DEGREES DEFINED

BACHELOR OF ARTS (WITH OR WITHOUT TEACHING CERTIFICATE)

The student who regularly completes a curriculum conforming to the degree requirements and embracing at least 70 semester hours from Groups I, II, and III, including at least 8 semester hours in one foreign language, is eligible for the degree of Bachelor of Arts. If two or more units of one foreign language are presented for entrance, the requirements for foreign language may be waived.
BACHELOR OF SCIENCE (WITH OR WITHOUT TEACHING CERTIFICATE)

1. The student who regularly completes a curriculum conforming to the degree requirements and embracing 42 semester hours or more in the first three groups (the minimum group requirements in Groups I, II, III) is eligible for the degree of Bachelor of Science.

2. The student who otherwise qualifies for the degree of Bachelor of Arts and who has earned at least 54 semester hours in Group II may at his option receive either the degree of Bachelor of Science or the degree of Bachelor of Arts.

BACHELOR OF MUSIC (AND TEACHING CERTIFICATE)

The student who completes a curriculum as outlined by the Department of Music with a major in Public School Music is eligible for certification. A total of 132 semester hours is required for graduation. The student must include 20 semester hours in a single field of Applied Music, which will be offered as his first minor. The second minor must be in a non-music area.

BACHELOR OF MUSIC (WITHOUT TEACHING CERTIFICATE)

Students who indicate by their placement examination certain levels of proficiency will be accepted as majors in the various fields of Applied Music or Composition. A total of 132 semester hours is required for graduation and must include specific requirements as indicated in the curricular outline as well as major and minor requirements as approved by the Department of Music.

GENERAL DEGREE (WITHOUT TEACHING CERTIFICATE)

Students who do not have in mind preparation for teaching may elect basic courses which provide a general education or which satisfy preliminary requirements for other professional curricula. When such a program of work is carried on for four years and conforms to the general degree requirements, the degree of Bachelor of Arts or Bachelor of Science may be granted without the teaching certificate.

SECOND BACHELOR'S DEGREE

A graduate of Western Michigan College of Education with the degree of Bachelor of Music or Bachelor of Science who subsequently becomes a candidate for the degree of Bachelor of Arts, or vice versa, is required, in addition to the credits he already has, to complete 30 semester hours of resident credit and to satisfy any other specific requirements for the degree. The 30 semester hours need not be taken subsequent to the first degree.
DEGREE REQUIREMENTS.

Any curriculum leading to the bachelor's degree and teacher's certificate consists of at least 124 semester hours of credit and must include

Group I ................................ at least 12 semester hours
Group II ................................ at least 12 semester hours
Group III ................................ at least 12 semester hours
Group IV ................................ at least 20 semester hours
Rhetoric ................................ at least 6 semester hours
Physical Education ...................... 4 semester hours

The remaining semester hours may be selected from the courses regularly offered by the college, subject to the following restrictions:

1. Not more than 40 semester hours may be taken in any one subject.
2. At least two-thirds of the work beyond the second year must be in courses not open to first-year students.
3. The student must complete a major subject of at least 24 semester hours and at least two minor subjects of not less than 15 semester hours. (A candidate for the elementary provisional certificate may present, instead, 4 minors, 15 semester hours each.) Credits in the required English composition and credits in Education which are required in general on all curricula do not count toward majors or minors.
4. Minimum residence requirements: (a) every candidate for the bachelor's degree must have earned at least thirty semester hours of credit on the campus; and (b) must offer residence credit as the final work required during the last semester or summer session preceding graduation. (An exception is made in the combined pre-professional curricula.)
5. Courses must be selected so that the requirements in some one of the provisional certificate curricula are fulfilled.
6. Students who wish to qualify for the bachelor's degree without the teacher's certificate will not be required to take the work prescribed under Group IV but must satisfy all the other requirements.

MAJOR AND MINOR REQUIREMENTS AND REGULATIONS

A major is a sequence of courses totaling a minimum of 24 semester hours; a minor is a sequence of courses totaling a minimum of 15 semester hours. Under certain conditions students may elect beyond this minimum up to a maximum of 40 hours offered by any department. In the Division of Science and Mathematics and in the Division of Social Sciences group majors and group minors are permitted.
1. **General Degree (without Teaching Certificate).** The academic training shall include a major and two minors.

2. **Bachelor's Degree and State Elementary Provisional Certificate.** The academic training shall include four minors, or a major (may be a group major) and two minors. The equivalent of two minors must be in subjects or subject fields taught in the elementary grades.

3. **Bachelor's Degree and State Secondary Provisional Certificate.** The academic training shall include one major and two minors, in subjects or subject fields in which the applicant expects to teach.

### REGULATIONS AND SUGGESTIONS

1. In the “Description of Courses,” see the introductory statement for each department preceding its description of courses, for its approved major and minor course sequences. Students should consult the departmental advisers for approval of their major and minor programs.

2. All secondary students shall be known as “majors” in the fields of selected departments, e.g., Home Economics, Art, Mathematics, English, etc. If a student wishes to elect a major in each of two or more departments, he will be listed accordingly, e.g., Art and English; Industrial Arts Education and Mathematics, etc.

3. Decision concerning field of majors must always be made by student before the close of sophomore year or beginning of junior year.

4. Decision concerning pursuance of elementary or secondary curriculum must be made by the close of freshman year or beginning of sophomore year.

5. In certain cases, “group” majors totaling a minimum of 30 semester hours and “group” minors totaling a minimum of 20 semester hours are allowed. They usually consist of courses selected from the related departments of a division (see the Division of Social Sciences and the Division of Science and Mathematics). Students should consult the chairman of the divisions relative to these group majors and group minors.

6. Group requirements (Groups I, II, and III) of the several curricula may be satisfied through the use of major and minor sequences. Likewise short sequential requirements of some of the curricula may sometimes be included as parts of major or minor groupings.

7. Minors may often be related to majors, so as to recognize naturally or closely related fields; for example, mathematics and physics, history and geography, literature and history, etc.

8. Students who wish to major in any of the “special” fields (art, business education, home economics, industrial arts education, librarianship, music, occupational therapy, physical education, and special education) are advised to follow the same procedure as indicated in item 1.

Attention is called to the regulation of the State Board of Education as to the “special” fields which lead to certification in both elementary and secondary grades, when the candidate qualifies in both fields. In respect to this, the Western Michigan College of Education at present prepares students in the fields of art, music, and physical education for women.
REQUIREMENTS FOR GRADUATION

RESTRICTIONS

1. It is usually not permissible to use education as a major or minor in any undergraduate curriculum.

2. The following courses are not to be counted as satisfying major and minor requirements:
   a. Required courses in rhetoric (see Group I).
   b. Uniformly required courses in education from Group IV: Human Growth and Development 251, Introduction to Directed Teaching 240 or 351, and Directed Teaching, Laboratory in Education, and General Education Problems 370A, B, C.
   c. Professional courses numbered 300 to 302. These are courses in teaching school subjects.

3. A combination of foreign languages, or of English or American literature with a foreign language, is not permissible. The major or minor must be in one language only.

4. Mathematics may not be combined with science (physics, geography, chemistry, biology) for a major or minor sequence.

REQUIREMENTS FOR GRADUATION

The State Board of Education for the State of Michigan, on recommendation of the president and faculty of Western Michigan College of Education, confers degrees and grants teachers' certificates as follows:

I. BACHELOR'S DEGREES

1. Bachelor of Arts
2. Bachelor of Music
3. Bachelor of Science

For the degrees of Bachelor of Arts and Bachelor of Science, the candidate shall present:

1. Credits satisfying a prescribed curriculum for a total of 124 semester hours, including required physical education.
2. Thirty semester hours of satisfactory work in residence on campus at this institution.
3. Residence at this institution during the semester or summer session immediately preceding graduation.

For the degree of Bachelor of Music, the candidate shall present the number of semester hours and course sequences as stipulated in the requirements of that curriculum.

II. PROVISIONAL TEACHING CERTIFICATES

The following types of teaching certificates are granted:

1. State Elementary Provisional Certificate
2. State Secondary Provisional Certificate
3. State Limited Certificate

1. State Elementary Provisional Certificate
   a. This certificate qualifies the holder to teach for a period of five years from date of issue in the elementary grades (kindergarten to eighth) in any public school in Michigan.
   b. The candidate must meet the requirements for a degree as defined above.
   c. The holder of the State Elementary Provisional Certificate may be issued the State Elementary Permanent Certificate when the candidate shall have met the following conditions:
      1) Application must be made to the college within one year following the expiration of the State Elementary Provisional Certificate.
      2) The candidate must submit satisfactory evidence that he has taught successfully during the life of the certificate for not less than three years in elementary schools.
      3) The holder of an Elementary Provisional Certificate issued after July 1, 1945, must have earned in addition 10 semester hours of acceptable college credit.
   d. For procedure for permanent certification see below.

2. State Secondary Provisional Certificate
   a. This certificate qualifies the holder to teach for a period of five years from date of issue in the secondary grades (seventh to twelfth) in any public school in Michigan, in subjects or subject fields indicated on the certificate.
   b. The candidate must meet the requirements for a degree as defined above.
   c. The holder of the State Secondary Provisional Certificate may be issued the State Secondary Permanent Certificate provided the candidate shall have met the following conditions:
      1) Application must be made to the college within one year following the expiration of the State Secondary Provisional Certificate.
      2) The candidate must submit satisfactory evidence that he has taught successfully during the life of the certificate for not less than three years in secondary schools.
      3) The candidate must have earned in addition 10 semester hours of acceptable college credit.
   d. For procedure for permanent certification see below.

3. State Limited Certificate
   a. This certificate qualifies the holder to teach in the state of Michigan for a period of three years from date of issue in any school district except a school district which maintains an approved high school.
b. The candidate shall present credits satisfying a prescribed curriculum aggregating 60 semester hours.
c. The candidate shall have satisfactorily completed in residence at this institution 15 semester hours.
d. The candidate shall have been in residence at this institution the semester or summer session immediately preceding graduation.

III. PROCEDURE FOR PERMANENT CERTIFICATION

The holder of an Elementary Provisional or Secondary Provisional Certificate, who has fully met the requirements, may be issued a Permanent Certificate. Below is outlined the procedure to be followed:

1. The Candidate will
   a. obtain from the Director of Teacher Education, Western Michigan College of Education, an application blank. This may be done after three years of teaching under the Provisional Certificate, but it must be done within one year following the expiration of the Provisional Certificate.
   b. fill out the application as required and return it to the college.
   c. return with the application blank his Provisional Certificate with his Teacher's Oath attached.

2. The College will
   a. investigate the qualifications of the candidate, ascertain if he satisfies requirements for permanent certification.
   b. recommend the candidate to the State Board of Education for permanent certification if his qualifications are found satisfactory.
   c. deliver to the candidate the Permanent Certificate properly executed.

IV. MISCELLANEOUS PROVISIONS REGARDING CERTIFICATES

1. A candidate presenting credits as a graduate of a Michigan County Normal School and who in addition thereto presents entrance credits satisfying the requirements of this institution shall be granted:
   a. toward the Provisional Certificate, 25 semester hours;
   b. toward the State Limited Certificate, 26 semester hours.

2. Not more than one-fourth of the number of hours necessary for any certificate or degree may be taken in extension or by correspondence or both. Such credit, however, cannot be applied to modify the minimum or final residence requirements.

3. No teacher's certificate will be granted to any person who is less than eighteen years of age.

4. No teacher's certificate will be granted to any person who is not a citizen of the United States or who has not declared his intention of becoming a citizen.
5. A person who holds an expired provisional certificate on either the elementary or the secondary level may renew such certificate and restore it to good standing by completing ten semester hours of acceptable college work. Application for reinstatement must be made through the institution upon whose recommendation the certificate was issued. For an application for reinstatement, please write to John C. Hoekje, Dean of Administration.

DIRECTIONS TO HOLDERS OF LIMITED CERTIFICATES

No person can be employed to teach in any school district unless he is legally qualified by holding a valid certificate. In order that the holder of any limited certificate may retain without interruption his status as a legally qualified teacher, he must make application for renewal to the State Board of Education between April 1 and September 1 of the year the certificate expires; if the candidate on the expiration of the certificate does not arrange for renewal as here stated, he will forfeit his status as a legally qualified teacher, and therefore will not be permitted to teach. He will, however, remain eligible to make application for renewal until June 30 of the year following expiration of his certificate, after which date renewal privileges are canceled.

A. To the holder of the State Limited Certificate or of the State Limited Renewal Certificate.

1. The holder of a State Limited Certificate may be issued (five times) a State Limited Renewal Certificate provided the candidate shall have met the following conditions:

   (a) Subsequent to the date of issue of the last certificate held, the candidate must have acquired 10 semester hours of credit, of an average grade of C or better, earned in an institution or accepted by an institution approved by the State Board of Education. These credits must be applicable toward the requirements of the curriculum prescribed for the State Provisional Certificate eventually desired.

   (b) In order to assure that the credits earned toward renewal will apply on the State Provisional Certificate curriculum at the institution where the candidate intends to qualify eventually for that certificate, the candidate should arrange in advance in each case to have his course selections approved by that institution. Also all credits, wherever earned, should be submitted to that institution for evaluation and by it transmitted to the State Board of Education with recommendations.

B. To the holder of the County Limited Certificate or of the County Limited Renewal Certificate.

1. The holder of a County Limited Certificate may be issued (two times) a County Limited Renewal Certificate, each valid for two years provided the candidate shall have met the following conditions:
(a) Subsequent to the date of issue of the last certificate held, the candidate must have acquired 10 semester hours of credit, of an average grade of C or better, earned in an institution or accepted by an institution approved by the State Board of Education. These credits must be applicable toward the requirements of the curriculum prescribed for the State Limited Certificate and for the State Provisional Certificate.

(b) In order to assure that the credits earned toward renewal will apply on the State Limited Certificate curriculum and on the State Provisional Certificate curriculum at the institution where the candidate intends to qualify for either certificate, the candidate should arrange in advance in each case to have his course selections approved by that institution. Also all credits, wherever earned, should be submitted to that institution for evaluation and by it transmitted to the State Board of Education with recommendations.

Note.—More complete information concerning the several teachers' certificates may be obtained from Bulletin No. 601, Teachers' Certification Code, published by the Superintendent of Public Instruction, Lansing, Michigan. 1942 Revision.

ADDITIONAL REGULATIONS

1. All freshmen must carry Rhetoric 106A, B.

2. At the end of the sophomore year all men students except those enrolled in the two-year curricula must have had at least 4 semester hours of physical education.

3. In general, freshmen, should not elect two courses in a single department in the same semester. No student should elect more than 8 semester hours in a single department in the same semester.

4. All students who expect to receive a degree must present at least 6 semester hours of credit in rhetoric.

5. Before being admitted to the regular program of work of the third year, a candidate for a teaching certificate shall have earned at least 8 semester hours in each of the Groups I, II, and III. He shall have maintained at least a C average for work already completed and shall give evidence of his fitness for teaching.

6. To satisfy the minimum requirements in Groups I, II, and III, the student shall not present a series of isolated courses.

7. All students who expect to obtain a degree and teaching certificate are required to present credits in the following courses: Human Growth and Development 251, Introduction to Directed Teaching 240 or 351, and Directed Teaching, Laboratory in Education, and General Educational Problems 370 A, B, C.

8. A student will not be permitted to carry directed teaching unless his point-hour ratio is at least 1.0.

9. All students must take the equivalent of six hour lectures in political science. This is a legal requirement.
<table>
<thead>
<tr>
<th>Degree Requirements</th>
<th>Bachelor of Arts</th>
<th>Bachelor of Science Math. or Science Concentration</th>
<th>Bachelor of Science</th>
<th>Bachelor of Music</th>
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</thead>
<tbody>
<tr>
<td>A. Minimum Group Requirements</td>
<td>Same</td>
<td>Same</td>
<td>Rhetoric. See Music Catalog</td>
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<tr>
<td>Group I-12 s.h. plus Rhetoric</td>
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<td>Group II-12 s.h.</td>
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<tr>
<td>Group III-12 s.h.</td>
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<td></td>
</tr>
<tr>
<td>B. Total in Groups I, II, and III</td>
<td>Same, but if 54 of these fall in Group II student has option of choosing the B.S. degree</td>
<td>Total 42 s.h. or more</td>
<td>See Music Catalog</td>
<td></td>
</tr>
<tr>
<td>— 70 semester hours</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Social Science 101A and 101B</td>
<td>Same</td>
<td>Same</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>or Political Science 230 or 231</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>or 234. This is a legal requirement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>D. Foreign Language—8 s.h. of college level or two years of high school level in one language</td>
<td>Same</td>
<td>No requirement</td>
<td>See Music Catalog</td>
<td></td>
</tr>
<tr>
<td>E. Physical Education—4 s.h.</td>
<td>Same</td>
<td>Same</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>F. Residence—30 s.h. on campus; final semester or summer session preceding graduation must be in residence credit work</td>
<td>Same</td>
<td>Same</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>G. Major/minors—one major (24 s.h.) and 2 minors (15 s.h. each.) Elementary teaching candidates may offer 4 minors instead</td>
<td>Same</td>
<td>Same</td>
<td>Major and one minor in Music; other minor in non-music. (For Public School majors)</td>
<td></td>
</tr>
<tr>
<td>H. Scholastic average—must be 1.0 for college career as average of courses applicable to the student’s curriculum in the aggregate 124 s.h.</td>
<td>Same</td>
<td>Same</td>
<td>Same</td>
<td></td>
</tr>
<tr>
<td>I. Maximum in one department —40 s.h. except in Pulp and Paper Tech. curriculum</td>
<td>Same</td>
<td>Same</td>
<td>Does not apply</td>
<td></td>
</tr>
<tr>
<td>J. Maximum of Freshman courses —at least 2/3 of work beyond second year must be in courses not open to first year students</td>
<td>Same</td>
<td>Same</td>
<td>Does not apply</td>
<td></td>
</tr>
</tbody>
</table>
**DEGREE REQUIREMENTS — Continued**

<table>
<thead>
<tr>
<th>Bachelor of Arts</th>
<th>Bachelor of Science Math. or Science Concentration</th>
<th>Bachelor of Science</th>
<th>Bachelor of Music</th>
</tr>
</thead>
<tbody>
<tr>
<td>K. Teaching certificates—candidates must meet requirements of the Education block as part of the hours applied toward graduation*</td>
<td>Same</td>
<td>Same</td>
<td>Same</td>
</tr>
<tr>
<td>*Candidates for the Elementary Provisional Certificate who were enrolled before September 1949, must present 6 s.h. in Fine Arts. Beginning September 1949 these candidates must present 12 s.h. in Fine Arts and Practical Arts</td>
<td>Same</td>
<td>Same</td>
<td>Not applicable</td>
</tr>
<tr>
<td>L. Total hours required for graduation if minimum and curricular requirements are met—124 including required physical education</td>
<td>Same</td>
<td>Same</td>
<td>132 including physical education</td>
</tr>
</tbody>
</table>
LIST OF THE CURRICULA

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   Secondary Curriculum ............................................. 105
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   Office Training Curriculum ...................................... 116
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    Professional, and Combined Curricula
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    Dentistry ....................................................... 122
    Engineering .................................................... 123
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    Journalism ....................................................... 125
    Law ........................................................................ 126
    Medicine ........................................................... 127
    Medical Technology .............................................. 128
    Nursing ............................................................... 129
    Occupational Therapy ............................................ 130
    Social Work ......................................................... 131
    Music ................................................................. 132
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    Retailing .................................................................... 144
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    Homemaking ........................................................... 148
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    Airline Hostess ...................................................... 152
    Air Transportation .................................................. 153
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    Refrigeration and Air Conditioning ............................ 156
    Drafting and Design Technology ............................... 157
    Printing Technology ................................................. 157
    Machine Tool Technology ......................................... 158
    Radio and Television Technology .............................. 159
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REQUIREMENTS OF THE VARIOUS CURRICULA

Special details and requirements in the various fields of specialization are outlined on the following pages. All of the curricula detailed conform to the general regulations set forth in the preceding pages and indicate the courses that should be pursued by students.

I. THE GENERAL DEGREE CURRICULUM

Students who do not have in mind preparation for teaching may elect basic courses which provide a general education or which satisfy preliminary requirements for other professional curricula. When such a program of work is carried on for four years and conforms to the degree requirements, the degree of Bachelor of Arts or Bachelor of Science may be granted without a teaching certificate.

Since Western Michigan College of Education is on the approved list of the Association of American Universities, students who complete their curricula with satisfactory records should experience no difficulty in enrolling in the better graduate and professional schools of the United States.

GENERAL DEGREE CURRICULUM

A.B. or B.S. Degree

(For liberal and pre-professional education)

Group Requirements

<table>
<thead>
<tr>
<th>Group I. Language and Literature</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ancient language and literature, English language and literature, modern language and literature, certain courses as indicated in the Department of Speech.</td>
<td>6</td>
</tr>
<tr>
<td>Rhetoric (in addition)</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group II. Science</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy, astronomy, biology, botany, chemistry, geography, geology, hygiene, mathematics, nature study, physics, physiology, psychology, zoology, certain courses as indicated in the Department of Agriculture.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group III. Social Science</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics, history, philosophy, political science, sociology. Must include two semester hours of political science.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group VII. Physical Education and Health</th>
<th>4</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Elective</th>
<th>78</th>
</tr>
</thead>
</table>
II. CURRICULA FOR TEACHERS

On the following pages are outlines of the various curricula for teachers offered by Western Michigan College of Education. They are designed to give prospective teachers a broad general education with a reasonable degree of specialization in the subject-matter fields through well-planned majors and minors. In addition, they furnish an adequate background in professional study for the graduate to enter teaching with a knowledge of the purposes and objectives of public education, the nature of child growth and development, the modern methods of teaching, and the means of appraising instruction.

ELEMENTARY CURRICULUM

A.B. or B.S. Degree

State Elementary Provisional Certificate

(For the preparation of teachers of Kindergarten and Grades 1, 2, 3, 4, 5, 6, 7, 8)

<table>
<thead>
<tr>
<th>Group Requirements</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I. Language and Literature</td>
<td>12</td>
</tr>
<tr>
<td>Rhetoric (in addition)</td>
<td>6</td>
</tr>
<tr>
<td>Group II. Science</td>
<td>12</td>
</tr>
<tr>
<td>Group III. Social Science</td>
<td>12</td>
</tr>
<tr>
<td>Including two semester hours of political science*</td>
<td></td>
</tr>
<tr>
<td>Group IV. Education</td>
<td></td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Psychology of Reading 212</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
<tr>
<td>Directed Teaching, Laboratory in Education, and General Educational Problems 370 A, B, C</td>
<td>15</td>
</tr>
<tr>
<td>Groups V and VI. Fine Arts (Art, Music) and Practical Arts**</td>
<td>12</td>
</tr>
<tr>
<td>Group VII. Physical Education and Health</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>42</td>
</tr>
</tbody>
</table>

Note.—1. The student, in conference with his counselor, should choose courses on the basis of his special needs and interests, from among those especially adapted to teaching in the elementary field as a whole, or in any of the following special areas:

- Early Elementary
- Later Elementary
- Rural Elementary
- Special Education

2. The academic training shall include four minors, or a major (this may be a group major) and two minors. The equivalent of two minors must be in subjects or subject fields taught in the elementary grades.

It is possible for students to specialize by presenting minors not only in the general subject-matter fields, but in the special fields as well, of art, home economics, industrial arts education, librarianship, music, physical education, and special education.

*May be satisfied by taking both 101A and 101B, Introduction to Contemporary Society.
**Includes at least one course in Art, one course in Music, and one course in Practical Arts.
3. Students majoring in art, music, librarianship, or physical education for women may choose either the State Elementary Provisional Certificate or the State Secondary Provisional Certificate. Either certificate will authorize the candidate (student) to teach his specified special subject in (both) the elementary and the secondary grades when the candidate qualifies in both fields.

4. Certain courses in some departments may not be counted toward satisfying the minimum group requirements. See course descriptions.

5. For further information regarding details of specialization in a department or field, see introductory paragraphs for each department.

SECONDARY CURRICULUM

A.B. or B.S. Degree

State Secondary Provisional Certificate

(For preparation of teachers of Grades 7, 8, 9, 10, 11, 12)

Group Requirements

<table>
<thead>
<tr>
<th>Group</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I</td>
<td>Language and Literature</td>
</tr>
<tr>
<td></td>
<td>Rhetoric (in addition)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Group II</td>
<td>Science</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Group III</td>
<td>Social Science</td>
</tr>
<tr>
<td></td>
<td>Including two semester hours of political science*</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Group IV</td>
<td>Education</td>
</tr>
<tr>
<td>Human Growth</td>
<td>Development 251</td>
</tr>
<tr>
<td>Introduction</td>
<td>Directed Teaching 351</td>
</tr>
<tr>
<td>Directed</td>
<td>Teaching, Laboratory in Education, and General Educational</td>
</tr>
<tr>
<td>Problems</td>
<td>370 A, B, C</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Group VII</td>
<td>Physical Education and Health</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td></td>
</tr>
</tbody>
</table>

Note.—1. The student, in conference with his counselor, should choose courses on the basis of his special needs and interests.

2. The academic training shall include one major and two minors in subjects or subject fields in which the applicant expects to teach. Furthermore, a methods course in the major or in one of the minor fields must be taken.

3. It is possible for students to specialize by presenting minors not only in the general subject-matter fields but in the special fields as well, of art, business education, home economics, industrial arts education, librarianship, music, and physical education.

4. Students majoring in art, music, librarianship, or physical education for women may choose either the State Elementary Provisional Certificate or the State Secondary Provisional Certificate. Either certificate will authorize the candidate (student) to teach his specified special subject in (both) the elementary and the secondary grades when the candidate qualifies in both fields.

5. Certain courses in some departments may not be counted toward satisfying the minimum group requirements. See course descriptions.

6. For further information regarding details of specialization in a department or field, see introductory paragraphs for each department.

*May be satisfied by taking both 101A and 101B, Introduction to Contemporary Society.
<table>
<thead>
<tr>
<th>Group I.</th>
<th>Language and Literature (including Literature for Children 203)</th>
<th>12 Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rhetoric (in addition)</td>
<td>6 Hours</td>
</tr>
<tr>
<td>Group II.</td>
<td>Science</td>
<td>General Biology 100A, B</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Hygiene 112 (or Health Education 285)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>General Psychology 200</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Abnormal Psychology 305</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mental Testing 307</td>
</tr>
<tr>
<td>Group III.</td>
<td>Social Science</td>
<td>Principles of Sociology 241</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Modern Social Problems 242</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Political Science</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elective</td>
</tr>
<tr>
<td>Group IV.</td>
<td>Education</td>
<td>Human Growth and Development 251</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introduction to Special Education 231</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education of Exceptional Children 431 (C130)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Psychology of Reading 212</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introduction to Mental Hygiene 235</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mental Hygiene of Childhood and Adolescence 436 (C120)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Education and Control of Mental Deviates 432 (C230)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Methods of Teaching Subnormal Children 337</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Introduction to Directed Teaching 351</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Problems in Education of the Mentally Handicapped 332</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Directed Teaching, Laboratory in Education, and General Educational Problems 370 A, B, C</td>
</tr>
<tr>
<td>Group V.</td>
<td>Fine Arts</td>
<td>Illustrative Handwork 107</td>
</tr>
<tr>
<td>Group VI.</td>
<td>Practical Arts</td>
<td>Industrial Arts for Elementary Teachers 164</td>
</tr>
<tr>
<td>Group VII.</td>
<td>Physical Education and Health</td>
<td>4 Hours</td>
</tr>
<tr>
<td>Elective</td>
<td></td>
<td>28 or 29 Hours</td>
</tr>
</tbody>
</table>

Note.—The academic training shall include a major in Special Education (mentally retarded) and two minors. The equivalent of two minors must be in subjects or subject fields taught in the elementary grades or in special classes for mentally retarded children.

*May be satisfied by taking both 101A and 101B, Introduction to Contemporary Society.
### SPECIAL EDUCATION CURRICULUM

#### SPECIAL EDUCATION CURRICULUM — OCCUPATIONAL THERAPY

**B.S. Degree and Diploma**

State Elementary Provisional Certificate

*(For the preparation of teachers of occupational therapy)*

<table>
<thead>
<tr>
<th>Group I. Language and Literature</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A</td>
<td>3</td>
</tr>
<tr>
<td>Literature for Children 203</td>
<td>3</td>
</tr>
<tr>
<td>Introduction or Principles of Speech Correction 230 or 231</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group II. Science</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Biology 100A</td>
<td>4</td>
</tr>
<tr>
<td>Nature Study 231A or B</td>
<td>4</td>
</tr>
<tr>
<td>Anatomy 211A</td>
<td>4</td>
</tr>
<tr>
<td>Physiology 211B</td>
<td>4</td>
</tr>
<tr>
<td>Kinesiology 216A</td>
<td>2</td>
</tr>
<tr>
<td>Applied Kinesiology 216B</td>
<td>2</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Abnormal Psychology 305</td>
<td>3</td>
</tr>
<tr>
<td>*Neurology and Psychiatry 330</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group III. Social Science</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Science</td>
<td>2-3</td>
</tr>
<tr>
<td>Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>Hospital Case Studies 352</td>
<td>3-4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group IV. Education</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theory of Occupational Therapy 210A, B and 310A</td>
<td>6</td>
</tr>
<tr>
<td>Theory of Occupational Therapy (Medical Lectures) 310B</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
<tr>
<td>General Educational Problems 370C</td>
<td>3</td>
</tr>
<tr>
<td>Directed Teaching 374</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group V. Fine Arts</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Design 215</td>
<td>3</td>
</tr>
<tr>
<td>Ceramics and Jewelry 225</td>
<td>2</td>
</tr>
<tr>
<td>Weaving 328</td>
<td>4</td>
</tr>
<tr>
<td>Minor Crafts 226</td>
<td>3</td>
</tr>
<tr>
<td>Art Structure 106</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group VI. Practical Arts</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>O.T. General Shop 167</td>
<td>3</td>
</tr>
<tr>
<td>O.T. Special Education Shop 308</td>
<td>3</td>
</tr>
</tbody>
</table>
Printing 144 .................................................. 3
Therapeutic Crafts 220, 221 or 222 ....................... 2
Stitchery 223 .................................................. 3
Clothing 203 .................................................. 2
Recreational Therapy 222 .................................. 2

Group VII. Physical Education ............................. 4
(2 on campus; 2 on affiliation)

Clinical Training
Nine calendar months at affiliating hospitals. This includes the course starred above plus undifferentiated credit totaling .............................. 5

Note.—1. Thirty semester hours of college credit must be earned before the student is admitted to the Department of Occupational Therapy. This admittance is based on the approval of the applicant by the Coordinating Committee of the Department on the basis of general aptitude for the work and the scholastic record submitted with the special application blank.

2. Granting of the Diploma of Occupational Therapy and registration in the American Occupational Therapy Association is conditional upon the student's passing a comprehensive examination over all required work.

*This course is taught at the Kalamazoo State Hospital.

SPECIAL EDUCATION CURRICULUM — SPEECH CORRECTION
B.S. Degree
State Elementary Provisional Certificate
(For the preparation of teachers of speech correction)

<table>
<thead>
<tr>
<th>Group I. Language and Literature</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric (in addition)</td>
<td>8</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A</td>
<td>6</td>
</tr>
<tr>
<td>(plus an additional general speech course to be selected through counseling)</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Speech Correction 230</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Speech Correction 231</td>
<td>3</td>
</tr>
<tr>
<td>Phonetics 318</td>
<td>3</td>
</tr>
<tr>
<td>Basic Voice and Speech Science 319</td>
<td>3</td>
</tr>
<tr>
<td>Stuttering and Allied Disorders 331</td>
<td>3</td>
</tr>
<tr>
<td>Applied Speech Correction 300</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group II. Science</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Biology 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>or Hygiene 112</td>
<td>2</td>
</tr>
<tr>
<td>and Physical Science 100A, B</td>
<td>6</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Abnormal Psychology 305</td>
<td>3</td>
</tr>
<tr>
<td>Mental Testing 307</td>
<td>2</td>
</tr>
</tbody>
</table>
Group III. Social Science
Principles of Sociology 241 .............................................. 3
Marriage and the Family 345 .............................................. 3
Political Science* ...................................................... 3
Elective ............................................................................ 3

Group IV. Education
Human Growth and Development 251 .............................................. 3
Problems of the Deaf and Hard of Hearing 232 .............................................. 3
Introduction to Mental Hygiene 235 .............................................. 3
or Mental Hygiene of Childhood and Adolescence 436(C120) .............................................. 2
Introduction to Special Education 231 .............................................. 2
Introduction to Directed Teaching 351 .............................................. 3
Directed Teaching, Laboratory in Education, and General Educational Problems 370A, B, C .............................................. 15

Group VII. Physical Education and Health .............................................. 4
Elective ............................................................................ 25 or 26

Note.—1. The student, in conference with his counselor, should choose courses on the basis of his special needs and interests.
2. The student must present a major in special education (speech correction). Two minors are also required and are usually in social science, science, languages, or psychology.
3. Certain courses in some departments may not be counted toward satisfying the minimum group requirements. See course descriptions.
4. For further information regarding details of specialization in a department or field, see introductory paragraphs for each department.
*May be satisfied by taking both 101A and 101B, Introduction to Contemporary Society.

MUSIC CURRICULUM
B.M. Degree with a major in Public School Music
State Elementary or Secondary Provisional Certificate
(For Instrumental or Vocal Supervisor)

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Major Performance</td>
<td>4</td>
</tr>
<tr>
<td>*English Diction and Song Literature 122A, B</td>
<td>0</td>
</tr>
<tr>
<td>Freshman Theory 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Music Appreciation 107A, B</td>
<td>4</td>
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<tr>
<td>Elementary Acoustics 110</td>
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*Courses required for students who will become vocal supervisors.
<table>
<thead>
<tr>
<th>Year</th>
<th>Course Description</th>
<th>Credits</th>
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<tbody>
<tr>
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<td></td>
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<tr>
<td><strong>Major Performance</strong></td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>*Italian Diction and Song Literature 222A, B</td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>Advanced Sight-Singing and Ear-Training 205A, B</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Advanced Harmony 206A, B</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>†Elementary School Methods and Materials 208A, B</td>
<td></td>
<td>6</td>
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<tr>
<td>†Instrumental Methods and Materials 209A, B</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Advanced Piano Class 217A, B</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Woodwind Class 219A, B</td>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td></td>
<td>3</td>
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<tr>
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<td>2</td>
</tr>
<tr>
<td>Elective (non-music)</td>
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<td>5</td>
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<tr>
<td><strong>Third Year</strong></td>
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<td></td>
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<tr>
<td><strong>Major Performance</strong></td>
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<tr>
<td><strong>Major Performance Literature 323</strong></td>
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</tr>
<tr>
<td>*French Diction and Song Literature 322A, B</td>
<td></td>
<td>0</td>
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<tr>
<td>†Junior and Senior High School Methods and Materials 301A, B</td>
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<tr>
<td>†Instrumental Methods and Materials 209A, B</td>
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<tr>
<td>Instrumental Conducting 311A</td>
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<tr>
<td>Choral Conducting 311B</td>
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<td>1</td>
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<tr>
<td>Brass Class 320A, B</td>
<td></td>
<td>2</td>
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<tr>
<td>Percussion Class 321</td>
<td></td>
<td>1</td>
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<tr>
<td>Introduction to Directed Teaching 351</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>American National Government 230</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>or American State and Local Government 231</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>or Survey of American Government 234</td>
<td></td>
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<tr>
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<td>11-12</td>
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<tr>
<td><strong>Major Performance</strong></td>
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<td>4</td>
</tr>
<tr>
<td><strong>Major Performance Literature 323</strong></td>
<td></td>
<td>0</td>
</tr>
<tr>
<td>*German Diction and Song Literature 324A, B</td>
<td></td>
<td>0</td>
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<tr>
<td>History of Music 357A, B</td>
<td></td>
<td>6</td>
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<tr>
<td>Integrated Professional Education 370A, B, C</td>
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<td>15</td>
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<tr>
<td>Elective (non-music)</td>
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<td>7</td>
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</tbody>
</table>

*Courses required for students who will become vocal supervisors.
**Courses required for students who will become instrumental supervisors.
†Each student is required to take 12 of the 18 semester hours offered in music methods and materials.
MUSIC CURRICULUM

B.M. Degree with a major in Public School Music
State Elementary or Secondary Provisional Certificate
(For General Supervisor)

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>Rhetoric 106A, B</td>
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<tr>
<td>*Major Performance</td>
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<tr>
<td>Freshman Theory 106A, B</td>
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<tr>
<td>Music Appreciation 107A, B</td>
<td>4</td>
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<tr>
<td>Elementary Acoustics 110</td>
<td>2</td>
</tr>
<tr>
<td>Piano Class 117A, B</td>
<td>2</td>
</tr>
<tr>
<td>String Class 118A, B</td>
<td>2</td>
</tr>
<tr>
<td>**English Diction and Song Literature 122A, B</td>
<td>0</td>
</tr>
<tr>
<td>Physical Education or Band</td>
<td>2</td>
</tr>
<tr>
<td>***Elective (non-music)</td>
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Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
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<tbody>
<tr>
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<td>Advanced Sight-Singing and Ear-Training 205A, B</td>
<td>4</td>
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<tr>
<td>Advanced Harmony 206A, B</td>
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<tr>
<td>†Elementary School Methods and Materials 208A, B</td>
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<tr>
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<tr>
<td>Advanced Piano Class 217A, B</td>
<td>2</td>
</tr>
<tr>
<td>Woodwind Class 219A, B</td>
<td>2</td>
</tr>
<tr>
<td>**Italian Diction and Song Literature 222A, B</td>
<td>0</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
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<td>Physical Education or Band</td>
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Third Year

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>Major Performance</td>
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<tr>
<td>Major Performance Literature 323</td>
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<tr>
<td>or</td>
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</tr>
<tr>
<td>**French Diction and Song Literature 322A, B</td>
<td>0</td>
</tr>
<tr>
<td>†Instrumental Methods and Materials 209A, B</td>
<td>6</td>
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<tr>
<td>†Junior and Senior High School Methods and Materials 301A, B</td>
<td>6</td>
</tr>
<tr>
<td>Instrumental Conducting 311A</td>
<td>1</td>
</tr>
<tr>
<td>Choral Conducting 311B</td>
<td>1</td>
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<tr>
<td>Brass Class 320A, B</td>
<td>2</td>
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<tr>
<td>Percussion Class 321</td>
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</tr>
<tr>
<td>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
<tr>
<td>American National Government 230</td>
<td>3</td>
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<tr>
<td>or</td>
<td></td>
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</tbody>
</table>
American State and Local Government 231 ....................... 3
or
Survey of American Government 234 .............................. 2
Elective (non-music) .................................................... 14-15

Fourth Year
Major Performance ....................................................... 4
Major Performance Literature 323 .................................... 0

or
**German Diction and Song Literature 324A, B .................. 0
History of Music 357A, B .............................................. 6
Methods in Major Performance Medium ............................. 3
Integrated Professional Education 370A, B, C .................... 15
Elective (non-music) ...................................................... 4

General supervisors are required to study voice two years and a single instrument two years.
**The student is required to enroll for this course only while his performance medium is voice.
***The non-music electives should be used to complete the non-music minor.
†Each student is required to take 12 of the 18 semester hours offered in music methods and materials.

LIBRARIANSHIP CURRICULUM
B.S. Degree with a major in Librarianship
State Elementary or Secondary Provisional Certificate
(For School Librarians)

First Year

Rhetoric 106A, B .......................................................... 6
General Biology 100A, B ................................................. 6
or
General Chemistry 100A, B ............................................. 8
History ................................................................. 6
Modern Language ....................................................... 8
Physical Education .................................................... 2
Electives ................................................................. 2
(Suggested electives, Fundamentals of Speech, Music or Art Appreciation.)

Second Year

General Psychology 200 ............................................... 3
Sociology 241 ............................................................. 3
Human Growth and Development 251 .............................. 3
State and Local Government 231 .................................... 3
History ................................................................. 3
Literature for Children 203 .......................................... 3
### English Electives
- Reading Interests of Children 202 ........................................... 3
- Reading Interests of Youth 302 ........................................... 3
- Organization of Library Materials 303 ........................................... 3
- Reference Service 311 ........................................... 2
- Cataloging and Classification 370 ........................................... 3
- Story Telling 306 ........................................... 2
- Introduction to Directed Teaching 351 ........................................... 3
- History or Economics ........................................... 3-6
- Electives ........................................... 6

**Third Year**

**Fourth Year**

#### First Semester

Directed Teaching, Laboratory in Education and General Educational Problems 370A, B, C ........................................... 15

*Teaching in minor subject and supervised practice in school library.

#### Second Semester

Library in the Modern Community 362 ........................................... 2
Administration of School Libraries 361 ........................................... 2
Curriculum Enrichment 305 ........................................... 3
Electives ........................................... 8

*Candidates for a major or minor in librarianship must complete one-half of their directed teaching through supervised practice in the school library.*
**VOCATIONAL INDUSTRIAL CURRICULUM**

**B.S. Degree**

State Secondary Provisional Certificate, and State Trade and Industrial Certificate

(For the preparation of Trade and Industrial teachers for the secondary schools)

This curriculum meets the necessary requirements for a Trade and Industrial Teacher Certificate, as established by the State Department of Public Instruction. Arrangements will be made whereby students may secure trade or occupational experience in local industries. Coordinated practical work experience is mandatory. It is necessary for a student to work an equivalent of three years, and some of this should be accumulated during vacation periods. In general, the type industry selected will be governed by the nature of the student's interest in the industrial phase which he expects to teach.*

*Students are required to take one minor in industrial arts consisting of 20 semester hours in drawing, wood, electricity and metal. An alternative may be a 15 semester hour minor in any course sequence such as wood, metal, drawing or printing.

<table>
<thead>
<tr>
<th><strong>First Year</strong></th>
<th><strong>Semester Hours</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Speech 105A, B</td>
<td>6</td>
</tr>
<tr>
<td>Physical Science 100A and B</td>
<td>8</td>
</tr>
<tr>
<td>Mechanical Drawing 120</td>
<td>2</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Coordinated Industry 150</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
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<tr>
<td>Electives</td>
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</table>

**Summer**

Coordinated Industry 152 ................................ 3

**Second Year**

<table>
<thead>
<tr>
<th><strong>Semester Hours</strong></th>
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<tbody>
<tr>
<td>Introduction to Vocational Education 200</td>
</tr>
<tr>
<td>General Psychology 200</td>
</tr>
<tr>
<td>Psychology of Personality 207</td>
</tr>
<tr>
<td>Principles of Economics 220A and B</td>
</tr>
<tr>
<td>Coordinated Industry 250 and 252</td>
</tr>
<tr>
<td>Physical Education</td>
</tr>
<tr>
<td>Electives</td>
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</table>
## VOCATIONAL INDUSTRIAL CURRICULUM

### Third Year

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Plan and Organization of a School Shop 347</td>
<td>2</td>
</tr>
<tr>
<td>Course Making in Industrial Education 351</td>
<td>2</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Labor Problems 325A</td>
<td>2</td>
</tr>
<tr>
<td>American National Government 230</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>American State and Local Government 231</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Sociology 241</td>
<td>3</td>
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<tr>
<td>Coordinated Industry 350, 352</td>
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<td>Electives</td>
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### Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>Teaching of Vocational Industrial Education 352</td>
<td>2</td>
</tr>
<tr>
<td>Introduction to Directed Teaching 351</td>
<td>3</td>
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<tr>
<td>Electives</td>
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<tr>
<td>Integrated Professional Education 370A, B, and C</td>
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</tbody>
</table>

## VOCATIONAL DISTRIBUTIVE EDUCATION CURRICULUM

B.S. Degree

State Secondary Provisional Certificate

(For preparation of teachers and coordinators of Vocational Distributive
Education. Graduates are qualified to teach and coordinate in
reimbursed Vocational Education Programs.)

The prerequisites to admission to this curriculum are:

1. Junior year standing and completion of a two-year terminal program
   in retailing.
2. Completion of a minimum of 24 semester hours in retailing courses.
3. Satisfactory evidence of having had one year of work experience in
   a retail establishment.

A minimum of two years of approved distributive work experience is
required for graduation.

Courses required unless previously taken to meet minimum group require-
ments:

### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106B</td>
<td>3</td>
</tr>
<tr>
<td>Survey of American Government 234, or</td>
<td>2</td>
</tr>
<tr>
<td>American National Government 230, or</td>
<td>3</td>
</tr>
<tr>
<td>American State and Local Government 231, or</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Contemporary Society 101A and B</td>
<td>6</td>
</tr>
</tbody>
</table>
Electives (Group I) ............................................ 0-12
Electives (Group II) ........................................ 0-10
Electives (Group III) ...................................... 0-10
Electives (Groups V-VI) ................................... 6
Human Growth and Development 251 .................... 3
Physical Education ........................................... 1

Summer

Coordinated Retail Experience 300 ....................... 2

Fourth Year

Principles of Vocational Education 470 (E100) .......... 2
Methods of Teaching Distributive Subjects 473 (E103a) 2
Coordination of Vocational Education 575 (E106) ....... 2
Introduction to Directed Teaching 351 .................. 3
Directed Teaching 370A .................................... 8
Laboratory in Education 370B ............................. 4
Physical Education ........................................... 1
Electives ...................................................... 9

VOCA TIONAL OFFICE TRAINING CURRICULUM

B.S. Degree

State Secondary Provisional Certificate

(For preparation of teachers and coordinators of Vocational Office Training Graduates are qualified to teach and coordinate in reimbursed Vocational Education Programs.)

The prerequisites to admission to this curriculum are:

1. Junior year standing and completion of a two-year terminal program in office training.
2. Completion of a minimum of 4 semester hours in office training courses.
3. Satisfactory evidence of having had one year of work experience in an office. A minimum of two years of approved office experience is required for graduation.

Courses required unless previously taken to meet minimum group requirements:
### SPECIAL EDUCATION CURRICULUM

#### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Correspondence 232</td>
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<td>Electives (Group II)</td>
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<td>Human Growth and Development 251</td>
<td>3</td>
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<tr>
<td>Physical Education</td>
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**Summer**

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Coordinated Office Experience 300</td>
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#### Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Principles of Vocational Education 470</td>
<td>2</td>
</tr>
<tr>
<td>Methods of Teaching Business Subjects 346</td>
<td>2</td>
</tr>
<tr>
<td>Coordination of Vocational Education 575</td>
<td>2</td>
</tr>
<tr>
<td>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
<tr>
<td>Directed Teaching 370A</td>
<td>8</td>
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<tr>
<td>Laboratory in Education 370B</td>
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<td>Physical Education</td>
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<tr>
<td>Electives</td>
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### INDUSTRIAL SUPERVISOR CURRICULUM

**B.S. Degree**

A four-year curriculum designed for students wishing to prepare themselves for such positions as foremen, shop supervisors, personnel officers, educational directors, and other administrative positions in industry.

To be eligible for admittance to this curriculum, a student must have satisfactorily completed a two-year industrial technical course in one of the following areas: radio, machine shop, drafting, automotive maintenance, aircraft mechanics, refrigeration and air conditioning, or printing.

#### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
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<tbody>
<tr>
<td>Communications 104A and B or Rhetoric 106A and B, and Speech 105</td>
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<tr>
<td>General Psychology 200</td>
<td>3</td>
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<td>Psychology of Personality 207</td>
<td>4</td>
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<tr>
<td>Introduction to Contemporary Society 101A and B</td>
<td>6</td>
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<tr>
<td>Foremanship Training 353</td>
<td>2</td>
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<tr>
<td>Business Correspondence 232 or Report Writing 233</td>
<td>3</td>
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<tr>
<td>Electives</td>
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Fourth Year

Occupational Analysis and Classification 404 ........................................... 2
Personnel Administration 336 ................................................................. 3
Business Administration 321 ................................................................. 3
Labor Problems 325A and B ................................................................. * 4
Effective Home Life 145 ............................................................................... 3
Industrial Cost Accounting 316A and B ...................................................... 4
Time Study and Job Analysis 354 ............................................................... 3
Plant Maintenance 355 ............................................................................... 2
Production Control 356 ............................................................................... 3
Electives ........................................................................................................ 5

Total of 124 semester hours for graduation.

1. Major—30 to 35 semester hours in technical shop work.
2. First minor—15 hours in industrial supervision.
3. Second minor—15 hours in social studies, economics, or mathematics.

*Twenty or more hours are required in the Division. The subjects selected must be taken at least from two departments within the Division.

RURAL ELEMENTARY CURRICULUM (Two Years)†

Two-year—62 semester hours—curriculum which satisfactorily completed meets requirements for the State Limited Certificate which is valid for three years "and qualifies holder to teach in any Primary School District, or in any Graded School District not maintaining grades above the eighth."‡

This curriculum includes the foundation courses for the degree, and students are encouraged to complete one of the four-year rural curricula—elementary or secondary—at the earliest possible time.

<table>
<thead>
<tr>
<th>Group I. English¹</th>
<th>Rhetoric 106A (in addition)</th>
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<td>Group III. Social Science³</td>
<td>Rural Sociology 220</td>
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<tr>
<td></td>
<td>Rural Economics 230</td>
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<td></td>
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<tr>
<td></td>
<td>Elective</td>
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<tr>
<td>Group IV. Education⁴</td>
<td>Curriculum 140</td>
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<td>Introduction to Directed Teaching 240</td>
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<tr>
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<td>Directed Teaching 241</td>
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<tr>
<td></td>
<td>Rural School Administration 340</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

†Semester Hours

‡Twenty or more hours are required in the Division. The subjects selected must be taken at least from two departments within the Division.

³This curriculum includes the foundation courses for the degree, and students are encouraged to complete one of the four-year rural curricula—elementary or secondary—at the earliest possible time.
Groups V and VI. Fine and Practical Arts

Fine Arts
Practical Arts

Group VII. Physical Education

Electives

Note. This "limited-time" curriculum is necessary because of the acceptance of a double standard, despite the call for equal educational opportunity, in the professional preparation of teachers for rural and urban schools. It has been arranged to assist students in obtaining as broad and, at the same time, as specific and practical a professional preparation for working with children in farm and rural non-farm communities, as is possible in a period of two years.

At least one-half—30 semester hours—of this curriculum must be chosen from courses in groups I, II, and III. Provision has been made for a flexibility of choice, under the guidance of the departmental counselor, among both group and general electives that will facilitate individualization on the basis of the personal and professional needs and interests of each student. In keeping with certification requirements "all courses must be appropriate to the education of elementary teachers." For most students the preferred choices would be made from among the courses in the different groups as listed below.

1. Fundamentals of Speech 105A; American Literature 221A, 221B; Literature for Children 202.
2. Rural School Agriculture 105; Teaching of Elementary Science 203; Nature Study 231A or Nature Study 231B; Human Geography 105A; Health Education 285.
3. United States History 201B and "... a course of six one hour lectures or the equivalent shall be given in political science..."—Michigan School Laws, Section 898: Revision of 1940.
4. Arithmetic 101; Psychology of Reading 212; Human Growth and Development 251. Those selected students permitted to do Directed Teaching 241 in the field while in residence there for six weeks receive 5 instead of 4 semester hours credit.

These electives may well be chosen from the preferred courses listed in the above notes (1 to 6) not used to meet minimum group requirements, supplemented if necessary from such courses as follows: Rhetoric 106B; Fundamentals of Speech 106B; Reading Interests of Children 202; Literary Interpretation 210; The Familiar Essay 212; The English Bible 218A, 218B; Principles of Speech Correction 231; Regional Geography 105B; Physical Science 100A, 100B; United States History 201A; Illustrative Handwork 107.


DEGREES IN RURAL LIFE AND EDUCATION

Elementary or Secondary Degree Curricula with major attention given to preparation for work in rural communities: The Rural Elementary Curriculum (two-year) includes foundation courses for the degree, and students are encouraged to complete one of the four-year rural curricula—elementary or secondary—at the earliest possible time. Additional courses, as well as counsel, are provided by the Department of Rural Life and Education for those wishing further professional specialization as teachers, principals, superintendents, county superintendents or school supervisors (helping teachers) in rural communities—open country, village, or town.

Students preparing to work in the elementary schools choose four minors (or a group major and two minors) and additional courses from among both group and general electives, with thought to individualization on the basis
of personal and professional needs. They become familiar with the grades and subject areas of the entire elementary field.

Students preparing to work in the secondary schools choose majors, minors, and additional subject matter areas with thought to the variety of teaching and extra-curricular demands to be met in the smaller high schools. Majors (24 semester hours) and minors (15 semester hours) in Rural Life and Education are provided further to facilitate students choosing from among those courses (p. —) that will in their judgment most nearly prepare them to serve both personally and professionally in schools in rural communities. These majors and minors are open to students whether or not they are enrolled in either the rural elementary or the rural secondary degree curricula.

Those preparing to serve rural people in the several professions and service occupations other than teaching will find considerable basic work in these curricula. For them, as well as for degree students preparing to work in either elementary or secondary school positions, advanced courses in rural education and rural life are offered.

### III. PRE-PROFESSIONAL, NON-TEACHING PROFESSIONAL, AND COMBINED CURRICULA

Professional schools have prescribed more or less definitely the nature of college work prerequisite to professional training. The amount of college training required by universities for the various professions has in late years been materially increased. A number of professions are now on the graduate level; that is, a college degree must be presented before one may enter upon the study of these professions.

For the most part, the additional college work now required is of a cultural nature, or is definitely preparatory to professional courses to be taken later.

Pre-professional curricula have been developed in Business Administration, Dentistry, Engineering, Forestry, Journalism, Law, Medicine, and Social Work. In addition to the standard pre-professional curricula, combined curricula have been arranged with the various professional schools of certain colleges and universities. In these curricula, the student, after completing the three-year curriculum as outlined, may apply for admission to the professional school or college of which he has met the requirements. If admitted, the student will, after a year of successful work in the professional school, be granted the A.B. or B.S. degree by Western Michigan College of Education, providing all requirements for the bachelor's degree have been satisfied.

The professional schools and colleges with which Western Michigan College of Education has agreements concerning combined curricula reserve the right to refuse admission. If the student contemplates entering some college or university other than those with which combined curricula have been arranged, he should procure a catalog of the institution he plans to attend, to assist the advisers in mapping out his course. A minimum of two
years in residence including the junior year is required for the bachelor's degree in the combined curricula. Combined curricula have been arranged with the Schools of Dentistry, Engineering, Business Administration, and Forestry of the University of Michigan. There are also combined curricula with the College of Medicine, Wayne University; the College of Law, University of Illinois; the Schools of Commerce and Journalism of Northwestern University; Nursing with Bronson Hospital; and Medical Technology with the Michigan Department of Health and Bronson Hospital.

AGRICULTURE

The completion of the courses outlined below will permit the student to enter the junior year at Michigan State College for the bachelor's degree in Agricultural Science and the certificate for the teaching of vocational agriculture in the secondary schools of Michigan.

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106 A, B</td>
<td>6</td>
</tr>
<tr>
<td>General Biology, 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Animal Husbandry, 106, 107, 108</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Elective (to be selected from United States History 201A, B; Trigonometry and College Algebra 103A; or Trigonometry 100C)</td>
<td>9-10</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry 100A, B, or 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>Farm Crops 202</td>
<td>3</td>
</tr>
<tr>
<td>Soils 201</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Horticulture 203</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Elective (to be selected from Principles of Economics 220A, B; Bacteriology 212A; Surveying 210; or United States History 210A, B)</td>
<td>8-10</td>
</tr>
</tbody>
</table>

BUSINESS ADMINISTRATION

Western Michigan College confers a B.S. or an A.B. degree upon completion of the major and minor requirements of the Business Administration Curriculum described later.

The pre-professional program presented below is designed mainly for those students who are anticipating transferring to the School of Business
Administration at some university or college, particularly those who transfer to the professional schools at the University of Michigan or Northwestern University. It cannot be emphasized too strongly that the student should exercise care to see that specific requirements for admission to a particular school have been met.

<table>
<thead>
<tr>
<th>First Year</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Trigonometry and College Algebra 103A, College Algebra and Analytic Geometry 103B</td>
<td>10</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>College Algebra and Analytic Geometry 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>Language or Literature</td>
<td>6-8</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Introduction to Contemporary Society 101A, B</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Elective</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 210A, B</td>
</tr>
<tr>
<td>Principles of Economics 220A, B</td>
</tr>
<tr>
<td>Introduction to Statistics 211, or Science</td>
</tr>
<tr>
<td>Language or Literature</td>
</tr>
<tr>
<td>Office Machines 230A, or Business Electives</td>
</tr>
<tr>
<td>Physical Education</td>
</tr>
<tr>
<td>Elective</td>
</tr>
</tbody>
</table>

**DENTISTRY**

(Combined Curriculum in Letters and Dentistry)

<table>
<thead>
<tr>
<th>First Year</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>General Biology 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>*Elective</td>
<td>16</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry 100A, B, or 101A, B</td>
</tr>
<tr>
<td>Mechanics, Heat, and Sound 203A, Electricity and Light 203B</td>
</tr>
<tr>
<td>Physical Education</td>
</tr>
<tr>
<td>Elective</td>
</tr>
</tbody>
</table>
### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organic Chemistry 306A, B</td>
<td>8</td>
</tr>
<tr>
<td>Elective</td>
<td>22</td>
</tr>
</tbody>
</table>

*In the selection of electives the student should plan to meet the General Degree requirements in Groups I, II, and III.

### Engineering

(Combined Curriculum in Letters and Engineering)

University of Michigan

#### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Trigonometry and College Algebra 103A, College Algebra and Analytic Geometry 103B</td>
<td>10</td>
</tr>
<tr>
<td>College Algebra and Analytic Geometry 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>General Chemistry 100A, B, or 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>Mechanical and Machine Drawing 221</td>
<td>3</td>
</tr>
<tr>
<td>Descriptive Geometry 222</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Elective</td>
<td>3-4</td>
</tr>
</tbody>
</table>

#### Second Year

Chemical and Metallurgical

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus 205A, B</td>
<td>8</td>
</tr>
<tr>
<td>Mechanics, Heat, and Sound 203A, Electricity and Light 203B</td>
<td>8</td>
</tr>
<tr>
<td>Problems 204A, B</td>
<td>2</td>
</tr>
<tr>
<td>Engineering Materials 210</td>
<td>3</td>
</tr>
<tr>
<td>Qualitative Analysis 201, Quantitative Analysis 202</td>
<td>8</td>
</tr>
<tr>
<td>Metal Processing 211</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Third Year

Chemical and Metallurgical

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Organic Chemistry 306A, B</td>
<td>8</td>
</tr>
<tr>
<td>Language (German preferred)</td>
<td>8</td>
</tr>
<tr>
<td>Statics 320</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A</td>
<td>3</td>
</tr>
<tr>
<td>Social Science electives</td>
<td>6</td>
</tr>
<tr>
<td>Elective</td>
<td>6-8</td>
</tr>
</tbody>
</table>
Second Year

Aeronautical, Civil, Electrical, Marine, and Mechanical

Calculus 205A, B ............................................. 8
Mechanics, Heat and Sound 203A, Electricity and Light 203B .......... 8
Problems 204A, B ........................................... 2
Engineering Materials 210 .................................... 3
Metal Processing 211 ......................................... 2
Fundamentals of Speech 105A .................................. 3
Physical Education ............................................. 1
Electives from Group I ......................................... 6-8

Third Year

Aeronautical, Civil, Electrical, Marine, and Mechanical

Principles of Economics 220A, B .................................. 6
Foreign Language ................................................. 8
or
Electives from Group III ......................................... 6
Differential Equations 321 or elective ................................ 3
Statics 320 or elective .......................................... 3
Theoretical Mechanics 425 or elective ............................... 3
Electives to total ................................................. 34

Note.—1. Language requirement: one year of a foreign language is required unless two
years of a single foreign language were presented for entrance.
2. All students must have 12 semester hours in Group III (Social Science), includ-
ing two hours of political science.
3. Electives: Differential Equations 321 is required in Aeronautical Engineering,
Electrical Engineering, and Engineering Mechanics. Geology 230 should be elected in
the third year of the Civil Engineering curriculum.
4. Civil Engineering requires Surveying.

FORESTRY

(Combined Curriculum in Letters and Forestry)
University of Michigan

First Year

Semester

Rhetoric 106A, B ................................................. 6
General Biology 100A, B ......................................... 8
Trigonometry and College Algebra 103A, B, or College Algebra and
Analytic Geometry 104A, B ...................................... 8-10
General Mechanical Drawing 120 ................................ 2
Physical Education ................................................. 1
Elective (to be selected from Literature or Language or Geography
225) ................................................................. 4-6

Second Year

General Chemistry 100A, B, or 101A, B ................................ 8
Botany 221A, B ..................................................... 8
JOURNALISM

Principles of Economics 220A, B .............................................. 6
Physics 205A .................................................................................. 4
Physical Education .......................................................................... 1
Elective (to be selected from Physics 205B; Botany 222; Speech 105A, B; Sociology 241, 242; Literature or Language) .................. 8

Third Year

General Geology 230A, B .............................................................. 6
Surveying 210 .................................................................................. 3
Elective (to be selected from American Government 230, American State and Local Government 231; Geology 230A, B; Organic Chemistry 306A, B; Zoology 242A, B; Geography 312 or 325; Geology 332 or 335) .................................................. 24

JOURNALISM

(Approved by the University of Michigan, Michigan State College and Northwestern University as part of requirement toward degree in Journalism)

First Year

Rhetoric 106A, B ........................................................................... 6
General Biology 100A, B ................................................................. 8
or
General Chemistry 100A, B, or 101A, B ............................................. 8
United States History 201A, B ......................................................... 6
French, German, or Spanish 100A, B .................................................. 8
Physical Education ........................................................................... 1
Elective .............................................................................................. 2-3

Second Year

Chief American Poets 121 or American Prose 122 ......................... 3
General Psychology 200 ................................................................... 3
Principles of Sociology 241 ............................................................... 3
Modern Social Problems 242 ............................................................ 3
American National Government 230 ................................................ 3
American State and Local Government 231 ..................................... 3
Principles of Economics 220A, B ....................................................... 6
Economic History of the United States 312 ........................................ 3
Physical Education ........................................................................... 1
Elective .............................................................................................. 3-4

Note.—1. Since journalists are using the typewriter constantly, it is of great advantage to the student to acquire facility in typing. It is strongly recommended that the student who is not already a proficient typist take a course in typewriting.
2. Northwestern University requires a reading knowledge of a modern language or two years of college work, in one language.
LAW
(Combined Curriculum in Letters and Law)
College of Law, University of Illinois

The College of Law requires at least 90 semester hours of pre-law work, exclusive of physical education.

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>8-10</td>
</tr>
<tr>
<td>or Laboratory Science</td>
<td>8</td>
</tr>
<tr>
<td>English History 109A, B</td>
<td>6</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Literature 107A, B</td>
<td>6</td>
</tr>
<tr>
<td>or Shakespeare 214A, B</td>
<td>6</td>
</tr>
<tr>
<td>United States History 201A, B</td>
<td>6</td>
</tr>
<tr>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Accounting 210A, B</td>
<td>6</td>
</tr>
<tr>
<td>General Psychology 200 (University of Michigan)</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>American National Government 230</td>
<td>3</td>
</tr>
<tr>
<td>American State and Local Government 231</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>Modern Social Problems 242</td>
<td>3</td>
</tr>
<tr>
<td>Public Finance 320</td>
<td>3</td>
</tr>
<tr>
<td>Elective (to be selected from Speech 105A, B; Money and Credit 221A, B; language or literature, or laboratory science)</td>
<td>1-5</td>
</tr>
</tbody>
</table>

Note.—An average scholarship of 3.5 points is required by the University of Illinois Law School.

MEDICINE
University of Michigan Medical School

The Medical School requires 90 semester hours of pre-medical work from an accredited college. An average scholarship of one and three-quarters honor points is required. The college pre-medical requirements must include the following:
Wayne University College of Medicine  
(Combined Curriculum in Letters and Medicine)

The Medical School requires 90 semester hours of pre-medical work from an accredited college.

**First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>General Biology 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>General Chemistry 100A, B, or 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>French or German</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Literature 107A</td>
<td>3</td>
</tr>
<tr>
<td>Mechanics, Sound, and Heat 203A, Electricity and Light 203B</td>
<td>8</td>
</tr>
<tr>
<td>Qualitative Analysis 201, Quantitative Analysis 202</td>
<td>8</td>
</tr>
<tr>
<td>French or German</td>
<td>8</td>
</tr>
<tr>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>

**Third Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Literature 107B</td>
<td>3</td>
</tr>
<tr>
<td>Organic Chemistry 306A, B</td>
<td>8</td>
</tr>
<tr>
<td>Principles of Economics 220A, B</td>
<td>8</td>
</tr>
<tr>
<td>Principles of Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>Vertebrate Embryology 342</td>
<td>4</td>
</tr>
<tr>
<td>Anatomy 211A</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
</tbody>
</table>

**Note.**—1. Application for admission to a College of Medicine should be made one year in advance of the time the student intends to enter the College of Medicine.

2. Credit in trigonometry must be presented before the student may begin the study of physics.
MEDICAL TECHNOLOGY

B.S. Degree

The first three years of this curriculum meet the scholastic requirements for admission to the laboratory training school of the Michigan Department of Health and of the Registry of the American Society of Clinical Pathologists. Upon successful completion of the fourth year, the student may be granted the degree of Bachelor of Science, if all requirements have been satisfied for a general degree.

First Year

| Rhetoric 106A, B | 6 |
| Mathematics | 5 |
| Trigonometry and College Algebra 103A, unless the student has met this requirement in high school. | |
| General Chemistry 100A, B, or 101A, B | 8 |
| Physical Education | 1 |
| Electives in Groups I, II, III | 11 |

Second Year

| Qualitative Analysis 201 | 4 |
| Quantitative Analysis 202 | 4 |
| Bacteriology 312A | 4 |
| Zoology 242B | 4 |
| Physical Education | 1 |
| Electives from Groups I, III | 14 |

Third Year

| Mechanics, Sound, and Heat 203A | 4 |
| Organic Chemistry 306A | 4 |
| Bio-Chemistry 350, 351 | 3 |
| Physiology 211B | 4 |
| Electives from Groups I, II, III | 15 |

Fourth Year

| Medical Technology 335 (400) | 30 |

During the fourth year, the student registers for Medical Technology 335 (400), a twelve months' course given in the laboratory training school of the Michigan Department of Health and/or approved hospital training schools. If student plans to affiliate with Bronson Hospital Training School, he is asked to take an aptitude test at Western Michigan College's Psycho-Educational Laboratory. Fee—$10.00.
GENERAL DEGREE WITH A MAJOR IN NURSING

B.S. Degree

Upon completion of a two-year program meeting degree requirements at the college, graduation from an accredited school of nursing and qualifying as a registered nurse, the student may become eligible for a Bachelor of Science degree with a major in nursing.

A student applying for admission to this curriculum must meet the following entrance requirements:

1. An approved pattern of subjects from an accredited high school which conforms to the requirements as established by the Michigan State Board of Education.
2. Minimum units in high-school science must be presented as follows: Chemistry, 1 unit; General Biology, 1 unit or Physics, 1 unit.
3. Must stand in the upper one-half of the high school graduating class.
4. Every applicant must take a college ability test before a final recommendation on admission will be made.
5. The student may apply for affiliation with an accredited school of nursing of her own choice for her professional training.*

Minimum required program includes:

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Science</td>
<td>12-16</td>
</tr>
<tr>
<td>Biology 100A, B; Chemistry 100A, B or 101A, B; or, other science courses approved by counselor</td>
<td>8</td>
</tr>
<tr>
<td>Foundations Western Civilization 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>or Introduction to Contemporary Society 101A, B</td>
<td>6</td>
</tr>
<tr>
<td>Government 231 (or equivalent)</td>
<td>3</td>
</tr>
<tr>
<td>Literature or Language</td>
<td>12</td>
</tr>
<tr>
<td>Sociology</td>
<td>6</td>
</tr>
<tr>
<td>General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>To Total 124</td>
</tr>
</tbody>
</table>

(Semester Hours)

(See p. 100 for details re: minors and other specific degree requirements.)

*Bronson Hospital, Kalamazoo, students receive their basic science courses on the campus at Western. They may take either one or two years of college work before entering Bronson School of Nursing, or complete their college work for a degree after three years in the School of Nursing.
### OCCUPATIONAL THERAPY

**B.S. Degree and/or Diploma**

A curriculum which, satisfactorily completed, meets the requirements of the Council on Medical Education and Hospitals of the American Medical Association and the American Occupational Therapy Association. Graduates of this course are entitled to take the examination for registration in the American Occupational Therapy Association.

#### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A</td>
<td>3</td>
</tr>
<tr>
<td>General Biology 100A</td>
<td>4</td>
</tr>
<tr>
<td>Elementary Design 215</td>
<td>3</td>
</tr>
<tr>
<td>Ceramics and Jewelry 225</td>
<td>2</td>
</tr>
<tr>
<td>Printing 144</td>
<td>3</td>
</tr>
<tr>
<td>Art Structure 106</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Elective from Group I</td>
<td>3</td>
</tr>
<tr>
<td>O. T. General Shop 167</td>
<td>3</td>
</tr>
<tr>
<td>Nature Study 231A or B</td>
<td>4</td>
</tr>
</tbody>
</table>

#### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy 211A</td>
<td>4</td>
</tr>
<tr>
<td>Physiology 211B</td>
<td>4</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Theory of Occupational Therapy 210A, B</td>
<td>4</td>
</tr>
<tr>
<td>O. T. Special Education Shop 308</td>
<td>3</td>
</tr>
<tr>
<td>Therapeutic Crafts 220</td>
<td>2</td>
</tr>
<tr>
<td>Stitchery 223</td>
<td>3</td>
</tr>
<tr>
<td>Minor Crafts 226</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Third and Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinesiology 216A</td>
<td>2</td>
</tr>
<tr>
<td>Applied Kinesiology 216B</td>
<td>2</td>
</tr>
<tr>
<td>Theory of O. T. 310B</td>
<td>3</td>
</tr>
<tr>
<td>Abnormal Psychology 305</td>
<td>3</td>
</tr>
<tr>
<td>Political Science</td>
<td>2-3</td>
</tr>
<tr>
<td>Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>Literature for Children 203</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Speech Correction 230 or Principles of Speech Correction 231</td>
<td>3</td>
</tr>
<tr>
<td>Theory of Occupational Therapy 310A</td>
<td>2</td>
</tr>
<tr>
<td>Weaving 328</td>
<td>4</td>
</tr>
</tbody>
</table>
SOCIAL WORK

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing 203</td>
<td>2</td>
</tr>
<tr>
<td>Recreational Therapy 222</td>
<td>2</td>
</tr>
<tr>
<td>Elective from Group III</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>8</td>
</tr>
<tr>
<td>Neurology and Psychiatry 330</td>
<td>3</td>
</tr>
<tr>
<td>Hospital Case Studies 352</td>
<td>3-4</td>
</tr>
<tr>
<td>Clinical Training</td>
<td>5</td>
</tr>
</tbody>
</table>

Note.—1. Thirty semester hours of college credit (as listed in first year above) must be earned before the student is admitted to the Department of Occupational Therapy. This admittance is based on the approval of the applicant by the Coordinating Committee of the department, on the basis of general aptitude for the work and the scholastic record submitted with the special application blank.

2. A portion of the nine months of clinical training may be taken between the third and fourth years.

3. Students who already have earned a college degree may enroll for a shortened course including two semesters on campus and nine months of clinical training. The course for these students is adjusted to fit their needs.

SOCIAL WORK

A.B. or B.S. Degree with Certificate in Social Work

Satisfactory completion of the courses in this curriculum is required for the Certificate in Social Work. In addition the student must take whatever courses are needed to satisfy the group and general education requirements for the A.B. or B.S. degree.

<table>
<thead>
<tr>
<th>First Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A</td>
</tr>
<tr>
<td>General Biology 100A, B</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100A, B or Introduction to Contemporary Society 101A, B, or equivalent</td>
</tr>
<tr>
<td>Physical Education</td>
</tr>
<tr>
<td>Electives</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Psychology 200</td>
</tr>
<tr>
<td>Psychology of Personality 209 or Introduction to Mental Hygiene 235, or Human Growth and Development 251</td>
</tr>
<tr>
<td>Principles of Sociology 241</td>
</tr>
<tr>
<td>Modern Social Problems 242</td>
</tr>
<tr>
<td>Social Psychology 243</td>
</tr>
<tr>
<td>Principles of Economics 220A, B</td>
</tr>
<tr>
<td>Physical Education</td>
</tr>
<tr>
<td>Electives</td>
</tr>
</tbody>
</table>
Third Year

The Field of Social Work 255 .................................................................................. 2

Any three of the following sociology courses:

- Rural Sociology 220 .......................................................................................... 3
- Marriage and the Family 345 ............................................................................. 3
- Juvenile Delinquency 246 .................................................................................. 3
- Cultural Anthropology 248 ............................................................................... 3
- Urban Community 340 ....................................................................................... 2
- Social Control 341 ............................................................................................. 2
- Criminology 342 ................................................................................................. 3
- Population 343 .................................................................................................... 3
- Race and Inter-group Relations 347 ................................................................. 2
- Contemporary Social Movements 349 ............................................................. 2
- American National Government 230 ............................................................... 3
- American State and Local Government 231 .................................................... 3
- Electives .............................................................................................................. 13-14

Fourth Year

Introduction to Social Research 348 .................................................................... 3
Family and Child Welfare 351 ............................................................................. 2
Social Legislation and Public Welfare 353 .......................................................... 3
Principles of Social Work 355 .............................................................................. 3
Orientation to Field Work 358A ......................................................................... 2
Supervised Field Work 358B .............................................................................. 3
Electives .............................................................................................................. 14

Note.—1. This curriculum conforms to the standards of the National Association of Schools of Social Administration. It is designed to prepare students for the lower levels of social-work positions, and for the civil service examinations required for employment in many public agencies. It also provides considerable pre-professional education for graduate training in social work. Graduates who continue in social work as a profession should plan to take, as early in their career as possible, one or two years of professional social-work training at the graduate level.

2. The required courses in this curriculum provide for a social science major of 34 or 35 semester hours and a minor in social work of 18 semester hours. Some 45 semester hours of elective courses are allowed. These electives should be used primarily to fulfill the requirements for the general degree and to strengthen the general education of the student. To meet the need of certain students for special skill, however, some electives from such the subjects as the following may well be considered. Elementary Typewriting 101A, Home and Its Management 222, Economics of Consumption 223, Community Recreation, Scouting, and Campfire 276, Laboratory and Psychological Testing 302, Clinical Psychology 309, Human Genetics 306, and Labor Problems 325A, B. Some students in their senior year may find it advisable also to elect some of the more specialized courses in social work offered in the Graduate Division.

MUSIC

B.M. Degree with a major in Voice*

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Voice 45A, B</td>
<td>6</td>
</tr>
<tr>
<td>Freshman Theory 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Elementary Acoustics 110</td>
<td>2</td>
</tr>
<tr>
<td>Course</td>
<td>Credits</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Piano Class 117A, B</td>
<td>2</td>
</tr>
<tr>
<td>English Diction and Song Literature 122A, B</td>
<td>0</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>8</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice 46A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Sight-Singing and Ear-Training 205A, B</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Harmony 206A, B</td>
<td>6</td>
</tr>
<tr>
<td>Music Literature 207A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Piano Class 217A, B</td>
<td>2</td>
</tr>
<tr>
<td>Italian Diction and Song Literature 222A, B</td>
<td>0</td>
</tr>
<tr>
<td>English Literature Electives</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
</tbody>
</table>

**Third Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice 47A, B</td>
<td>6</td>
</tr>
<tr>
<td>Counterpoint 305A, B</td>
<td>6</td>
</tr>
<tr>
<td>Composition 306A, B</td>
<td>6</td>
</tr>
<tr>
<td>Style and Structure 310A</td>
<td>3</td>
</tr>
<tr>
<td>Contemporary Music 310B</td>
<td>3</td>
</tr>
<tr>
<td>Conducting 311A, B</td>
<td>2</td>
</tr>
<tr>
<td>French Diction and Song Literature 322A, B</td>
<td>0</td>
</tr>
<tr>
<td>Elective</td>
<td>6</td>
</tr>
</tbody>
</table>

**Fourth Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice 48A, B</td>
<td>6</td>
</tr>
<tr>
<td>Orchestration 355A, B</td>
<td>6</td>
</tr>
<tr>
<td>History of Music 357A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Conducting 351A, B</td>
<td>2</td>
</tr>
<tr>
<td>German Diction and Song Literature 324A, B</td>
<td>0</td>
</tr>
<tr>
<td>Political Science 230, 231 or 234</td>
<td>2-6</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Social Science 101A, B</td>
<td>2-6</td>
</tr>
<tr>
<td>Elective</td>
<td>6-10</td>
</tr>
</tbody>
</table>

*A minimum of 12 and a maximum of 18 additional semester hours in subjects of academic and cultural value are required. The balance of credits offered toward the Bachelor of Music degree must be music credits, and should be determined with the major professor's assistance. The Bachelor of Music degree with a voice major requires of the student the ability to pass a piano examination on level 2.*
MUSIC

B.M. Degree with an Instrumental Major

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Major Performance, level 5, A, B</td>
<td>6</td>
</tr>
<tr>
<td>Freshman Theory 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Elementary Acoustics 110</td>
<td>2</td>
</tr>
<tr>
<td>Piano Class 117A, B</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>8</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Performance, level 6, A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Sight-Singing and Ear-Training 205A, B</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Harmony 206A, B</td>
<td>6</td>
</tr>
<tr>
<td>Music Literature 207A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Piano Class 217A, B</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>6</td>
</tr>
</tbody>
</table>

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Performance, level 7, A, B</td>
<td>6</td>
</tr>
<tr>
<td>Counterpoint 305A, B</td>
<td>6</td>
</tr>
<tr>
<td>Composition 306A, B</td>
<td>6</td>
</tr>
<tr>
<td>Style and Structure 310A</td>
<td>3</td>
</tr>
<tr>
<td>Contemporary Music 310B</td>
<td>3</td>
</tr>
<tr>
<td>Conducting 311A, B</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>6</td>
</tr>
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</table>

Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Performance, level 8, A, B</td>
<td>6</td>
</tr>
<tr>
<td>Major Performance Literature</td>
<td>0</td>
</tr>
<tr>
<td>Orchestration 355A, B</td>
<td>6</td>
</tr>
<tr>
<td>History of Music 357A, B</td>
<td>6</td>
</tr>
<tr>
<td>Political Science 230, 231 or 234 or Social Science 101A</td>
<td>2-6</td>
</tr>
</tbody>
</table>

Elective                                                 | 8-12           |

*A minimum of 12 and a maximum of 24 additional semester hours in subjects of a general and cultural value are required. The balance of the credits offered toward the Bachelor of Music degree must be music credits and should be determined with the major professor's assistance. The Bachelor of Music degree with an instrumental major requires of the student the ability to pass a piano examination on level 2.
**MUSIC**

**B.M. Degree with a major in Composition***

<table>
<thead>
<tr>
<th>First Year</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td><strong>Applied Music</strong></td>
<td>4</td>
</tr>
<tr>
<td>Freshman Theory 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Elementary Acoustics 110</td>
<td>2</td>
</tr>
<tr>
<td>String Class 118A, B</td>
<td>2</td>
</tr>
<tr>
<td>Piano Class 117A, B</td>
<td>2</td>
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<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>14</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Music</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Sight-Singing and Ear-Training 205A, B</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Harmony 206A, B</td>
<td>6</td>
</tr>
<tr>
<td>Music Literature 207A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Piano Class 217A, B</td>
<td>2</td>
</tr>
<tr>
<td>Woodwind Class 219A, B</td>
<td>2</td>
</tr>
<tr>
<td>Style and Structure 310A</td>
<td>3</td>
</tr>
<tr>
<td>Contemporary Music 310B</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Music</td>
<td>6</td>
</tr>
<tr>
<td>Counterpoint 305A, B</td>
<td>6</td>
</tr>
<tr>
<td>Composition 306A, B</td>
<td>6</td>
</tr>
<tr>
<td>Conducting 311A, B</td>
<td>2</td>
</tr>
<tr>
<td>Brass Class 320A, B</td>
<td>2</td>
</tr>
<tr>
<td>Percussion Class 321</td>
<td>1</td>
</tr>
<tr>
<td>Elective</td>
<td>9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Music</td>
<td>6</td>
</tr>
<tr>
<td>Orchestration 355A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Composition 356A, B</td>
<td>6</td>
</tr>
<tr>
<td>History of Music 357A, B</td>
<td>6</td>
</tr>
<tr>
<td>Political Science 230, 231 or 234</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Social Science 101A, B</td>
<td>2-6</td>
</tr>
<tr>
<td>Elective</td>
<td>2-6</td>
</tr>
</tbody>
</table>

*The student will study applied music throughout his four-year course. He must study enough piano to pass an examination on level 2. A minimum of 12 and a maximum of 24 additional semester hours in subjects of a general cultural value are required. The balance of credits offered must be music credits and should be determined with the major professor's assistance.

**The student will be advised what course number to enroll for after he has taken his placement examination at the time of his original registration.
LIBRARIANSHIP

A.B. or B.S. Degree with a major in Librarianship
(For County Librarians)

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>General Biology 100A, B or General Chemistry 100A, B</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>6</td>
</tr>
<tr>
<td>Modern Language</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>2-3</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A, B</td>
<td>6</td>
</tr>
<tr>
<td>American State and Local Government 231</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Principles and Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>English</td>
<td>6</td>
</tr>
<tr>
<td>History</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

(Students may elect Reading Interest of Children 202, 3 semester hours.)

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Interests of Youth 302</td>
<td>3</td>
</tr>
<tr>
<td>Reading Interests of Children 202</td>
<td>3</td>
</tr>
<tr>
<td>Selection of Reading Materials 303</td>
<td>3</td>
</tr>
<tr>
<td>Organization of Library Materials 360</td>
<td>2</td>
</tr>
<tr>
<td>Reference Service 311</td>
<td>3</td>
</tr>
<tr>
<td>Cataloging and Classification 370</td>
<td>3</td>
</tr>
<tr>
<td>Story Telling 306</td>
<td>2</td>
</tr>
<tr>
<td>American Rural Government 332</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library in the Modern Community 362</td>
<td>2</td>
</tr>
<tr>
<td>Administration of County and Public Libraries 363</td>
<td>3</td>
</tr>
<tr>
<td>Discussion or Public Speaking</td>
<td>2</td>
</tr>
<tr>
<td>Curriculum Enrichment 305</td>
<td>3</td>
</tr>
<tr>
<td>Reading Interests of Adults 304</td>
<td>2</td>
</tr>
<tr>
<td>Library Observation and Practice 330</td>
<td>3</td>
</tr>
<tr>
<td>Electives (English or History)</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
</tr>
</tbody>
</table>

(A period of block practice in a county or city public library will be arranged.)
IV. VOCATIONAL AND PRACTICAL ARTS EDUCATION CURRICULA

Western Michigan College of Education accepts as one of its functions the training, on a pre-service as well as in-service basis, of teachers and other persons interested in acquiring technical instruction of a highly specialized character. At present there is a fairly wide range of instructional programs offered in Business Studies, Home Economics, and Industrial Education. The primary objective of these curricula is teacher education, but they also include training for vocational competency. Some of the courses of study are open to youths and adults whose academic background does not necessarily include subject matter sequences required for regular college admission. However, the student should present evidence of high school graduation, and recommendation of the high school principal.

BUSINESS STUDIES

The Department of Business Studies offers many and varied vocational and professional training opportunities in the field of business and industry.

The Business Education Curriculum prepares teachers for the following fields: Secretarial, Accounting, Salesmanship and Retailing, General Business, and Vocational Coordinators.

The Business Administration Curriculum: The student on the A.B. or B.S. degree level has the opportunity for preparation for vocational and professional positions in business and industry. The major vocational areas which the student may elect are: Accounting, Economics, General Business, Secretarial Administration, and the following management areas: Office Management, Personnel Administration, Sales Management, Retail Store Management, and Small Business Management.

Business Administration students may prepare for specific business and industrial openings by a careful selection of courses for their minors. A specific example would be preparation for office or sales work with a pharmaceutical firm. Courses in chemistry and related sciences would be a valuable background. Proper sequence of courses can be worked out with major and minor advisers.

The Technical Business Curriculum: For those who wish to attend college for only a two-year period, the Technical Business Curriculum provides opportunities for preparation for the many beginning occupations in business and industry in such fields as Clerical Accounting, Secretarial Training, General Business, Salesmanship, General Clerical and Small Business Management.

The Cooperative Curricula: The two-year Cooperative Retailing Program and Cooperative Secretarial Training Program are on a work-and-school basis. This gives the student an outstanding opportunity to meet, on a practical work-for-pay basis, the requirements of the full-time job for which he is preparing.
Western Michigan College is the designated teacher-education institution for distributive education. It has provided a qualified teacher-education service available to school, individual teachers, and coordinators who desire aid in the improvement of methods of instruction, or in planning more effective instructional materials.

It operates with the cooperation of the Office of Vocational Education, Department of Public Instruction.

Under the Michigan Plan for Vocational Education for the certification of vocational teachers, it is required that teachers, coordinators, and supervisors of business subjects carry out a program of educational upgrading. The subjects used for upgrading oneself to a higher level for certification may be used concurrently for graduate credit, leading to a master's degree from the Horace A. Rackham School of Graduate Studies, University of Michigan.

Western Michigan College recognizes homemaking education as an important phase of one's personal, family, and community life.

It prepares students to qualify as teachers of both non-vocational and vocational homemaking programs.

A two-year terminal curriculum is offered to students who are not interested in a four-year course. This program is planned to help young women who wish to make homemaking a career.

The Department of Home Economics also includes an approved four-year curriculum for dietitians.

Western Michigan College recognizes the important place that industrial arts assumes in the total program of general education.

The Industrial Education Department offers shop and professional courses for the training of teachers, supervisors, and administrators of industrial arts education.

The areas of instruction include metalwork, plastics, printing, drawing, woodwork, electricity, aviation, arts and crafts, general shop, farm shop, and auto maintenance.

All of the elementary courses are open to women.

This curriculum provides for a combination work-study program, specifically for the preparation of trade and industrial teachers. It leads to a B.S. degree, a secondary provisional certificate, and a vocational trade and industrial certificate. Coordinated practical work experience in industry or its equivalent is mandatory. It is necessary for a student to work a total of at least four years. In general, the type of industry selected is governed by the nature of the student's interest in the industrial phase which he expects to teach.
The current postwar years present a world of new inventions and technical processes, new achievements in the satisfaction of human wants, and new demands for competence in citizenship, home relationships, and community living.

To meet these needs, Western Michigan College has accepted as a fundamental policy the inclusion of both vocational and general education as basic to technical employment and community living.

Further, it includes a program of guidance, counseling and placement facilities, adequate standards of proficiency and accomplishment, and an adequately trained staff to discharge the pioneer responsibilities.

Certain specific principles have been adhered to in the organization of terminal industrial technical curricula, as follows:

1. These curricula are open to any recommended high-school graduate who has demonstrated his scholastic ability, and who shows sufficient maturity and aptitude to profit by such a program of study. Regular college-entrance requirements need not be met, but the student must have the recommendation of his high-school principal and the approval of the Department of Industrial Education.

2. Occupational preparation, largely industrial-technical in character, is recognized as the primary purpose and as the principal objective which prompts students to enroll in technical curricula.

3. Instruction is related to general fields, as well as in shop areas, and is given for the adequate personal, social, and occupational development of the individual.

Upon completion of any technical curricula, the student is granted a certificate of achievement issued by the Michigan State Board of Education.

The aviation program at Western Michigan College has been established for two specific purposes:

1. To provide occupational training for those expecting to enter the aviation field, and

2. To enable prospective and in-service teachers to secure a better understanding of the implications of the air age on our modern society.

This curriculum is four years in length, leading to a B.S. degree. It is designed to train students to manage and operate airports, and for various administrative, supervisory, and sales positions in the business field of aviation. It requires concentration in four areas—mechanics, pilot training, business administration, and airport operation. Sufficient work is given in mechanics to meet the requirements for a CAA airplane and/or engine mechanic's license. A minimum of 35 hours of flight training leading to a private pilot's license is required of all students.
Pilot Training

This is available to any student on campus, regardless of curriculum, who wishes to gain some flight experience, or secure a private, commercial, or instructor's license.

Aviation Teacher Education

The courses listed in this curriculum are intended for any elementary or secondary students preparing for teaching, who wish to learn some of the basic fundamentals of aviation and its effect on the social, economic, and political structure of the world at large. All teachers should have some understanding of aviation in order that they may better infuse pertinent aviation materials in the courses which they expect to teach.

Those who are particularly interested in aviation may secure a minor sequence in this area.

Industrial-arts students are especially urged to take one of the two minors required in aviation. For many students, one or two aviation courses are sufficient.

PULP AND PAPER TECHNOLOGY

This vocational and scientific curriculum is four years in length, leading to a B.S. degree. The purpose is to prepare students for work in the paper industry in the technical, manufacturing, sales, and executive areas. It is foundational in character, and provides for actual work experience during the summers in the paper mills. The plan provides for operating cooperatively through the use of an advisory committee composed of seven members from the industry and three from Western Michigan College. This curriculum is jointly sponsored by the Division of Vocational Education and the Department of Chemistry.

BUSINESS ADMINISTRATION

B.S. or A.B. Degree

An integrated curriculum requiring students to obtain a major in the Department of Business Studies and a minor in the Department of Economics, or a major in the Department of Economics while fulfilling the requirements of the Business Administration Curriculum. In addition to a minor in Economics a student under the Business Administration Curriculum must have a minimum of at least thirty semester hours in the field of Business Administration and a minimum of forty-eight hours in the fields of Business and Economics. Besides meeting the requirements of the curriculum as stated below, the student must plan to meet the general degree requirements for the degree desired. (See summary of general degree requirements elsewhere in this catalog.)
# BUSINESS ADMINISTRATION

## First and Second Years

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>*Business Statistics 235</td>
<td>3</td>
</tr>
<tr>
<td>Accounting Principles 210A, B</td>
<td>6</td>
</tr>
<tr>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Business Correspondence 232</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A, B</td>
<td>6</td>
</tr>
<tr>
<td>Language or Literature</td>
<td>6</td>
</tr>
<tr>
<td>**Math. Sequence A or B, or Bus. Math. 120A, B</td>
<td>4-8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives (See Major and Minor requirements)</td>
<td>6-20</td>
</tr>
</tbody>
</table>

## Third and Fourth Years

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Geography 218 or Physical Science 100A</td>
<td>3 or 4</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Survey of Business Insurance 322</td>
<td>3</td>
</tr>
<tr>
<td>American National Government 230 or</td>
<td></td>
</tr>
<tr>
<td>American State and Local Government 231</td>
<td>3</td>
</tr>
<tr>
<td>Economic History of the United States 312 or</td>
<td></td>
</tr>
<tr>
<td>Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>Business Law 320A, B</td>
<td>6</td>
</tr>
<tr>
<td>Management Principles 339</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives (See Major and Minor requirements)</td>
<td>29-32</td>
</tr>
</tbody>
</table>

### Majors in Business Administration

I. Accounting: Accounting 210A, B; Advanced Accounting 310A, B; Cost 311, Tax 312, Auditing 313, Accounting Theory and Problems 314. All courses listed are major requirements, and should be taken, insofar as possible, in the sequence listed. Students are admitted to a Major in Accounting only upon approval of the Accounting Staff.

Mathematics Minor required. Sequence A or B.

II. Air Transportation: (Students under the Air Transportation curriculum may major in Business Administration.)

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*Mathematics minors waive this requirement.

**Accounting majors are requested to take Mathematics, Sequence A or B.

Other majors in Business Administration may elect Mathematics, Sequence A or B.

Note.—1. Mathematics. Sequence A is based upon one or one and a half years of high-school algebra and one year of high-school geometry and consists of (a) Trigonometry and College Algebra 103A, B, ten hours, or College Algebra and Analytic Geometry 104A, B, eight hours; (b) Mathematics of Finance 227, three hours; (c) Mathematics of Insurance 225, two hours; (d) Statistics 209 or 211, three hours.

2. Mathematics. Sequence B is for those students who present at least one year, but less than two years, of high-school mathematics, and consists of (a) Introduction to College Mathematics 105A, B, eight hours; (b) Mathematics of Finance 227A, three hours, Mathematics of Finance 227B, two hours; (c) Statistics 209 or 211, three hours.
III. Economics: See Economics Department for fulfilling Economics Major.)

IV. General Business: Elect any sequence of courses from the Department of Business Studies which meets the students' vocational interests and needs.

V. Secretarial Administration: Secretarial Science 130A, B; Office Machines 230A, B; Office Organization and Management 239; Filing Techniques 103, Personnel Administration 336; Business Report Writing 233. (Required courses on the Business Administration Curriculum may be waived in order to meet the needs of the Secretarial Administration program.)

VI. Management:
1. Office Management: Accounting 310A and B or 311 and 312; Survey of Office Machines 230; Office Organization and Management 239; Personnel Administration 336; Filing Principles and Techniques 101; Proficiency in Typewriting or 101A and 101B; Business Report Writing 233. (Minor in Psychology recommended.)


3. Sales Management: Salesmanship 340; Sales Management 341; Credit Management 345; Real Estate Fundamentals 350; Advertising 342; Personnel Administration 336; Small Business Management 237; Purchasing 348.

4. Retail Store Management: Retail Salesmanship 150; Fundamentals of Retailing 140; Merchandise Information 151A or 151B; Retail Merchandise Mathematics 111; Retail Advertising 240; Retail Credit and Collections 241 or Credit Management 345.

5. Small Business Management: Salesmanship 340; Sales Management 341; Credit Management 345; Real Estate Fundamentals 350; Advertising 342; Personnel Administration 336.

TECHNICAL BUSINESS CURRICULA (Two Years)

The Technical Business Curricula have been specifically designed for those students who are planning on attending college for a two-year period. The program, which is designed to provide the student with an effective training for the many beginning occupations in business and industry, is divided into two major areas: the cooperative work-and-study programs now found in the Retailing Curriculum and the Secretarial Curriculum, and the regular college classroom programs. Although the enrollment in the cooperative curricula is limited, the student is urged to qualify for these fields whenever possible.

Any high-school graduate is eligible for admission to the Technical Business Curricula provided he has been recommended by his high-school principal. Students who wish to qualify for the cooperative program must meet
certain standards as established by the Division of Vocational Education. Courses taken either in the cooperative or non-cooperative programs may be applied toward degree requirements provided regular college-entrance requirements are met.

All graduates of the two-year Technical Business Curriculum receive a certificate indicating the field of specialization they have completed.

**General Requirements for All Enrollees on the Regular (Non-cooperative) Technical Business Curricula**

**First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Industrial and Business World 135</td>
<td>4</td>
</tr>
<tr>
<td>Business Mathematics 120</td>
<td>2</td>
</tr>
<tr>
<td>Principles of Accounting 210A, B</td>
<td>6</td>
</tr>
<tr>
<td>Business Correspondence 232</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Business Statistics 235</td>
<td>3</td>
</tr>
<tr>
<td>Survey of Business Insurance 322</td>
<td>3</td>
</tr>
<tr>
<td>Management Principles 339</td>
<td>3</td>
</tr>
<tr>
<td>Business Law 320A</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>12</td>
</tr>
</tbody>
</table>

**Fields of Specialization in Technical Business Curriculum**

1. Clerical Accounting: Select from Accounting 310A, B; Cost Accounting 311; Pay Roll and Social Security Accounting 215; Office Machines 230A, B; Business Law 320A, B; Office Management 239 or other Business Studies on consent of adviser; Proficiency in Typewriting or Typewriting 101A, B; Industrial Cost Accounting 316A, B.

2. General Business: Select courses in keeping with students' vocational interests with consent of counsellor.


4. Salesmanship: Personnel Administration 336; Salesmanship 340; Advertising 342; Small Business Management 237; Sales Management 341; Credit Management 345; Purchasing 348.

*Students who wish to elect the Technical Secretarial Training or Retail Curricula must, at the present time, qualify for the Cooperative work-study curricula described below. Since the enrollment in the work-study curricula is definitely limited, students should make application at least thirty days before the date of actual matriculation.
5. General Clerical, Office Machines 230A, B; Typewriting 101A, B; Filing Techniques 101; Office Organization and Management 239; Cost Accounting 311; Pay Roll and Social Security Accounting 215.

6. Small Business Management: Accounting 210A, B; Small Business Management 237; Real Estate Fundamentals 350; Personnel Administration 336; Credit Management 345; Advertising 342.

**COOPERATIVE PROGRAM IN RETAILING (Two Years)**

The work-study program in retailing embraces a two-year curriculum which combines classroom instruction at the College in the morning, and, with the cooperation of the merchants of Kalamazoo, employment for actual experience in the local stores during the afternoon and Saturday.

Students enrolled in this curriculum will have the opportunity, in addition to taking the specialized courses in retailing, to elect such other college courses as will fit their needs and as their schedules, abilities, and work programs will permit.

### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Salesmanship 150</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Retailing 140</td>
<td>3</td>
</tr>
<tr>
<td>Merchandise Information (Non-textiles) 151A</td>
<td>2</td>
</tr>
<tr>
<td>Business Mathematics 120</td>
<td>2</td>
</tr>
<tr>
<td>Rhetoric 106A</td>
<td>3</td>
</tr>
<tr>
<td>Color and Design in Retailing 142</td>
<td>3</td>
</tr>
<tr>
<td>Merchandise Information (Textiles) 151B</td>
<td>2</td>
</tr>
<tr>
<td>Retail Merchandise Mathematics 111</td>
<td>3</td>
</tr>
<tr>
<td>Business Correspondence 232</td>
<td>3</td>
</tr>
<tr>
<td>Coordinated Business Experience 100</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Credit and Collections 241</td>
<td>3</td>
</tr>
<tr>
<td>Store Organization 251</td>
<td>2</td>
</tr>
<tr>
<td>Retail Advertising 240</td>
<td>3</td>
</tr>
<tr>
<td>Retail Personnel Management 252</td>
<td>2</td>
</tr>
<tr>
<td>Industrial and Business World 135</td>
<td>4</td>
</tr>
<tr>
<td>Coordinated Business Experience 200A, B</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>12</td>
</tr>
</tbody>
</table>

**Recommended Electives:** Selling Fashion Merchandise 141, Selling Home Furnishings 242, Interior and Window Display (T) 224, Retail Accounting 211A, B, Retail Buying Techniques 243, Coordinated Business Experience 200A, B.
COOPERATIVE PROGRAM IN SECRETARIAL TRAINING (Two Years)

The work-study program in Secretarial Training embraces a two-year curriculum which combines classroom instruction at the College in the morning and employment for actual on-the-job experience in local offices during the afternoon of the student's sophomore year.

Students enrolled in this course will have the opportunity to elect such other college courses as will fit their needs and as their schedules, abilities, and work programs will permit. The advantages of social and cultural contacts of regular college students are open to all students on this program. The college and departmental placement offices are available in aiding the students to secure suitable full-time positions upon graduation.

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Industrial and Business World 135</td>
<td>4</td>
</tr>
<tr>
<td>Business Mathematics 120</td>
<td>2</td>
</tr>
<tr>
<td>*Secretarial Science 130A, B</td>
<td>10</td>
</tr>
<tr>
<td>Personal and Social Problems 120</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>**Electives</td>
<td>7</td>
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</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretarial and Accounting 211A, B</td>
<td>6</td>
</tr>
<tr>
<td>Introduction to Contemporary Society 101A, B</td>
<td>6</td>
</tr>
<tr>
<td>Office Machines 230A, B</td>
<td>4</td>
</tr>
<tr>
<td>Filing Principles and Techniques 101</td>
<td>2</td>
</tr>
<tr>
<td>Coordinated Business Experience 200A, B</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Elective</td>
<td>8</td>
</tr>
</tbody>
</table>

*Students who have not had shorthand or typewriting in high school should register for Shorthand and Typewriting 100A.

**Students should consult their faculty adviser before making their selections for electives.

HOME ECONOMICS DEPARTMENT

B.S. Degree

State Secondary Provisional Certificate and State Vocational Homemaking Certificate for Preparation of Home Economics Teachers

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing Clinic and Textiles 103</td>
<td>3</td>
</tr>
<tr>
<td>Elementary Design 105</td>
<td>2</td>
</tr>
<tr>
<td>Foods 111</td>
<td>3</td>
</tr>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Chemistry 105A, B</td>
<td>8</td>
</tr>
</tbody>
</table>
Problems of Consumers 142 .......................................................... 3  
Effective Home Life 145 ............................................................. 3  
Physical Education ..................................................................... 1  
Electives ................................................................................... 3 or 4

**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 100A</td>
<td>4</td>
</tr>
<tr>
<td>Clothing 205</td>
<td>3</td>
</tr>
<tr>
<td>Nutrition 211</td>
<td>3</td>
</tr>
<tr>
<td>Costume Design 209</td>
<td>2</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100A, B or</td>
<td>8</td>
</tr>
<tr>
<td>Introduction to Contemporary Society 101A, B</td>
<td></td>
</tr>
<tr>
<td>Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>Household Physics 202</td>
<td>2</td>
</tr>
<tr>
<td>Speech 106A or English</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
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</table>

**Home Economics major with a minor in Clothing**

**Third Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Furnishings 221</td>
<td>2</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Home Nursing 223</td>
<td>2</td>
</tr>
<tr>
<td>American National Government 230 or</td>
<td></td>
</tr>
<tr>
<td>State and Local Government 231</td>
<td>3</td>
</tr>
<tr>
<td>Home Management 322</td>
<td>2</td>
</tr>
<tr>
<td>Home Management Practice 324 (living in house)</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Foods 311</td>
<td>3</td>
</tr>
<tr>
<td>Family Clothing 305</td>
<td>2</td>
</tr>
<tr>
<td>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
<tr>
<td>Problems in Home Economics Education 300</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
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**Fourth Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing 306 (modeling)</td>
<td>2</td>
</tr>
<tr>
<td>Quantity Food Management 312</td>
<td>2</td>
</tr>
<tr>
<td>Tailoring 304</td>
<td>3</td>
</tr>
<tr>
<td>Directed Teaching 370A</td>
<td>8</td>
</tr>
<tr>
<td>Laboratory in Education 370B</td>
<td>4</td>
</tr>
<tr>
<td>General Educational Problems 370C</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>12</td>
</tr>
</tbody>
</table>
## Home Economics major with a minor in Foods

### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Home Furnishings 221</td>
<td>2</td>
</tr>
<tr>
<td>Food Chemistry 341</td>
<td>2</td>
</tr>
<tr>
<td>Home Nursing 223</td>
<td>2</td>
</tr>
<tr>
<td>American National Government 230 or State and Local Government 231</td>
<td>3</td>
</tr>
<tr>
<td>Home Management 322</td>
<td>2</td>
</tr>
<tr>
<td>Home Management Practice 324 (living in house)</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Foods 311</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Family Clothing 305</td>
<td>2</td>
</tr>
<tr>
<td>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
<tr>
<td>Food Demonstration 318</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>5</td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problems in Home Economics Education 300</td>
<td>3</td>
</tr>
<tr>
<td>Quantity Foods Management 312</td>
<td>2</td>
</tr>
<tr>
<td>Experimental Foods 319</td>
<td>2 or 3</td>
</tr>
<tr>
<td>or Advanced Nutrition 316</td>
<td>2 or 3</td>
</tr>
<tr>
<td>Directed Teaching 370A</td>
<td>8</td>
</tr>
<tr>
<td>Laboratory in Education 370B</td>
<td>4</td>
</tr>
<tr>
<td>General Educational Problems 370C</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>9 or 10</td>
</tr>
</tbody>
</table>

## General Home Economics Major

### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Home Furnishings 221</td>
<td>2</td>
</tr>
<tr>
<td>Home Nursing 223</td>
<td>2</td>
</tr>
<tr>
<td>Home Management 322</td>
<td>2</td>
</tr>
<tr>
<td>Home Management Practice 324 (living in house)</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Foods 311</td>
<td>3</td>
</tr>
<tr>
<td>Family Clothing 305</td>
<td>2</td>
</tr>
<tr>
<td>Elective in Home Economics</td>
<td>2 or 3</td>
</tr>
<tr>
<td>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
<tr>
<td>Problems in Home Economics Education 300</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>6 or 7</td>
</tr>
</tbody>
</table>
### Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>American National Government 230 or State and Local Government 231</td>
<td>3</td>
</tr>
<tr>
<td>Quantity Foods Management 312</td>
<td>2</td>
</tr>
<tr>
<td>Directed Teaching 370A</td>
<td>8</td>
</tr>
<tr>
<td>Laboratory in Education 370B</td>
<td>4</td>
</tr>
<tr>
<td>General Educational Problems 370C</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

### HOMEMAKING CURRICULUM (Two Years)

*(For Students who do not plan to get a degree)*

A diploma is issued at the completion of this course.

#### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Home Life 145</td>
<td>3</td>
</tr>
<tr>
<td>Clothing and Textiles 103</td>
<td>3</td>
</tr>
<tr>
<td>Food for the Family 218</td>
<td>2</td>
</tr>
<tr>
<td>Elementary Design 105</td>
<td>2</td>
</tr>
<tr>
<td>Rhetoric 106A</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A</td>
<td>3</td>
</tr>
<tr>
<td>Hygiene 112</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>13</td>
</tr>
</tbody>
</table>

*(To be selected from history, English, speech, business education, science, and home economics)*

#### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing 205</td>
<td>3</td>
</tr>
<tr>
<td>Costume Design 209</td>
<td>2</td>
</tr>
<tr>
<td>Everyday Nutrition 222</td>
<td>2</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>(Home Economics Section)</td>
<td></td>
</tr>
<tr>
<td>Home Furnishings 221</td>
<td>2</td>
</tr>
<tr>
<td>Home Nursing 223</td>
<td>2</td>
</tr>
<tr>
<td>State and Local Government 231 or Am. Nat. Gov. 230</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>13</td>
</tr>
</tbody>
</table>

*(To be selected from sociology, business education, speech, English, and home economics)*
## DIETETICS CURRICULUM

### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foods 111</td>
<td>3</td>
</tr>
<tr>
<td>Clothing 108</td>
<td>3</td>
</tr>
<tr>
<td>Elementary Design (art) 105</td>
<td>2</td>
</tr>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Chemistry 101A, B</td>
<td>6-8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>10-12</td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nutrition 211</td>
<td>3</td>
</tr>
<tr>
<td>Foods 311</td>
<td>3</td>
</tr>
<tr>
<td>Biology 100A</td>
<td>4</td>
</tr>
<tr>
<td>Organic Chemistry 206A</td>
<td>4</td>
</tr>
<tr>
<td>Accounting 210A</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 241, 242</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quantity Food Management 312</td>
<td>2</td>
</tr>
<tr>
<td>Food Chemistry 341</td>
<td>2</td>
</tr>
<tr>
<td>Bacteriology 212A</td>
<td>4</td>
</tr>
<tr>
<td>Anatomy 211A</td>
<td>4</td>
</tr>
<tr>
<td>Biochemistry 350, 351</td>
<td>3-4</td>
</tr>
<tr>
<td>Advanced Nutrition 316</td>
<td>3</td>
</tr>
<tr>
<td>American National Government 230</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>10-11</td>
</tr>
</tbody>
</table>

### Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diet and Disease 317</td>
<td>2</td>
</tr>
<tr>
<td>Institutional Management 323</td>
<td>3</td>
</tr>
<tr>
<td>Physiology 211B</td>
<td>3</td>
</tr>
<tr>
<td>Problems in Home Economics Education 300</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>19</td>
</tr>
</tbody>
</table>

Recommended minors: Chemistry and Combined Social Science. Each student is required to work twelve months in a hospital approved by the American Dietetics Association.

Recommended electives: Second year, Biology 100B; Third year, Home Management 322, Consumer Buying 339; Fourth year, Home Management Practice 324, Experimental Food Study 319, Housing and House Planning 321.
PULP AND PAPER TECHNOLOGY

(Vocational and Scientific Curriculum)

Sponsored Jointly by the Division of Vocational Education and the Department of Chemistry

B.S. Degree

This curriculum is intended to prepare students for work in the paper industry in the technical, manufacturing, sales, and executive areas. It is foundational in nature, and provides for actual work experience during the summers in the paper mills. It is expected that the student will work in the mills at least two of the three summers indicated. The plan operates cooperatively through the use of an advisory committee composed of six members from the industry and three members from Western Michigan College.

First Year

First Semester

<table>
<thead>
<tr>
<th>Rhetoric 106A</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Mathematical Analysis 103A or 104A</td>
<td>4-5</td>
</tr>
<tr>
<td>General Chemistry 100A or 101A</td>
<td>4</td>
</tr>
<tr>
<td>Mechanical Drawing 121 or 122</td>
<td>2-3</td>
</tr>
<tr>
<td>Orientation to Pulp Technology 130A</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Rhetoric 106B</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Mathematical Analysis 103B or 104B</td>
<td>4-5</td>
</tr>
<tr>
<td>General Chemistry 100B or 101B</td>
<td>4</td>
</tr>
<tr>
<td>Orientation to Pulp Technology 130B</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

Summer

| Mill Practice 131 | 2 |

Second Year

First Semester

| *Language and Literature | 4 |
| Calculus 205A | 4 |
| Mechanics, Sound, and Heat 203A | 5 |
| Qualitative Analysis 201 | 4 |
| Pulp Manufacture 230A | 2 |
| Physical Education | 1 |
# PULP AND PAPER TECHNOLOGY

## Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Language and Literature</td>
<td>4</td>
</tr>
<tr>
<td>Calculus 205B</td>
<td>4</td>
</tr>
<tr>
<td>Electricity and Light 203B</td>
<td>5</td>
</tr>
<tr>
<td>Quantitative Analysis 202</td>
<td>4</td>
</tr>
<tr>
<td>Paper Manufacture 230B</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
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</table>

### Summer

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mill Practice 231</td>
<td>2</td>
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</tbody>
</table>

## Third Year

### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Language and Literature</td>
<td>4</td>
</tr>
<tr>
<td>Organic Chemistry 306A</td>
<td>4</td>
</tr>
<tr>
<td>Pulp Testing 332A</td>
<td>2</td>
</tr>
<tr>
<td>Fiber Microscopy 333</td>
<td>1</td>
</tr>
<tr>
<td>Elements of Industrial Chemistry 334A</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>5</td>
</tr>
</tbody>
</table>

### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Language and Literature</td>
<td>4</td>
</tr>
<tr>
<td>Organic Chemistry 306B</td>
<td>4</td>
</tr>
<tr>
<td>Paper Testing 332B</td>
<td>2</td>
</tr>
<tr>
<td>Elements of Industrial Chemistry 334B</td>
<td>2</td>
</tr>
<tr>
<td>Wood Chemistry 335</td>
<td>2</td>
</tr>
<tr>
<td>Coloring and Filling of Paper 336</td>
<td>1</td>
</tr>
<tr>
<td>Sociology 241</td>
<td>3</td>
</tr>
</tbody>
</table>

### Summer

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mill Practice 331</td>
<td>2</td>
</tr>
<tr>
<td>Mill Inspection Trip 337</td>
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</tr>
</tbody>
</table>

## Fourth Year

### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Chemistry 303A</td>
<td>5</td>
</tr>
<tr>
<td>Economics 220A</td>
<td>3</td>
</tr>
<tr>
<td>Bleaching, Pulp Purification, and De-inking 432</td>
<td>2</td>
</tr>
<tr>
<td>Auxiliary Equipment for Pulp and Paper Mills 433</td>
<td>1</td>
</tr>
<tr>
<td>Thesis 436A</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
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### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Chemistry 303B</td>
<td>5</td>
</tr>
<tr>
<td>Economics 220B</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry and Technology of Plastics 434</td>
<td>2</td>
</tr>
</tbody>
</table>

*Recommended courses: Second year, German; Third year, German.*
Converting of Paper 435 .................................................. 1
Thesis 436B .................................................................. 2
Electives .................................................................... 4-5


AIRLINE HOSTESS CURRICULUM

B.S. Degree

A program for women desiring a practical educational background to qualify for airline hostess employment with commercial airlines. In addition to being high-school graduates, candidates for this curriculum must meet special airline physical requirements pertaining to height, eyesight, voice, and appearance.

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Speech 105A, B</td>
<td>6</td>
</tr>
<tr>
<td>Healthful Living 112</td>
<td>2</td>
</tr>
<tr>
<td>Business Mathematics 120</td>
<td>2</td>
</tr>
<tr>
<td>Human Geography 105A</td>
<td>4</td>
</tr>
<tr>
<td>Elementary Aviation 110</td>
<td>3</td>
</tr>
<tr>
<td>*Typing 101A, B</td>
<td>2-4</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
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</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Psychology (for nurses) 202</td>
<td>2</td>
</tr>
<tr>
<td>Psychology of Personality 207</td>
<td>4</td>
</tr>
<tr>
<td>Secretarial Accounting 211A, B</td>
<td>6</td>
</tr>
<tr>
<td>Office Machines 230A, B</td>
<td>4</td>
</tr>
<tr>
<td>First Aid 171</td>
<td>1</td>
</tr>
<tr>
<td>Foods for the Family 218</td>
<td>2</td>
</tr>
<tr>
<td>Meteorology and Navigation 302</td>
<td>3</td>
</tr>
<tr>
<td>Personality Development 224</td>
<td>3</td>
</tr>
<tr>
<td>The Airline Hostess 207</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

*Students who have had one or more years of typewriting in high school will not register for Typing 101A.

Students interested in taking stenography training may substitute Shorthand 101A, B, and Secretarial Science 130A, B.

Note.—Whenever practicable, students are urged to select Pilot Training and Flight Theory 214A or 214 D and one foreign language.
AIR TRANSPORTATION CURRICULUM

B.S. Degree

The Air Transportation Curriculum is a four-year course leading to a B.S. degree. It is designed to train students to manage and operate airports and for various administrative, supervisory, and sales positions in the business field of aviation. In addition to meeting the necessary requirements for a Bachelor of Science degree, the curriculum requires concentration in four areas—mechanics, pilot training, business administration, and airport operation. Sufficient work is given in mechanics to meet the requirements for a CAA airplane and engine mechanics license. A minimum of 35 hours of flight training leading to a private pilot's license is required of all students.

First Year

Rhetoric 106A, B ........................................ 6
Applied Mathematics 112 ................................ 3
Speech 105A ............................................. 3
Mathematics of Buying and Investment 200 .......... 2
Aircraft Structures 103 ................................ 2
Elementary Aviation 110 ................................ 3
Drawing 170A ........................................... 2
Engine Assembly and Disassembly 106 ................. 3
Physical Education ....................................... 2
Elective ................................................... 6

Second Year

Principles of Economics 220A, B .......................... 6
Accounting 210A ......................................... 3
General Psychology 200 ................................. 3
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology of Personality 207</td>
<td>4</td>
</tr>
<tr>
<td>Survey of American Government 234</td>
<td>2</td>
</tr>
<tr>
<td>*Business Statistics</td>
<td>3</td>
</tr>
<tr>
<td>Pilot Training and Flight Theory 214A</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Sheetmetal 102</td>
<td>2</td>
</tr>
<tr>
<td>Welding 274A</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Hydraulics and Instruments 200</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
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</table>

**Third Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Organization and Management 239</td>
<td>3</td>
</tr>
<tr>
<td>*Cost Accounting 311</td>
<td>3</td>
</tr>
<tr>
<td>Labor Problems 325A</td>
<td>2</td>
</tr>
<tr>
<td>Business Correspondence 232</td>
<td>3</td>
</tr>
<tr>
<td>*Tax Accounting 312</td>
<td>3</td>
</tr>
<tr>
<td>Radio Communications 301</td>
<td>2</td>
</tr>
<tr>
<td>Meterology and Navigation 302</td>
<td>3</td>
</tr>
<tr>
<td>Carburetion and Lubrication 104</td>
<td>2</td>
</tr>
<tr>
<td>Engine Overhaul 206</td>
<td>3</td>
</tr>
<tr>
<td>Electricity and Ignition 105</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>6</td>
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</tbody>
</table>

**Fourth Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Administration 336</td>
<td>3</td>
</tr>
<tr>
<td>Airport Selection and Layout 303</td>
<td>2</td>
</tr>
<tr>
<td>Air Traffic and Cargo 304</td>
<td>2</td>
</tr>
<tr>
<td>Airport Management 305</td>
<td>2</td>
</tr>
<tr>
<td>Air Line Administration 306</td>
<td>2</td>
</tr>
<tr>
<td>Control Tower Operation 307</td>
<td>2</td>
</tr>
<tr>
<td>Engine Operation 204</td>
<td>3</td>
</tr>
<tr>
<td>Aircraft Maintenance 203</td>
<td>3</td>
</tr>
<tr>
<td>Propellers 205</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>10</td>
</tr>
</tbody>
</table>

*The following courses may be substituted for the starred courses.
237 Small Business Management
340 Salesmanship
341 Sales Management
342 Advertising
345 Credit Management

Note: 1. Minimum of 128 semester hours. Two minors in any two of three fields, economics, psychology, and business administration. At least 12 semester hours from each of Groups I, II, III with a total of 42 semester hours in these groups.
2. The following courses are optional if a student does not intend to qualify for his CAA—A and E license; however, a major of at least 40 semester hours in aviation must be met.
203 Aircraft Maintenance
206 Engine Overhaul
104 Carburetion and Lubrication
274A Welding
AIRCRAFT MAINTENANCE ENGINEERING (Two Years)

This two-year curriculum is offered to students who wish to enter the field of aviation for their life work. Special preparation is given for service and maintenance positions with the airlines, repair depots, and commercial and private owners of aircraft.

Twenty-five to thirty hours per week in shop work and related subjects are offered in a modern, well-equipped, government-approved repair station located in the Mechanical Trades Building. All repair work on airplane engines and aircraft structures is supervised by licensed mechanic instructors. A major part of the instruction is given on aircraft to be re-licensed after repairs and the overhaul are completed. Facilities leased at the Municipal Airport provide inspection and service of licensed aircraft used in daily flight operations.

A student who is recommended may write the government-sponsored examinations for the airplane mechanic's or the airplane-engine mechanic's license. A diploma is granted upon successful completion of the course. Whenever practicable, students are advised to complete one semester of Pilot Training. (Courses 214A, B, C, or D.)

First Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
<tr>
<td>Elementary Aviation 110</td>
<td>3</td>
</tr>
<tr>
<td>Aircraft Structures 103</td>
<td>3</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Basic Metal Work 176A</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Sheetmetal 102</td>
<td>2</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Assembly and Disassembly 106</td>
<td>5</td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
</tr>
<tr>
<td>Electricity and Ignition 105</td>
<td>3</td>
</tr>
<tr>
<td>Carburetion and Lubrication 104</td>
<td>2</td>
</tr>
<tr>
<td>Welding 274A</td>
<td>2</td>
</tr>
</tbody>
</table>

Second Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Welding 274B</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Hydraulics and Instruments 200</td>
<td>3</td>
</tr>
<tr>
<td>Aircraft Sheetmetal 202</td>
<td>3</td>
</tr>
<tr>
<td>Propellers 205</td>
<td>2</td>
</tr>
<tr>
<td>Engine Overhaul 206</td>
<td>5</td>
</tr>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection Regulations 201</td>
<td>2</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
</tbody>
</table>
Vocational English 278 ........................................... 3
Engine Operations 204 ........................................... 3
Aircraft Maintenance 203 ....................................... 5

Summer Session
(one summer session required)

Aircraft Servicing 300 ........................................... 6

Note.—Pilot training is available to any student wishing to secure some flight experience or a private, commercial or instructor’s license. All students enrolled in one of the curricula offered by the college are eligible for flight training. For a description of flight course see page 325.

REFRIGERATION AND AIR CONDITIONING TECHNOLOGY (Two Years)

This curriculum is offered to students who wish to enter the field of refrigeration and air conditioning in such capacities as sales engineers, commercial installers, or repairmen. The refrigeration phase covers both domestic and commercial systems with emphasis placed on heat load calculations and selection of equipment.

The air-conditioning phase covers the cooling or heating, humidification or dehumidification, cleansing and distribution of air for healthful living. Emphasis is placed on selection of equipment, installation, and service.

First Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigeration 115A</td>
<td>5</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Vocational English 278</td>
<td>3</td>
</tr>
<tr>
<td>Basic Metal Work 175</td>
<td>2</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
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</thead>
<tbody>
<tr>
<td>Refrigeration 115B</td>
<td>5</td>
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<tr>
<td>Welding 274A</td>
<td>2</td>
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<tr>
<td>Applied Physics 173</td>
<td>3</td>
</tr>
<tr>
<td>Electricity 174</td>
<td>2</td>
</tr>
<tr>
<td>Intermediate Algebra 100A</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Conditioning 215A</td>
<td>5</td>
</tr>
<tr>
<td>Applied Physics 273</td>
<td>3</td>
</tr>
<tr>
<td>Trigonometry 100C</td>
<td>3</td>
</tr>
<tr>
<td>Sheetmetal 275</td>
<td>2</td>
</tr>
<tr>
<td>Materials of Industry 178</td>
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</table>
### DRAFTING AND DESIGN TECHNOLOGY

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Air Conditioning 215B</td>
<td>5</td>
</tr>
<tr>
<td>Industrial Mathematics and Science 272</td>
<td>3</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>4-5</td>
</tr>
</tbody>
</table>

#### DRAFTING AND DESIGN TECHNOLOGY (Two Years)

A two-year curriculum offered to students wishing to enter the specialized fields of drafting and design.

**First Year**

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafting 124A</td>
<td>6</td>
</tr>
<tr>
<td>Basic Metal Work 175</td>
<td>2</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Vocational English 278</td>
<td>3</td>
</tr>
<tr>
<td>Electricity 174</td>
<td>2</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafting 124B</td>
<td>5</td>
</tr>
<tr>
<td>Machine Shop 176</td>
<td>2</td>
</tr>
<tr>
<td>Intermediate Algebra 100A</td>
<td>3</td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>2-3</td>
</tr>
</tbody>
</table>

**Second Year**

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafting 224A</td>
<td>5</td>
</tr>
<tr>
<td>Materials of Industry 178</td>
<td>3</td>
</tr>
<tr>
<td>Trigonometry 100C</td>
<td>3</td>
</tr>
<tr>
<td>Heat Treatment 231</td>
<td>2</td>
</tr>
<tr>
<td>Sheetmetal 275</td>
<td>2</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafting 224B</td>
<td>5</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Mathematics and Science 272</td>
<td>3</td>
</tr>
<tr>
<td>Welding 274A</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>2-3</td>
</tr>
</tbody>
</table>

#### PRINTING TECHNOLOGY (Two Years)

This two-year curriculum is offered to students who wish to enter the printing field. Practical work experience and essential related knowledge are provided in the various areas of printing. Students may elect sufficient business courses to enable them to manage and operate their printing plant.
## UNDERGRADUATE DIVISION — CURRICULA

### First Year

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing 125</td>
<td>5</td>
</tr>
<tr>
<td>Vocational English 278</td>
<td>3</td>
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<tr>
<td>Industrial Mathematics 171</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>2-3</td>
</tr>
</tbody>
</table>

#### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing 127</td>
<td>5</td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 170B</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>5-6</td>
</tr>
</tbody>
</table>

### Second Year

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing 225</td>
<td>5</td>
</tr>
<tr>
<td>Elementary Design 105</td>
<td>2</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>5-6</td>
</tr>
</tbody>
</table>

#### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing 227</td>
<td>5</td>
</tr>
<tr>
<td>Electricity 174</td>
<td>2</td>
</tr>
<tr>
<td>Art Structure 106</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>5-6</td>
</tr>
</tbody>
</table>

---

**MACHINE TOOL TECHNOLOGY (Two Years)**

This two-year curriculum is offered to students who wish to enter the field of industrial machine tool specialization.

#### First Year

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Machine Shop 130A</td>
<td>5</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
<tr>
<td>Vocational English 278</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>2-3</td>
</tr>
</tbody>
</table>
## Industrial Machine Shop

### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Machine Shop 130B</td>
<td>5</td>
</tr>
<tr>
<td>Intermediate Algebra 100A</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 170B</td>
<td>2</td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
</tr>
<tr>
<td>Materials of Industry 178</td>
<td>3</td>
</tr>
</tbody>
</table>

### Second Year

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool Fabrication 230</td>
<td>5</td>
</tr>
<tr>
<td>Applied Physics 273</td>
<td>3</td>
</tr>
<tr>
<td>Trigonometry 100C</td>
<td>3</td>
</tr>
<tr>
<td>Tool and Die Designing 270</td>
<td>2</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Die Making 250</td>
<td>5</td>
</tr>
<tr>
<td>Welding 274A</td>
<td>2</td>
</tr>
<tr>
<td>Industrial Mathematics and Science 272</td>
<td>3</td>
</tr>
<tr>
<td>Heat Treatment 231</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>3-4</td>
</tr>
</tbody>
</table>

---

## Radio and Television Technology (Two Years)

Basic training and field experience are provided to master the skills necessary to repair, install, and service all types of radio communications and television equipment. Sufficient study is given to qualify for various commercial radio operators' licenses required by the Federal Communications Commission.

### First Year

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Radio 135A</td>
<td>5</td>
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<tr>
<td>Electricity 174</td>
<td>2</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Basic Metal Work 175</td>
<td>2</td>
</tr>
<tr>
<td>Vocational English 278</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio Transmission 135B</td>
<td>5</td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
</tr>
<tr>
<td>Intermediate Algebra 100A</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
<tr>
<td>Sheetmetal 275</td>
<td>2</td>
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</tbody>
</table>
## Second Year
### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Television 235A</td>
<td>5</td>
</tr>
<tr>
<td>Trigonometry 100C</td>
<td>3</td>
</tr>
<tr>
<td>Applied Physics 273</td>
<td>3</td>
</tr>
<tr>
<td>Electricity 277</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>2-3</td>
</tr>
</tbody>
</table>

### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Radio and Television Techniques 235B</td>
<td>5</td>
</tr>
<tr>
<td>Industrial Mathematics and Science 272</td>
<td>3</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
<tr>
<td>Welding 274A</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>2-3</td>
</tr>
</tbody>
</table>

### ELECTRICAL TECHNOLOGY (Two Years)

This curriculum is offered to students who wish to prepare themselves for a gainful occupation in the electrical fields. The curriculum consists of a study of the generation, transmission and utilization of electrical energy by means of direct and alternating currents. Emphasis is placed upon the fundamental principles and practical applications of electrical circuits and apparatus as employed in industry, communication, and the servicing of electrical appliances.

## First Year
### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
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<tr>
<td>Basic Metal Work 175</td>
<td>2</td>
</tr>
<tr>
<td>Drawing 107A</td>
<td>2</td>
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<tr>
<td>Vocational English 278</td>
<td>3</td>
</tr>
<tr>
<td>Electricity 145</td>
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### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>Intermediate Algebra 100A</td>
<td>3</td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
</tr>
<tr>
<td>Sheetmetal 275</td>
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<td>Drawing 170B</td>
<td>2</td>
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<tr>
<td>Electricity 146</td>
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## Second Year
### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Trigonometry 100C</td>
<td>3</td>
</tr>
<tr>
<td>Applied Physics 273</td>
<td>3</td>
</tr>
<tr>
<td>Welding 274A</td>
<td>2</td>
</tr>
<tr>
<td>Electricity 245</td>
<td>5</td>
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<tr>
<td>Electives</td>
<td>2-3</td>
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</tbody>
</table>
Second Semester
Industrial Mathematics and Science 272 ........................................... 3
Personnel Relations 279 ................................................................. 3
Electricity 246 .............................................................................. 5
Electives ..................................................................................... 4-5

AUTOMOTIVE TECHNOLOGY (Two Years)

This two-year curriculum is offered to students who wish to specialize in the field of automotive maintenance. The curriculum consists of practical work experience in repairing, inspecting, and servicing automobiles.

First Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Engines and Accessories 155A</td>
<td>5</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Vocational English 278</td>
<td>3</td>
</tr>
<tr>
<td>Basic Metal Work 175</td>
<td>2</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Body and Running Gear 155B</td>
<td>5</td>
</tr>
<tr>
<td>Intermediate Algebra 100A</td>
<td>3</td>
</tr>
<tr>
<td>Machine Shop 176</td>
<td>2</td>
</tr>
<tr>
<td>Electricity 174</td>
<td>2</td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
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</tbody>
</table>

Second Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Electricity and Ignition 255A</td>
<td>5</td>
</tr>
<tr>
<td>Sheetmetal 275</td>
<td>2</td>
</tr>
<tr>
<td>Welding 274</td>
<td>2</td>
</tr>
<tr>
<td>Applied Physics 273</td>
<td>3</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Analysis 255B</td>
<td>5</td>
</tr>
<tr>
<td>Heat Treatment 231</td>
<td>2</td>
</tr>
<tr>
<td>Trigonometry 100C</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>5-6</td>
</tr>
</tbody>
</table>
GRADUATE DIVISION

An Extra-Mural Unit of the Horace H. Rackham School of Graduate Studies, University of Michigan

ADMINISTRATIVE OFFICERS

ELMER H. WILDS, Ed.D., Director of the Graduate Division
MARGARET T. MABIE, Secretary of the Graduate Division

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ELMER H. WILDS, Chairman
MARGARET T. MABIE, Secretary
PAUL V. SANGREN, Ex Officio

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James W. Boynton, M.S., Professor of Chemistry
George E. Bradley, M.S., Professor of Physics
William R. Brown, Ph.D., Professor of English
Roy C. Bryan, Ph.D., Professor of Education
Phil W. Buck, Ph.D., Professor of Psychology
John A. Buelke, A.M., Professor of Education
Charles H. Butler, Ph.D., Professor of Mathematics
Theodore L. Carlson, Ph.D., Professor of Economics
Samuel I. Clark Ph.D., Professor of Political Science
Manley M. Ellis, Ph.D., Professor of Education
Donald G. Forgays, Ph.D., Professor of Psychology
Orie I. Frederick, Ph.D., Professor of Education
Joseph W. Giachino, Ed.D., Professor of Industrial Technical Education
George H. Hilliard, Ph.D., Professor of Education
Frank J. Hinds, A.M., Professor of Biology
Chester L. Hunt, Ph.D., Professor of Sociology
Leonard C. Kercher, Ph.D., Professor of Sociology
James O. Knauss, Ph.D., Professor of History
George Kohrman, A.M., Professor of Vocational Education
Robert M. Limpus, Ph.D., Professor of English
George G. Mallinson, Ph.D., Professor of Education
A. Edythe Mange, Ph.D., Professor of History
Arthur J. Manske, Ph.D., Professor of Education
Ralph N. Miller, Ph.D., Professor of English
The board of Regents of the University of Michigan at its meeting in July, 1938, passed a resolution approving a formal request from the State Board of Education that the University of Michigan cooperate with the four Michigan Colleges of Education in planning a graduate program of instruction. According to the action, a Graduate Division, organized and administered in cooperation with the University, has been set up at Western Michigan College of Education. All courses given in the Graduate Division are offered by instructors who have been given the status of graduate lecturer by the Executive Board of the Graduate School of the University. All courses given in the Graduate Division constitute a part of the regular program of instruction of the University and carry both course and residence credit toward the master's degree. Most courses are strictly of a graduate nature and do not give undergraduate credit. Some courses are open to well-qualified seniors, who are admitted on approval of the director of the Graduate Division.

Graduate courses have been offered by the Graduate Division of Western Michigan College of Education since February, 1939. The graduate courses for which credit is given have been selected through cooperation of the Advisory Council of Western Michigan College of Education and the Adviser to the College from the University of Michigan, but these courses are under the control of the Executive Board of the Graduate School of the University of Michigan. The work is conducted as a part of the regular program of the University of Michigan Graduate School.

An attempt is made to keep the work balanced by offering a considerable proportion of the courses in cognate fields and, at the same time, by giving all courses in Education for which there is a demand. Courses give two semester hours credit. The courses offered are open, not only to students just entering upon a program of advanced study, but also to those who have already completed some of the work for advanced degrees at the University of Michigan. Such students should ascertain in advance whether the particular courses offered may be included as a part of their program for the master's or doctor's degree.
ADMISSION

The privileges of admission are open to students who hold the bachelor's degree, or its equivalent, from schools of recognized standing and who are otherwise qualified to pursue with profit the work offered. Undergraduates within six hours of graduation may enroll in the Graduate Division and take graduate courses while completing their undergraduate work.

In order to be admitted to the courses offered, the student must comply with regulations of the Graduate School, which are as follows:

1. Two complete official transcripts of scholastic records to date should be sent to the Graduate Office, in advance of registration. The transcript should specify degrees obtained, courses completed, scholarship grades attained, and the basis of grading. One copy of the transcript is kept permanently on file in the Graduate School Office at Ann Arbor, and another in the Graduate Division Office at Western Michigan College of Education.

2. A student who wishes to become an applicant for an advanced degree must indicate in his request for admission to graduate study a field of specialization; a student who is not an applicant for a degree is held to no special requirements, but he must furnish evidence of graduation from a recognized college.

3. Application-for-admission blanks may be secured from the Graduate Division Office, Room 106, Administration Building.

In order to register for the first semester, the student must be admitted by September 1; for the second semester, by January 15. Students who plan to begin their graduate work in the Graduate Division of Western Michigan College of Education may make application on blanks provided for that purpose by the Director of the Graduate Division, and may have their transcripts sent directly to his office. Graduates of Western Michigan College of Education may have their transcripts automatically transferred by filling out and returning these application blanks to the Graduate Division office.

COURSE REQUIREMENTS

Every student planning to work toward a degree is expected to acquire an intimate knowledge of his field of study and the methods employed in that field so that he will be able to approach his subject in an independent and critical spirit. A mere accumulation of credits is not advisable. A student should have in view a fairly complete program of studies before enrolling in the courses offered. The Director of the Graduate Division will assist the student in formulating such a program and recording it on the Schedule of Study blank which must be reviewed by the Graduate Adviser to Western Michigan College of Education and submitted by him to the Dean of the Graduate School for approval. Alterations in the program, resulting from the dropping or adding of courses, must receive approval in similar fashion.

DEGREES

All degrees are awarded by the University of Michigan. Students taking work in the Graduate Division shall be permitted to complete such require-
DEGREES

ment for the master's degree as may be satisfied by courses offered in the division. Unless specifically stated otherwise, a minimum of one summer session of full-time work on the campus of the University of Michigan is required of all applicants for the master's degree. Courses may be taken in the Graduate Division for credit toward the doctor's degree. All doctoral students must meet the admission requirements of the Graduate School of the University of Michigan in full and should be approved by their department of specialization before proceeding very far with their work. Doctoral students are required to fill in the first two pages of the Schedule of Study form, but the actual outlining of their programs may wait until they can confer with their advisers. No student can have a doctoral committee appointed until the Schedule of Study form is on file.

RESIDENCE REQUIREMENT

The minimum amount of credit which must be earned in residence is eighteen hours. The residence requirement may be met by attendance in any of the Graduate Centers of the University of Michigan. The eighteen-hour minimum residence requirement must be supplemented by acceptable credit to the extent of six hours, which if not also taken in residence may be advanced credit for work taken in a recognized graduate school of another institution, or University of Michigan Extension credit.

TIME LIMITATION

A student enrolled after September, 1935, must complete the work for the master's degree within six consecutive years after his first enrollment in the Graduate School. The time limit for acquiring the degree will be extended during the period of the present emergency in all cases when a student can present satisfactory evidence that he has been engaged in active government defense service which prevented him from continuing his graduate work.

CREDIT REQUIREMENT

The standard credit requirement for the master's degree is thirty hours, which must include one seminar or Education B192 or C192.

The minimum credit requirement for the master's degree is twenty-four hours. This minimum is sufficient, however, only if the student's undergraduate record is satisfactory both as to quality of work done and quantity in relation to the proposed program of graduate work. This minimum also presupposes the preparation of a master's thesis. If a student has a B+ average in his first twelve hours of graduate work, he may exercise the option of writing a master's thesis in lieu of six hours of work. He will obtain a petition blank from the office of the graduate adviser to be filled out and returned to that office. Any student intending to go on for the doctorate must prepare a master's thesis or its equivalent.
SEMINAR REQUIREMENT

In so far as possible, two types of seminars are provided: (a) for those students preparing a master's thesis, and (b) for those not preparing a thesis. Under most circumstances Education B192, or its equivalent, is prerequisite or must be taken simultaneously with either type of seminar. Those not preparing a master's thesis usually elect Education B192 or C192; those preparing a master's thesis, two seminars, although if they complete the thesis in one, some other course may be substituted for the second seminar. Most seminars are specifically designed to aid students in bringing the thesis to completion. It is permissible to begin the preparation of a thesis in any one of the non-seminar courses (consult instructors and advisers about this).

SCHOLARSHIP REQUIREMENT

Students who desire credit must meet all the requirements set by the instructor with reference to attendance, supplementary reading, term reports, examinations, etc. The master's degree is awarded only to those students who maintained an average of B in all their work. An average grade of B is required for graduation. A grade lower than B for a given subject does not necessarily bar a student from obtaining credit for a graduate course, provided such a grade is balanced by other work of uniformly high character. Hours of D and E grades are used to determine the average grade of each student, but are not included in the number of hours required for the degree. A graduate student will not be allowed credit for a course unless it is completed and reported in the office of the Graduate School within a year of the official termination of the course.

Graduate students are subject to the rules of the Dean of Men and the Dean of Women and to other general regulations of Western Michigan College of Education.

For a student devoting full time to graduate study, the normal load during a term is twelve hours; the maximum program of work allowed during a six weeks' summer session is six hours. During a term the program of work done by students devoting only part-time to graduate study and paying the reduced schedule of fees varies from two to six hours, but no student in part-time attendance who is engaged in full-time teaching or other such employment shall be allowed to elect more than four hours of work during a term. During the summer session the program of work for such students will be determined by the Director of the Graduate Division according to the proportion of the student's time available for graduate study.

THE PERMANENT TEACHER'S CERTIFICATE

The candidate for the secondary permanent certificate must earn ten semester hours of residence credit. The Teachers' Certification Code recommends that this be obtained in graduate courses leading toward the master's degree. The required ten hours may be earned in either a subject-matter or a professional field; the program to be followed is determined in each case by the present and probable future needs of the individual. There are un-
doubted advantages to be gained from taking graduate work during the provisional period. The Director of the Graduate Division of Western Michigan College of Education will advise students in regard to desirable graduate courses available for this purpose in this and in other institutions. Even though the candidate plans to secure his permanent certificate through the institution in which he completed the requirements for the provisional certificate, he may take all or part of the required ten semester hours at Western Michigan College of Education.

Probably the most satisfactory way to meet the course requirements for the permanent certificate is to pursue work toward the master's degree. The attainment of the degree will not only insure meeting the credit requirements for the permanent certificate but will also improve the opportunities for advancement in the teaching profession. The Director of the Graduate Division will be glad to discuss with candidates the possibilities of satisfying the requirements for the permanent certificate while at the same time working toward the master's degree.

REGISTRATION

Registration for the first semester of the Graduate Division will be on Saturday, September 22, 1951, from 9 to 12 A.M., and from 1 to 4 P.M. Registration for the second semester will be on Saturday, February 9, 1952, at the same hours. All students who enroll later than these dates must pay in addition to the regular fee a penalty of one dollar for each day of late registration until a maximum penalty of three dollars is incurred.

Registration will take place in the Graduate Division Office, Room 106, Administration Building.

All Saturday classes for the first semester will begin on Saturday, September 29 and will continue through Saturday, February 2. All Saturday classes for the second semester will begin on Saturday, February 16, and continue through Saturday, June 7. Weekday evening classes during both semesters will meet during the week preceding the Saturday classes. Most classes meet two class hours each Saturday during the semester. Most courses give two semester hours credit. (Consult Schedule of Classes for instructors, hours, and places of meeting.) Prerequisites for a course should be carefully determined by the student before enrolling in the course. Generally speaking, prerequisites for courses are, in addition to graduation from a four-year curriculum in an accepted college or university, one year of work of college grade in the field of the subject elected. In some cases, courses may require specific prerequisites or an amount of prerequisite credit in excess of the general requirement.

FEES

The semester fees must be paid in advance and no student can enter upon his work until after such payment. These fees are payable at the beginning of the first semester in September and at the beginning of the second semester in February. The fees are as follows:

Full Program Fee—Michigan Residents, $75; Nonresidents, $200.
Reduced Program Fees—Nine hours or fewer is considered a reduced program. Those electing such a program must pay each semester the appropriate fee indicated below:

<table>
<thead>
<tr>
<th>Group</th>
<th>Michigan Residents</th>
<th>Non-Residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Registration for work on doctoral dissertations, or library privileges, work in absentia, or election of three hours</td>
<td>$30</td>
<td>$75</td>
</tr>
<tr>
<td>2 Four hours</td>
<td>40</td>
<td>105</td>
</tr>
<tr>
<td>3 Five hours</td>
<td>45</td>
<td>115</td>
</tr>
<tr>
<td>4 Six hours</td>
<td>50</td>
<td>130</td>
</tr>
<tr>
<td>5 Seven hours</td>
<td>55</td>
<td>145</td>
</tr>
<tr>
<td>6 Eight hours</td>
<td>60</td>
<td>155</td>
</tr>
<tr>
<td>7 Nine hours</td>
<td>65</td>
<td>165</td>
</tr>
</tbody>
</table>

In case of complete voluntary withdrawals after the beginning of any one semester, refunds, less $10 service charge, are made as follows:

100 per cent—up to two weeks
50 per cent—more than two weeks and less than four weeks
40 per cent—more than four weeks and not later than eight weeks

Undergraduates who, at the beginning of a given semester, are within six semester hours of graduation or, at the beginning of the summer session, within four hours of graduation are permitted to register in the Graduate Division. Such students must complete the undergraduate requirements and receive the bachelor’s degree while doing work in the Graduate Division during the first semester or summer session there. These students must register for such work at the Graduate Division Office.

Undergraduate students who wish to carry graduate courses for undergraduate credit (numbered in the 400 group) must secure written permission from Dr. Elmer H. Wilds, Director of the Graduate Division, but enrollment should follow the regular plan for undergraduates.

For students who are within six hours of graduation and who enroll in a combination program of graduate and undergraduate work, the fees are as follows:

1. Undergraduate students who elect six or more hours in the Graduate Division shall pay the announced fee of $75.00 for Michigan students and $200.00 for nonresident students for full-time enrollment in the Graduate School; but no additional fees will be charged for undergraduate work. This fee is paid in the Graduate Office but covers graduate and undergraduate enrollment.

2. Undergraduate students who elect less than six hours in the Graduate Division shall pay the usual part-time undergraduate enrollment fees and the part-time graduate fees covering the work they elect.
OTHER INFORMATION

For details concerning other information, see the Announcement of the Graduate Division, Western Michigan College, and the Announcements of the Graduate School and of the School of Education, University of Michigan, and the booklet, Advanced Study in Education, prepared by the School of Education, University of Michigan.

Questions not answered by these sources should be addressed to Dr. Elmer H. Wilds, Director of the Graduate Division, Western Michigan College of Education, Kalamazoo, Michigan.

COURSES OFFERED

1951-1952

First Semester

Chemistry 183** Physical Chemistry ...................... Boynton
Economics 121* Labor ...................... Bowers
Education
   B120 Improvement of High School Teaching .. Bryan
   B156 High School Supervision ................ Frederick
   B192 Methods of Research ................ Frederick,
   B250 Principles of Educational Administra-
       tration .................................. Norrix
   B251 Supervision of Elementary School
       Instruction ................................ Hilliard
   C119 Educational Guidance and Adjustment . Manske
   C120 Mental Hygiene for Childhood and
       Adolescence ................................ Ellis
   C175* Psychology of Child Development ...... Ellis
   C177 Education of Young Children .......... Swickard
   D201 Problems in the Teaching of Science .. Mallinson
   D235** Teaching of Mathematics ............ Butler
   E100* Principles of Vocational Education . Kohrman
   E103a* Methods of Teaching Trade and Busi-
       ness Subjects (Distributive Ed.) .. Trimpe
   E114* Curriculum Construction in Vocational
       Education ................................ Giachino
   E151* Principles of Business Education .... Schneider

English
   121** English Literature, 1798-1832 ......... Limpus
   177** English Literature, Restoration to 1730 Miller
   184* Modern Novel ......................... Brown

History
   285 Studies in Western Europe: 18th
       Century Enlightenment .................. Seibert

Pol. Sci.
   163* Foreign Policy of the United States ..... Woods
   184* American Political Thought ............ Clark

Physics
   105** Modern Physics ....................... Bradley

Psychology
   142* The Deviant Individual ............... Buck

Sociology
   115* Advanced Population Studies .......... Kercher

Social Work
   243 Child Psychiatry ...................... Williamson
Second Semester

Chemistry 184** Physical Chemistry .................. Boynton
         — ** History of Chemical Theory .................. Osborn
Economics 141* International Economics .................. Carlson
         191* Consumer Economics .................. Bigelow
Education B105 Elementary School Curriculum .................. Frederick
         B122 Modern High School Curriculum .................. Frederick
         B124 Administration of Secondary Schools .................. Bryan
         B133* Visual-Sensory Aids in Education .................. Snow
         B2276 Seminar in Secondary School Curriculum .................. Mallinson
         B252 Elementary School Organization and Administration .................. Buelke
         B255 Social Interpretation .................. Hilliard
         C102 Educational Psychology .................. Ellis
         C107b Psychology of Elementary School Subjects .................. Swickard
         C217 Techniques of Guidance .................. Manske
         C230* Education and Control of Mental Deviates .................. Ellis
         D156* Teaching the Social Studies .................. Woods
         E106* Coordination in Vocational Education .................. Kohrman
         E113* Administration and Supervision of Vocational Education .................. Giachino
         E157* Coordination in Business Education .................. Schneider
English 122** English Literature, Keats .................. Limpus
         160* Shakespeare's Tragedies .................. Brown
         181* American Literature .................. Miller
Health 271* Methods of School Health Education .................. Hinds
History 201* Studies in Michigan History .................. Knauss
         282* Studies in Modern European History: The Near East .................. Mange
Pol. Sci. 142* Municipal Government and Administration .................. Shilling
         164* Conduct of American Foreign Policy .................. Woods
Psychology 145* Learning and Motivation .................. Forgays
Sociology 158* Advanced Studies in Social Control .................. Hunt
Social Work 270 Mental Hygiene in Social Work .................. Williamson

*Graduate Courses Open to Seniors.
**Senior Courses Open to Graduates.
Full description of these courses with hours of credit and time scheduled will be found under the various departments’ Description of Courses.
DATES OF SATURDAY CLASS MEETINGS

First Semester

September 22, 1951—Registration
September 29—*Saturday Classes Begin
October 6
October 13
October 20
October 27
November 3
November 10
November 17
November 24—Thanksgiving Holiday
December 1
December 8
December 15, 22, 29—Christmas Holiday
January 5, 1952
January 12
January 19
January 26
February 2—Examinations

Second Semester

February 9, 1952—Registration
February 16—*Saturday Classes Begin
February 23
March 1
March 8
March 15
March 22
March 29
April 5
April 12, 19—Easter Holiday
April 26
May 3
May 10
May 17
May 24
May 31
June 7—Examinations

*Weekday classes will meet during the week immediately preceding these dates.
CURRICULA FOR THE MASTER'S DEGREE

The following Schedules of Study are drawn up with a view to bringing together those courses which have some degree of functional unity. Some of the courses listed may not be given in every semester or summer session, but will be offered at some time. Substitutions will be made whenever necessary. In some cases it may be wise to depart from a given schedule in order that the needs of a student may be more adequately met. This may be done with the approval of the Director of the Graduate Division, provided the general requirements for the master's degree are satisfied.

TEACHING IN THE ELEMENTARY SCHOOL

Required Courses, 10 hours
- B105 Elementary School Curriculum
- C107a or C107b Psychology of Elementary School Subjects
- C175 Psychology of Child Development
- B133 Visual-Sensory Aids in Education
- B192 Methods of Research in Education

Elective Courses in Education, 10 hours
Any Education course counting for graduate credit may be elected. The following are suggested: A125, B151, B251, C102, C119, C120, C130, C132, C177, F190.

Cognate Courses, 10 hours
- Political Science 141, 163, 184; Sociology 115, 158, 159, 160, 243; Economics 193; Health Practice 171; or any course in subject-matter fields taught in the elementary schools.

TEACHING IN THE SECONDARY SCHOOL

Required Courses, 10 hours
- B133 Visual-Sensory Aids in Education
- D--- Special Methods
- B122 Modern High School Curriculum
- C120 Mental Hygiene
- B192 Methods of Research in Education

Elective Courses in Education, 10 hours
Any Education course counting for graduate credit may be elected. The following are suggested: A125, B120, B124, B156, C102, C116, C119, C120, C217, E101, F190.

Cognate Courses, 10 hours
- Economics 152, 193, 255; Political Science 141, 163, 184; Sociology 115, 118, 158, 159, 160; Health Practice 171; or any course in subject-matter fields taught in high schools.
ADMINISTRATION AND SUPERVISION OF ELEMENTARY SCHOOLS

Required Courses, 10 hours

- B250 Principles of Educational Administration
- B105 Elementary School Curriculum
- (B151 Elementary School Administration and Supervision, or
  B252 Elementary School Organization and Administration)
- B251 Supervision of Elementary School Instruction
- B192 Methods of Research in Education

Elective Courses in Education, 10 hours

Any education course counting for graduate credit may be elected. The following are suggested: A125, B105, C102, C119, C120, C130, C132, C165, C217, F190.

Cognate Courses, 10 hours

Economics 152, 193, 255; Political Science 141, 163, 184; Sociology 115, 118, 158, 159, 160, 243; Health Practice 171; Geography 120, 130, 135, 145; Psychology 130; or any course in History, Geography, or English.

ADMINISTRATION AND SUPERVISION OF SECONDARY SCHOOLS

Required Courses, 10 hours

- B122 Modern High School Curriculum
- B124 Secondary School Administration
- B133 Visual-Sensory Aids
- B156 High School Supervision
- B192 Methods of Research in Education

Elective Courses in Education, 10 hours

Any Education course counting for graduate credit may be elected. The following are suggested: A125, B122, B250, B255, B257, C115, C119, C120, C130, C165, C217, E100, E101, F190.

Cognate Courses, 10 hours

Economics 152, 193, 255; Political Science 141, 163, 184; Sociology 115, 118, 158, 159, 160, 243; Psychology 130; Speech 151; History 182, 201; Geography 145.

GENERAL EDUCATIONAL ADMINISTRATION

Required Courses, 12 hours

- B248 State Administration, or
- B225 Legal Basis of Public Education
- B250 Principles of School Administration
- B124 Secondary School Administration
- B255 Social Interpretation
- B192 Methods of Research in Education
B253 Personnel Administration
B256 Practicum in School Administration
B258 School Plant Planning

Elective Courses in Education, 8 hours
Any Education course counting for graduate credit may be elected. The following are suggested: A125, B105, B122, B151, B156, B248, B257, C115, C119, C120, C130, C165, C217, E100, E101, F190.

Cognate Courses, 10 hours
Economics 152, 193, 255; Political Science 141, 163, 184; Sociology 158, 159, 160; Psychology 130; Speech 151; History 182, 201; Geography 145.

GUIDANCE AND COUNSELING

Required Courses, 12 hours
C117 Aptitude and Vocational Tests
C119 Educational Guidance and Adjustment
C217 Techniques of Guidance
E107 Techniques of Securing Occupational Information
B192 Methods of Research in Education
B139 Organization and Administration of a Guidance Program

Elective Courses in Education, 8 hours
Any Education course counting for graduate credit may be elected. The following are suggested: A125, B124, B182, C115, C130, C165, E101.

Cognate Courses, 10 hours
Psychology 130; Health Practice 171; Sociology 158, 159, 160; Economics 193; History 182.

INDUSTRIAL EDUCATION

Required Courses, 12 hours
E100 Principles of Vocational Education
E101 Principles and Techniques of Vocational Guidance
E102 Legal and Industrial Relations Aspects of Vocational Education
E106a Coordination in Vocational Education
B192 Methods of Research in Education
E201 Seminar: Vocational Education

Elective Courses in Education, 8 hours
Any Education course counting for graduate credit may be elected. The following are suggested: B124, B250, B255, C119, E103, E113, E114.

Cognate Courses, 10 hours
Economics 121, 141, 152, 255; Psychology 131, 132; Political Science 184; Sociology 158, 160, 162.
BUSINESS EDUCATION

Required Courses, 10 hours
- D265 The Teaching of Business Subjects
- E151 Principles of Business Education
- E157 The Curriculum in Business Education
- B192 Methods of Research in Education
- E201 Seminar in Vocational Education

Elective Courses in Education, 10 hours
Any Education course counting for graduate credit may be elected. The following are suggested, B124, B250, C117, C119, E101, E102, E103, E105, E106, E109, E113.

Cognate Courses, 10 hours
- Economics 121, 141, 152, 255; Psychology 130, 132; Political Science 141, 184; Geography 145; Sociology 158, 160, 162.

Many other curricula in additional fields are available. Schedules of Study for such curricula may be planned in consultation with the Director of the Graduate Division.
DESCRIPTION OF COURSES

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  Geography and Geology .......................................... 243
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DIVISION OF SOCIAL SCIENCES ................................ 262-283
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  Political Science ..................................................... 274
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  Education .................................................................. 284
  Librarianship .......................................................... 296

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  Home Economics .................................................... 310
  Industrial Education ............................................... 315
DIVISION OF FINE ARTS
Lydia Siedschlag, Chairman

The Division includes the Departments of Art, Music, and Occupational Therapy. It functions through a committee consisting of the respective heads of these departments. The heads of the departments and the departmental counselors will advise students relative to requirements for majors or minors in these departments and concerning any special requirements set up by the departments. In certain cases, where a group major or minor is possible and advisable, the chairman of the Division should be consulted.

ART

LYDIA SIEDSCHLAG       ELIZABETH SMUTZ
HARRY S. HEFNER       OPAL STAMM
JOHN G. KEMPER       ELAINE L. STEVENSON
HAZEL I. PADEN       ZACK YORK

Many courses in the Department of Art are designed for students not particularly talented in art, but interested in finding a field of art in which they may do well. Suggested courses which require no prerequisite other than a marked desire to participate in art experiences are: Elementary Design 105, Art Structure 106, Illustrative Handwork 107, Lettering and Poster Making 108, Industrial Art 110, Modeling 111, and Art Appreciation 113A, B.

A minor in art consists of: Art Structure 106, Elementary Design 105, Art Appreciation 113A, B or history of Art 213A, B, and art electives to complete 15 semester hours of credit.

Two points of comparative Arts 212 may be substituted for Art Appreciation 113A and B.

A major in art consists of: Elementary Design 105, Art Structure 106, Industrial Art 110, Figure Drawing 205, Art Composition 208, Commercial Art 214, History of Art 213A, History of Art 213B, and Demonstration Drawing 306.

Advanced Figure 305, Advanced Design 309, Advanced Composition 308, and electives to make 40 hours.

Art Observation 340 and Supervision 341 are offered as required education courses for art majors.

105 Elementary Design
A fundamental course in art developing design and color theory through problems in various media.
Each semester. Mr. Hefner, Miss Paden. Two or three semester hours.

106 Art Structure
A course giving drawing experience, lettering, figure, color, and design. Each semester. Miss Stevenson, Miss Paden. Three semester hours.
107 Illustrative Handwork
An elementary craft course with manual problems related to interests in the primary grades.
Each semester. Mr. Hefner. Three semester hours.

108 Lettering and Poster Making
Emphasis is on lettering and poster making for school and commercial use.
Second semester. Mr. Kemper. Two semester hours.

110 Industrial Art
A studio course in crafts, designed to meet the needs of groups with varied interests. Weaving, bookbinding, blockprinting, etc.
Each semester. Miss Stevenson. Three semester hours.

111 Modeling
The course includes the designing, building, and casting of pottery; and the use of the potter's wheel and kiln for modeling with clay, firing, and glazing. Modeling in the round and bas-relief may be substituted.
Second semester. Mr. Hefner. Three semester hours.

112 Learning Through Art
A course designed for the grade teacher. Art problems are related to the curricula. Posters, programs, bulletins, decorations for special days are handled seasonally. No prerequisites.
Each semester. Miss Smutz. Three semester hours.

11A3 Art Appreciation
This course aims to develop aesthetic judgment. A brief survey of the history of painting, with special attention to modern painting, is given.
First semester. Mr. Kemper. One semester hour.

113B Art Appreciation
A brief survey of the history of sculpture, architecture, and minor arts is given. Prerequisite: Art Appreciation 113A.
Second semester. Mr. Kemper. One semester hour.

201 Free Brush
A method of spontaneous drawing and designing, using large brushes, ink, and poster paints.
Mr. Hefner. Two semester hours.

205 Figure Drawing
Anatomy of the human figure is studied. Rapid sketches, line drawings, and memory sketches are made, after which the work progresses from gesture lines, shadow edges, planing and contour drawing to finished drawings. Mediums—pencil and charcoal. Prerequisite: Art Structure 106 or consent of instructor.
First semester. Mr. Kemper. Three semester hours.
209 Art Composition
A study of composing within a given space figures, landscapes, flowers, birds, and animals, emphasizing unity, spacing, distribution of dark and light; study of tone relationship and color harmony. Mediums used are show-card paints, charcoal, pen and ink, and linoleum cuts. Christmas cards for the annual sale are designed in this class. Prerequisite: Art Structure 106, Elementary Design 105.
First semester. Miss Paden. Three semester hours.

212 Handicraft
Includes problems in screen painting, metal, wood, leather tooling, and other handwork. Emphasis on technique. Prerequisite: Art Structure 106, Industrial Art 110, or consent of instructor. A fee of two dollars will be charged for materials.
Mr. Hefner. Three semester hours.

213A History of Art
Study of primitive, Egyptian, Chaldean, Greek, and Roman architecture, sculpture, and painting.
First semester. Mr. Kemper. Three semester hours.

213B History of Art
Study of the art of the Renaissance in Europe and of modern art in Europe and America. Prerequisite: History of Art 213A or consent of the instructor.
Second semester. Mr. Kemper. Three semester hours.

214 Commercial Art
This course is designed to offer special work in the study of advertising art. Posters for school, for business activities, lettering, typography, packaging design, and other related subjects are done. Various techniques and media, as well as technical methods used in the reproduction of art work are discussed. Prerequisite: Elementary Design 105 and Art Structure 106.
First semester. Mr. Kemper. Three semester hours.

215 Comparative Arts
The course takes literature, music, and art and endeavors to point out to students, not necessarily specialists in any of the arts, the common core which permeates all the arts. Common expressions such as organization of form, rhythm, repetition, unity, harmony, and tonality are made meaningful through discussion and demonstration by a member of the English, the Music, and the Art Department.
Dr. Carter, Mr. Kemper, Miss Loutzenhisler.
4 semester hours. 2 point credit may be applied on a major or minor in any two of the three arts,—Literature, Music or Art.
Each semester.

220 Stage Design
A course for art and speech majors. Class makes practical use of knowledge of scene painting, lighting, and mechanics of staging, in connection with the midwinter play.
First semester. Dr. York. Two semester hours.
221 Home Furnishing
   Color, design, historic furniture and modern furniture are studied; and
   models for room arrangement are made.
   Each semester. Miss Stamm. Two semester hours.

224 Interior and Window Display
   A studio course for art and cooperative retailing students. Window and
   store display art is studied with emphasis upon color, design, and lettering
   as related to displays. Attention is given to sources for display materials
   and services.
   First semester. Mr. Kemper. Three semester hours.

305 Advanced Figure Drawing
   A continuation of Figure Drawing 205, developing technical skill and
   imagination. Prerequisite: Figure Drawing 205.
   Second semester. Mr. Kemper. Two semester hours.

306 Demonstration Drawing
   A required course for Art majors who expect to teach. Methods and
   teaching devices are stressed and opportunity given to experiment with new
   materials. Tentative course of study is made. Prerequisite: Art Structure
   106.
   Second semester. Miss Paden. Two semester hours.

308 Advanced Art Composition
   The work centers about the study of prints and print making, etching,
   woodblock printing, and oil painting. Prerequisite: Art Structure 106,
   Elementary Design 105, Art Composition 208.
   Not offered 1951-52. Mr. Kemper. Two semester hours.

309 Advanced Design
   Continuation of Elementary Design 105. Applied Art Problems. Pre-
   requisite: Art Structure 106, Elementary Design 105, Art Composition
   208.
   First semester. Mr. Hefner. Three semester hours.

310 Painting
   Painting of still life and landscape, in the studio and outdoors. Water
   colors are used. The course involves the study of composition, color value,
   and technique. Prerequisite: Art Structure 106, Elementary Design 105,
   Art Composition 208, or consent of instructor.
   Second semester. Miss Paden. Two semester hours.

314 Advanced Commercial Art
   Continuation of Commercial Art 214 with emphasis on typographic lay-
   out, booklet design, letterheads, mailing pieces, packaging and display de-
   sign and construction. This course will acquaint students with technical
   methods essential to commercial art such as photo prints and their uses
   pasteups, photostats, and methods of color separation for working drawings.
   Mr. Kemper. Three semester hours.
The Department of Music offers courses leading to the Bachelor of Music and Bachelor of Arts degrees. The Bachelor of Arts degree is defined on page 100 as to both purposes and requirements. The Bachelor of Music degree is different in that it is very highly professional in its requirement aims and permits the student to do much more of his work in the field of music. Detailed information relative to the Bachelor of Music degree may be had by writing for a Music Supplement Catalog.

Those students who want a music major with teaching certification should work for the Bachelor of Music degree.

Those students who want a group music major without teaching certification may work for the Bachelor of Arts degree. Such music majors must complete 16 semester hours of Applied Music (through level 6 in their major performance field); Freshman Theory 106A, B; Advanced Harmony 206A, B; Music History 357A, B; Style and Structure 310A; and one semester of an advanced theory or music literature course.

Minors in music must complete Freshman Theory 106A, B; Advanced Sight-Singing and Ear-Training 205A, B; Elementary School Methods and Materials 208A, B or Junior and Senior High School Methods and Materials 301A, B or Instrumental Methods and Materials 209A, B.

Credit from another institution in any branch of theory will be accepted only upon satisfactory completion of an examination covering the field for which the student desires transferred credit. All transferred credit is tentative and is conditioned upon the successful completion of a semester's work at Western Michigan College of Education. No credit hours exceeding the number granted for parallel work at Western Michigan College of Education will be accepted for transfer from another institution.

Western Michigan College of Education is an Associate Member of the National Association of Schools of Music.

MUSIC COURSES

100A  Music for Classroom Teachers

Designed for the classroom teacher, this course deals with the foundations of music, some work in sight-singing, place of music in the education of children, relationship of music to other subject areas, and classroom problems in music education, e.g., listening, singing activities, place of performance, and use of radio and music of the movies.

First semester.  Mrs. Britton.  Three semester hours,
100B Music for Classroom Teachers
A continuation of 100A.
Second semester. Dr. Beloof. Three semester hours.

106A Freshman Theory
A study of all triads, inversions, dominant and secondary seventh chords, embellishments and modulation to closely related keys. Practical application is emphasized by work in ear-training, sight-singing (with sol-fa syllables and numbers), melodic, harmonic, and rhythmic diction, and keyboard harmony. Composing of original music is encouraged.
First semester. Miss Green. Three semester hours.

106B Freshman Theory
A continuation of 106A.
Second semester. Miss Green. Three semester hours.

107A Music Appreciation
This course, primarily a listening one, is designed for students wishing a general cultural course to increase their knowledge and discrimination of music. Various types of music from the folk song and dance to the symphony, oratorio, and opera are presented and discussed. Concerts and outstanding radio programs are related to the course.
First semester. Mr. LaMariana. Two semester hours.

107B Music Appreciation
A continuation of 107A.
Second semester. Mr. LaMariana. Two semester hours.

109 Rural School Music Methods and Materials
This course consists of sight reading of unison songs, introduction of part singing, organization of music work in the school and the community. The importance and value of music in the life of school and community are emphasized; materials for the school music program, community singing, and recreation are considered.
First semester. Mrs. Snyder. Three semester hours.

110 Elementary Acoustics
Designed for music majors to acquaint them with the science of sound.
No science prerequisite.
Each semester. Mr. Grimsall. Two semester hours.

116A Voice Class
This course deals with the fundamental processes of breath control and tone production, provides some individual instruction and an opportunity to study standard song literature. Recommended to voice majors to gain a knowledge of voice class procedures and to candidates for certification as general supervisors to prepare for the basic achievement examinations.
First semester. Mrs. Snyder. One semester hour.

116B Voice Class
A continuation of 116A.
Second semester. Mrs. Snyder. One semester hour.
117A  Piano Class
A course designed for students with little or no background in piano. Opportunity is provided for some individual instruction. Recommended to piano majors to gain a knowledge of piano class procedure and to elementary education majors.
First semester. Mrs. Beloof. One semester hour.

117B  Piano Class
A continuation of 117A.

118A  String Class
The study of a stringed instrument to the extent that the student can demonstrate a knowledge of the basic fundamentals on that instrument. The study of a limited repertoire for that instrument.
First semester. Mr. LaMariana. One semester hour.

118B  String Class
A continuation of 118A.
Second semester. Mr. LaMariana. One semester hour.

122A  English Diction and Song Literature
Required of all students whose field of concentration is voice. English diction and song literature are studied as a class; opportunity is provided for solo performance.
First semester. Mrs. Faustman. No credit.

122B  English Diction and Song Literature
A continuation of 122A.
Second semester. Mrs. Faustman. No credit.

205A  Advanced Sight-Singing and Ear-Training
Advanced sight-singing and ear-training based on the principal and secondary triads and seventh chords. Further work in sight-singing and ear-training by use of modulation to both closely and distantly related keys. Further work in melodic, harmonic, and rhythmic diction and aural analysis.
Prerequisite: Freshman Theory 105A, B or 106A, B.
First semester. Dr. Matthews. Two semester hours.

205B  Advanced Sight Singing and Ear-Training
A continuation of 205A.
Second semester. Dr. Matthews. Two semester hours.

206A  Advanced Harmony
The study of non-harmonic idioms, chromatic harmony, suspensions, and modal harmony and counterpoint. Harmonic analysis of instrumental music of the classical and romantic schools. Practical application in advanced keyboard harmony of all work covered. Composing of original music is encouraged.
Prerequisite: Freshman Theory 106A, B.
First semester. Miss Green. Three semester hours.
206B Advanced Harmony
A continuation of 206A.
Second semester. Miss Green. Three semester hours.

207A Music Literature
Designed to satisfy the needs of music majors and minors. Some formal analysis and historical background of the material studied are included. The larger musical forms are stressed in the selection of material.
First semester. Dr. Matthews. Three semester hours.

207B Music Literature
A continuation of 207A.
Second semester. Dr. Matthews. Three semester hours.

208A Elementary School Methods and Materials
The purposes, problems, and procedures of the first six grades, development of independent sight-singing (syllables and words), two- and three-part singing, introduction of tonal and rhythmic problems found in music designed for these grades, introduction of notation, creative music for children, the child voice, and directed listening.
First semester. Miss Doty. Three semester hours.

208B Elementary School Methods and Materials
A continuation of 208A.
Second semester. Miss Doty. Three semester hours.

209A Instrumental Methods and Materials
A discussion of the teaching methods for classes in strings and winds, and an evaluation of the materials suitable for these classes and small and large ensembles.
First semester. Mr. LaMariana. Three semester hours.

209B Instrumental Methods and Materials
A continuation of 209A.
Second semester. Mr. LaMariana. Three semester hours.

216A Advanced Voice Class
A continuation of 116A, B. Further application of the principles of singing through more difficult song literature. Recommended to candidates for certification as general supervisors to prepare for basic achievements examinations. Prerequisite: Voice Class 116A, B.
First semester. Mrs. Snyder. One semester hour.

216B Advanced Voice Class
A continuation of 216A.
Second semester. Mrs. Snyder. One semester hour.

217A Advanced Piano Class
A continuation of 117A, B. Recommended to elementary education majors. Prerequisite: Piano Class 117A, B.
First semester. Mrs. Beloof. Three semester hours.
DIVISION OF FINE ARTS

217B Advanced Piano Class
A continuation of 217A.
Second semester. Mrs. Beloof. Three semester hours.

219A Woodwind Class
The study of four woodwind instruments—flute, oboe, clarinet, and bassoon—to the extent that the student can play all scales on all four instruments. The study of a limited repertoire for these instruments.
First semester. Mr. Kyser. One semester hour.

219B Woodwind Class
A continuation of 219A.
Second semester. Mr. Kyser. One semester hour.

222A Italian Diction and Song Literature
Required of all students whose field of concentration is voice. Italian diction and song literature are studied as a class, and opportunity is provided for solo performance.
First semester. Mr. Adams. No credit.

222B Italian Diction and Song Literature
A continuation of 222A.
Second semester. Mr. Adams. No credit.

301A Junior High School Methods and Materials
This course involves a study of the place of music in the education of adolescent youth, the changing voice, voice testing and classification, singing and instrumental ensembles, the place of music in all types of integrating courses for secondary schools, and class instruction in voice and the various instruments.
First semester. Staff. Three semester hours.

301B Senior High School Methods and Materials
A continuation of 301A on the senior-high-school level.
Second semester. Staff. Three semester hours.

305A Counterpoint
Modal and harmonic counterpoint as exemplified by the composers of the fifteenth, sixteenth, seventeenth, and early eighteenth centuries. Modern counterpoint. Practical application through the writing of strict counterpoint in the five species—double counterpoint, obligatos, descants, canons, and fugues. Prerequisite: Advanced Harmony 206A, B.
First semester. Dr. Matthews. Three semester hours.

305B Counterpoint
A continuation of 305A.
Second semester. Dr. Matthews. Three semester hours.
306A Composition
Original work in composition, starting with the smaller forms in both the
d vocal and instrumental fields. Prerequisite: Advanced Harmony 206A, B.
First semester. Dr. Matthews. Three semester hours.

306B Composition
A continuation of 306A.
Second semester. Dr. Matthews. Three semester hours.

310A Style and Structure
A study of the finest musical compositions with particular reference to
design. Tracing the development of musical form from the phrase through
the sonata form. Particular emphasis on the eighteenth- and nineteenth-
century composers. Prerequisite: Advanced Harmony 206A, B.
First semester. Dr. Matthews. Three semester hours.

310B Contemporary Music Literature
Survey of contemporary music literature through listening. Some study
of the chronological evolution of modern structure and harmony. Special
emphasis on idiom, neo-classicism, polytonality, and atonality.
Not offered in 1950-1951. Three semester hours.

311A Instrumental Conducting
A beginning course in the correct use of the baton. Application is made
by use of easy literature for instrumental ensembles.
Second semester. Mr. Meretta, Mr. Stulberg. One semester hour.

311B Choral Conducting
A continuation of 311A, working in the field of choral music. Opportunity
is provided to prepare choral works with respect to tone quality, range
of nuance, phrasing, tempo, and balance of parts.
First semester. Dr. Carter, Mrs. Snyder. One semester hour.

312 Accompanying
Supervised experience in accompanying vocal and instrumental music,
both solo and ensemble. (This course may be repeated for credit not to ex-
ceed a total of four semester hours.)
Each semester. The Staff. One semester hour.

320A Brass Class
The study of four brass instruments—cornet (or trumpet), trombone,
French horn, and tuba—to the extent that the student can play all scales
on all four instruments. The study of a limited repertoire for these in-
struments.
First semester. Mr. Meretta. One semester hour.

320B Brass Class
A continuation of 320A.
Second semester. Mr. Meretta. One semester hour.
321 Percussion Class
A survey of the requirements for a percussion player. The student is required to play in an acceptable manner at least one percussion instrument and to demonstrate a working knowledge of three others.
Second semester. Mr. Meretta. One semester hour.

322A French Diction and Song Literature
Required of all students whose field of concentration is voice. French diction and song literature are studied as a class, and opportunity is provided for solo performance.
First semester. Mr. Adams. No credit.

322B French Diction and Song Literature
A continuation of 322A.
Second semester. Mr. Adams. No credit.

323 Major Performance Literature
Required of applied-music (except voice) majors for last two years. Literature for the major performance instrument is studied as a class, and opportunity is provided for solo performance. (This course may be repeated for credit not to exceed a total of four semester hours.)
Each semester. The Staff. One semester hour.

324A German Diction and Song Literature
Required of all students whose field of concentration is voice. German diction and song literature are studied as a class, and opportunity is provided for solo performance.
First semester. Mrs. Faustman. No credit.

324B German Diction and Song Literature.
A continuation of 324A.
Second semester. Mrs. Faustman. No credit.

351A Advanced Conducting
Supervised experience in conducting vocal and/or instrumental groups. The student may be called upon to prepare an ensemble for public performance. Prerequisite: Instrumental Conducting 311A, Choral Conducting 311B.
First semester. The Staff. One semester hour.

351B Advanced Conducting
A continuation of 351A.
Second semester. The Staff. One semester hour.

355A Orchestration
A study of the characteristics of the various instruments, application in arranging for various instrumental combinations including accompaniments for solos, vocal and instrumental. The course is about evenly divided between arranging for band and for orchestra. Some attention is given to the problems in score reading. Prerequisite: Advanced Harmony 206A, B.
First semester. Dr. Matthews. Three semester hours.
355B Orchestration
A continuation of 355A.
Second semester. Dr. Matthews. Three semester hours.

356A Advanced Composition
Further original work in composition dealing with the larger forms in both the vocal and instrumental fields. Prerequisite: Composition 306A, B.
First semester. Dr. Matthews. One to three semester hours.

356B Advanced Composition
A continuation of 356A.
Second semester. Dr. Matthews. One to three semester hours.

357A History of Music
Early development of rhythm, scale, and keynote; beginning of harmony, growth of notation; development of instruments and instrumental music; growth of opera and oratorio; crystallizing of schools of composition and the place of various composers in this process; use of nationalism in music and its transition into the music of the twentieth century.
First semester. Dr. Matthews. Three semester hours.

357B History of Music
A continuation of 357A.
Second semester. Dr. Matthews. Three semester hours.

360 Workshop in Special Problems
Designed for students interested in some special field of music not formally listed for instruction. All special problems must be approved by the head of the Department of Music, but may be under the direct guidance of any of the members of the music faculty. This course may be elected as many as three times.
Hours per week to be arranged with major professor. The Staff. One to three semester hours.

APPLIED MUSIC
Individual lessons in applied music can be elected for college credit by any student in the college. Students in other departments of the college who wish individual instruction in some field of applied music should contact the head of the Department of Music for assignment of instructor. Such requests will be granted to the extent that the instructor's time and practice facilities are available beyond the needs of the music-major degree candidates. All music majors are required to have 60 minutes a week of individual instruction in their major performance field of concentration through the entire four-year course.
Eight levels of study in the various areas of applied music are indicated in the Music Supplement Catalog. Levels one through four grant two semester hours of credit per semester. Levels five through eight grant three semester hours of credit per semester.
DIVISION OF FINE ARTS

11A through 18B  Harp
21A through 28B  Piano
31A through 38B  Organ
41A through 48B  Voice
51A through 58B  Stringed Instruments
   Violin, Viola, Cello, Bass Viol.
61A through 68B  Brass Instruments
   Cornet or Trumpet, Trombone, French Horn, Tuba, Baritone.
71A through 78B  Woodwind Instruments
   Flute, Oboe, Bassoon, Clarinet, Saxophone.
81A through 88B  Percussion

MUSIC ENSEMBLES

All music majors are required to participate in some large music ensemble, e.g., orchestra, band, choir, or glee club, throughout their four years of study. Students who want to participate in an ensemble should contact the director.

130 Women's Glee Club ................................. Mrs. Snyder
   The Women's Glee Club of Fifty is selected by try-outs. The object is to select students for special artistic training in ensemble work. The glee club sings before a number of high schools throughout the state and takes an active part in the musical work on the campus and in the city.

131 Men's Glee Club ................................. Mr. Adams
   Open to all men with musical ability who have had experience in singing. The club makes a concert tour during the spring vacation in addition to filling numerous other engagements and taking an active part in the music life on the campus.

132 Orchestra ................................. Mr. Stulberg
   The orchestra is open to all students who have had a reasonable amount of orchestral experience. Many fine compositions will be studied and played during the year. The orchestra will assist in the Messiah and other festivals. Many unusual instruments are available for the use of students.

133 Band ................................. Mr. Meretta
   This organization affords to the student who plays some instrument an opportunity for development in both marching and playing. The band furnishes music at nearly all athletic events, concerts are given during the year on the campus and at various high schools. Uniforms and many of the instruments are furnished. (May be substituted for physical education credit.)
The Auxiliary Choir is open to all students (men and women) who wish to obtain a knowledge of choral music. The choir participates in the annual Southwestern Michigan Messiah Festival at Christmas time and in the Southwestern Michigan College and High School Festival in May.

The College Choir has a limited membership. The organization aims to develop and perpetuate a high standard of choral-ensemble singing. Each year the choir makes a number of appearances on the campus and before high schools and other organizations.

Special instrumental or vocal ensembles may be formed with the permission of the head of the Department of Music. Where a sufficient number of hours of rehearsal per week warrant it, one semester hour of credit will be granted.

In order to meet the increasing demands of both civilian hospitals and those of the armed forces, the following courses are given in occupational therapy. They may be taken in any one of the following curricula: B.S. degree, with or without Teacher's Certificate and Diploma in Occupational Therapy, or the Diploma course for undergraduates and for college graduates. These curricula are approved by the American Medical Association, and graduates are qualified to take the examination for registration in the American Occupational Therapy Association.

Students enrolling in this department will take their major in occupational therapy and their minors in biology and art. It is expected that students will, as far as possible, choose the electives allowed in the curricula they are following from allied fields such as music, fine arts, or psychology.

A major in occupational therapy consists of courses 140A, 167, 203, 208, 210A, 210B, 220, 222, 223, 310A, 310B. A minor in art consists of courses 106, 215, 225, 226, 328. A minor in biology consists of courses 100A, 211A, 211B, 231A or B.

Theory of Occupational Therapy

Study of the history, purpose, and aims of occupational therapy from ancient times. Special emphasis is placed on occupational therapy in the psychiatric field and on professional and hospital ethics and etiquette.

Each semester. Miss Spear. Two semester hours.
210B Theory of Occupational Therapy
Specific instruction in applying occupational therapy in the various fields of service. Survey of public and private agencies offering facilities for the placement of the handicapped.
Each semester. Miss Spear. Two semester hours.

215 Elementary Design
This course includes problems of wide range of materials and techniques providing experiments in simple design for occupational therapy needs.
Each semester. Three semester hours.

216A Kinesiology
A basic study of the muscles of the body, classified as to joint motion. Each muscle studied according to origin, insertion, action, and effect of loss. This study accompanied by a review of the skeletal and nervous systems and basic terminology of kinesiology. Prerequisite: Anatomy and Physiology 215.
Each semester. Mrs. Willy. Two semester hours.

216B Applied Kinesiology
Course includes joint measurement, muscle testing, building and adapting equipment for physical exercise with special attention to cerebral palsy, polio, multiple sclerosis, and peripheral nerve injuries. Prerequisite: Kinesiology 216A.
Each semester. Mrs. Willy. Two semester hours.

310A Theory of Occupational Therapy
Correlation of all theory courses in occupational therapy. Specific instruction in the organization and administration of an occupational therapy department. Supplemented by field trips to hospitals, social agencies, and allied industries.
Each semester. Miss Spear. Two semester hours.

310B Theory of Occupational Therapy (Medical Lectures)
A series of lectures on medical and orthopedic conditions. These will be correlated with occupational therapy treatment.
First semester. Mrs. Willy and local physicians. Two or three semester hours.

330 Neurology and Psychiatry
Consists of the history and clinical demonstration of mental diseases; their causes and methods of readjustment. Study of the application of work to individual needs given during practical training.
Each semester. Miss Spear. Three semester hours.

352 Hospital Case Studies
Complete and thorough case histories of typical patients observed in occupational therapy departments. Students must submit two case histories for each semester hour credit.
Each semester. Mrs. Willy. Three or four semester hours.
THERAPEUTIC OCCUPATIONS

222 Recreational Therapy
A creative approach to writing, dramatics, singing, percussion instruments, games, dances, and fiesta meals as therapeutic measures enabling students to develop a basis for work with both children and adults.
Each semester. Two semester hours.

223 Stitchery
Includes samples of simple and decorative stitches, such as Italian hemstitching, Assisi, Swedish darning, and others; also knitting, crocheting, tatting, and the assembling of projects.
Each semester. Mrs. Thomas. Three semester hours.

224 Therapeutic Crafts
Course covers techniques and equipment used in short-time crafts, including hand printing, carving, string and paper work. Emphasis is placed on the application of these techniques to occupational therapy treatment.
Each semester. Mrs. Thomas. Two semester hours.

225 Ceramics and Jewelry
A beginning course dealing with the fundamentals of work in clay and other media, together with the designing and construction of jewelry in silver and other metals. Originality of ideas, methods of construction, and suitable finishing will be the main considerations.
Each semester. Two semester hours.

226 Minor Crafts
A course giving the techniques and equipment used in basketry, bookbinding, leatherwork, and rug making. Special emphasis will be placed on the use of these crafts in occupational therapy treatment.
Each semester. Mrs. Thomas. Three semester hours.

303 Weaving
Designed to give a working knowledge of hand looms. Includes discussion of looms, functional adaptations of them for special treatments, reading and drafting patterns, warping and threading looms, and types of weaving.
Each semester. Mrs. Thomas. Four semester hours.

CLINICAL TRAINING

410 Clinical Training
Each student is required by the American Medical Association to complete nine months of clinical training in hospitals arranged by the instructor and supervised by the therapist in charge of the respective Occupational Therapy departments. The types of hospitals in which the student trains are psychiatric, tuberculosis, general, pediatric, and orthopedic. Comprehensive reports are made by the students and analyzed by the instructor for ultimate consideration when the student graduates and qualifies for the national registration examination given by the American Occupational Therapy Association.
Arranged for by Miss Spear or Mrs. Willy. Five semester hours.
DIVISION OF LANGUAGES AND LITERATURE

Mathilde Steckelberg, Chairman

The Division includes the Departments of English, Languages, and Speech. It functions through a committee consisting of the respective heads of these departments. The heads of the departments and the departmental counselors will advise students relative to requirements for majors and minors in these departments and concerning any special requirements set up by the departments. In certain cases, where a group major or minor is possible and advisable, the chairman of the Division should be consulted.

104A Communication

A course which attempts to provide the training in the combined techniques of reading, writing, speaking, and listening. By means of analyses of written material and lectures, group discussions, short talks, and written exercises, the course aims to promote effective communication and intelligent comprehension in common situations. May be taken as the equivalent of Rhetoric 106A.

First semester. Mrs. Malmstrom, Mr. Householder, Dr. Limpus, Dr. Miller. Four semester hours.

104B Communication

A continuation of 104A. May be taken as the equivalent of Rhetoric 106B.

Second semester. Mrs. Malmstrom, Mr. Householder, Dr. Limpus, Dr. Miller. Four semester hours.

ENGLISH

 THELMA E. ANTON HELEN E. MASTER
 WILLIAM R. BROWN RALPH N. MILLER
 GEORGIANN BURGE LUCILLE A. NOBBS
 EDITH M. EICHER FREDERICK J. ROGERS
 LORENA M. GARY HELEN G. SELLERS
 FRANK C. HOUSEHOLDER CHARLES A. SMITH
 ROBERT M. LIMPUS JOSEPH CARL TOROK
 M. DEZENA LOUTZENHISER RUTH VAN HORN
 JEAN MALMSTROM LOUISE J. WALKER

The courses in English are planned primarily to meet the needs of students preparing to teach in the various departments of the public schools.

Attention is called to the Comparative Arts 215 and Mythology 202, each of which may be counted for 2 hours credit in the English Department.

Freshmen who elect literature in addition to rhetoric may take Introduction to Literature 107A and B or General Literature 124A and B.

Students who intend to have a major or minor in English in any curriculum should confer with the adviser of the department by the third semester. The following general suggestions may assist in planning programs of study:
Students who intend to minor in English in the Elementary curriculum should plan to include in their 15 hours Literature for Children 203; Introduction to Literature 107A and B or General Literature or Literary Interpretation 210, and 3 hours in American Literature. Students in the Elementary curriculum who intend to major in English should add to the above 3 hours in fiction and 3 hours in drama.

Students who major or minor in English in the Secondary curriculum should have a reading knowledge of some modern language, preferably French or German. Minors must include in their 15 hours 3 hours in Shakespeare, 3 hours in American Literature, 3 hours in fiction; 3 to 6 hours in period courses; and General Literature or Literary Interpretation. Majors in addition to the work required for minors must have Chaucer and two period courses. The student who is now planning a major or minor in English must include these courses listed for the minor in the secondary education curriculum.

Not more than 6 of the 24 hours for a major and not more than 3 of the 15 hours for a minor may be counted from the following courses: Journalism 201, A and B; Expository Writing 326; Writing by Types 327; and Creative Writing 328.

All majors in English and all minors in English in the Secondary and General Degree Curricula must take in addition to Rhetoric 106, A and B, an additional two hours in History of the English Language 325, which may not be counted toward the requirement in Group I, or toward the minimum requirements for major or minor.

**LANGUAGE**

106A Rhetoric

The course is planned to aid the student in developing greater facility in the use of language in the common human experiences of thinking, talking, reading, and writing.

Each semester. The Staff. Three semester hours.

106B Rhetoric

A continuation of 106A.

Each semester. The Staff. Three semester hours.

206A Writing Laboratory

A course in which students follow individualized programs of reading and writing, with considerable class discussion and evaluation of finished products. This course is designed for second-year students and for freshmen who have been exempted from Rhetoric because of superior achievement.

First semester. The staff. Three semester hours.

206B Writing Laboratory

A continuation of 206A.

Second semester. The staff. Three semester hours.
201A Journalism
Origins, development, and ethical principles involved in writing and editing American newspapers; and practice in types of journalistic writing and editing are given. Straight news, advance, follow, and sports stories; interviews; informative, human-interest, and entertainment features and columns; ethics of journalism and publicity; copy-editing and headlines are studied.
First semester. Miss Anton. Three semester hours.

201B Journalism
A continuation of 201A. Editorials, opinion columns, critical writing, cartoons, advertising copy and lay-out, typography, and page lay-outs are studied. Prerequisite: English 201A.
Second semester. Miss Anton. Three semester hours.

325 History of the English Language
A course in the development of the language, treating the historic and linguistic forces which have brought about changes in the form, grammar, and vocabulary of English. Required of all English majors and of all minors except in the Elementary Curriculum.
Each semester. Mrs. Burge, Miss Eicher, Miss Gary, Dr. Limpus, Miss Master. Two semester hours.

326 Expository Writing
An elective course offering practice in the writing of expository papers of all kinds.
Each semester. Miss Anton, Miss Walker. Two semester hours.

327 Writing by Types
An advanced elective course in writing for especially qualified students of junior or senior standing with a grade of A or B in Rhetoric 106. Reading and practice in writing with emphasis on literary qualities.
Each semester. Miss Nobbs. Two semester hours.

328 Creative Writing
Original writing in the field of the student's choice. Open only to juniors and seniors who have gained permission.
First semester. Miss Van Horn. Three semester hours.

329 Modern English Usage
An examination of contemporary language usage for the purpose of understanding current tendencies. Greatest emphasis is placed on an inductive study of modern grammar, based on the actual usage of speakers and writers. Semantic and phonetic processes are also studied.
Each semester. The Staff. Two semester hours.
Open to Seniors and Graduates

415(166) Literary Criticism
A careful study of the fundamental principles of literary criticism, supplemented with wide reading in English critical essays. Each student writes several short criticisms.
First semester. Dr. Miller. Two semester hours.

425(152) Modern English Grammar
A study of the historical development of the English language with special attention to the evolution of modern syntax and the growth of new meanings of words.
Not offered in 1951-1952. Dr. Limpus. Two semester hours.

LITERATURE

107A Introduction to Literature
A study of expository writing in the social sciences, natural sciences, and philosophy. Limited to freshmen. Prerequisite to 107B.
Each semester. The Staff. Three semester hours.

107B Introduction to Literature
In the second semester the emphasis is on belles lettres: autobiography, the short story, the novel, and poetry.
Each semester. The Staff. Three semester hours.

124A General Literature
A careful reading of representative pieces of European literature in translation. First semester, reading in the epic and drama.
First semester. Dr. Brown, Miss Master, Mr. Rogers. Three semester hours.

124B General Literature
A continuation of 124A. Readings in prose fiction and the lyric.
Second semester. Dr. Brown, Miss Master, Mr. Rogers. Three semester hours.

203 Literature for Children
A general survey of the field of literature suited to the needs and tastes of children; the general principles which underlie the selection of literature for children under any given conditions.
Each semester. Miss Master. Three semester hours.

207A Great English Writers
Emphasis is placed on the study of Chaucer, Shakespeare's Henry IV, Part I, Twelfth Night, Milton's Paradise Lost, and Boswell's Johnson. Open only to sophomores.
First semester. Miss Anton, Miss Eicher, Miss Loutzenhiser, Miss Van Horn. Three semester hours.
207B Great English Writers
Emphasis is placed on the study of Wordsworth, Eliot's *Adam Bede*, Browning’s Shorter Poems, Newman, and Huxley. Open only to sophomores.
Second semester. Miss Anton, Miss Eicher, Miss Loutzenhiser, Miss Van Horn. Three semester hours.

210 Literary Interpretation
In this course an attempt is made to introduce the student to the general field of literary study and to develop in him some skill in critical interpretation. The typical forms of literature are carefully studied, and different ways of approaching the subject are considered.
Each semester. Miss Eicher, Miss Sellers. Three semester hours.

212 The Familiar Essay
This course aims to introduce the student to careful and accurate reading of English literary prose, and to cultivate in him some appreciation of the familiar essay as a type of literature.
Second semester. Dr. Miller. Two semester hours.

214A Shakespeare
The purpose of the course is to help the student read Shakespeare with better understanding and appreciation. One of the great tragedies and one of the better comedies are carefully studied in class.
First semester. Dr. Brown. Three semester hours.

214B Shakespeare
In this course the remaining plays and the poems of Shakespeare are read and considered in their historical order.
Second semester. Dr. Brown. Three semester hours.

216A Contemporary Literature
A detailed study of the major trends and authors represented by them in English Literature from the beginning of the century to the present time. 216A is not a pre-requisite for 216B.
First semester. Mr. Householder, Mr. Rogers, Mrs. Malmstrom. Two semester hours.

216B Contemporary Literature
A detailed study of the major trends and authors represented by them in American literature from the beginning of the century to the present time.
Second semester. Mr. Householder, Mr. Rogers, Mrs. Malmstrom. Two semester hours.

218A The English Bible—The Old Testament
In this course an attempt is made to study the Bible as a body of great literature. Facts of history and composition, insofar as they are known, are carefully studied as a background for intelligent interpretation and appreciation of Biblical literature.
First semester. Miss Gary. Two semester hours.
218B The English Bible
Second semester. Miss Gary. Two semester hours.

219 Short Story
A study of the short story as an art form, principally in America, England, and certain European countries, with comments on the interrelationship of ideas. One term paper required.
Each semester. Miss Van Horn. Two semester hours.

221A American Literature
A survey of American literature from the beginning to the Civil War with special reference to the development of literary movements and types.
First semester. Mr. Householder, Mrs. Burge, Miss Nobbs, Miss Walker. Three semester hours.

221B American Literature
This course is a continuation of American Literature 221A from the Civil War to the present.
Second semester. Mr. Householder, Mrs. Burge, Miss Nobbs, Miss Walker. Three semester hours.

223A English Literature 1660-1730
Literature of the classical period exclusive of Milton.
First semester. Dr. Miller. Three semester hours.

223B English Literature 1730-1798
Second semester. Dr. Miller. Three semester hours.

225 The Ballad
A study of the form and method of development of the traditional popular ballad.
Not offered in 1950-51. Miss Master. Two semester hours.

227A English Literature of the Renaissance
A study of the non-dramatic poetry and prose of the sixteenth century—Sidney, Spenser, Bacon, and others.
First semester. Mr. Smith. Three semester hours.

227B English Literature of the Renaissance
A study of the non-dramatic poetry and prose of the first half of the seventeenth century—Donne, Jonson, Herrick, Bunyan, Browne, and others. 227A is not a prerequisite for 227B.
Second semester. Mr. Smith. Three semester hours.

228 Milton
Milton is approached in this course both as a great literary artist and as one of the most significant liberal thinkers of modern times. *Comus, Paradise Lost, Paradise Regained, Samson Agonistes*, and a selection of his prose are read and discussed.
First semester. Mr. Smith. Three semester hours.
305A Victorian Literature

The poetry and prose of the Regency and Early Victorian Periods. For juniors and seniors. Sophomores may enroll with the permission of the instructor.

First semester. Not offered 1951-52. Two semester hours.

305B Victorian Literature

The poetry and prose of the Middle and Late Victorian Period. For juniors and seniors. Sophomores may enroll with the permission of the instructor. (305A is not prerequisite for 305B).

Second semester. Not offered 1951-52. Two semester hours.

306 Carlyle

This course is intended for mature students who have a taste for serious, thoughtful reading and who care for a better acquaintance with the work of this author.

First semester. Miss Loutzenhiser. Two semester hours.

307A History of English Literature

This course is intended primarily for third- and fourth-year students who have had no literature in the first and second years. It may be elected by other third- and fourth-year students who have not taken English Literature 207. A study of English epic and lyric poetry.

First semester. Miss Gary. Three semester hours.

307B History of English Literature

A continuation of 307A. A study of representative English dramas, essays, and novels.

Second semester. Miss Gary. Three semester hours.

308A English Drama

The chief aim of the course is to acquaint the students with both interesting and significant plays by Elizabethan and Jacobean playwrights.

First semester. Mr. Smith. Two semester hours.

308B English Drama

A continuation of 308A. Restoration and eighteenth-century plays by Dryden, Wycherley, Steele, Addison, Gay, Garrick, Sheridan, and others are studied.

Second semester. Mr. Smith. Two semester hours.

309A English Literature of the Romantic Period

A study of the main currents of English literature near the beginning of the nineteenth century, beginning with Blake and Burns and emphasizing Wordsworth, Coleridge, Scott, and the major criticism of the period. Prerequisite: six hours of literature.

First semester. Dr. Limpus. Three semester hours.
309B  English Literature of the Romantic Period
A continuation of 309A, emphasizing Byron, Shelley, Keats, Hazlitt, Lamb, and DeQuincey.
Second semester. Dr. Limpus. Three semester hours.

312  Wordsworth
A study of Wordsworth's poetry and critical theory against the background of the Romantic movement.
Second semester. Mr. Smith. Three semester hours.

313  English Novel
A study of the technique of the novel and its development in England from Defoe to Hardy.
Each semester. Dr. Brown, Miss Loutzenhiser. Three semester hours.

314  Contemporary Novel
A study of the tendencies in English and American prose fiction since 1898, together with wide reading from the chief novelists of the period.
Each semester. Miss Anton, Dr. Brown. Two semester hours.

315  The European Novel
A study of selected masterpieces of continental fiction in English translation. Major emphasis is placed upon the inter-relation of continental patterns and the development of English fiction.
First semester. Dr. Brown. Three semester hours.
Note.—This course cannot be counted for credit by students who elect General Literature 124B.

322  American Literature
This course is intended for juniors and seniors who have not taken English 221A, B. (This course cannot be counted for credit together with courses 221A, B.)
Each semester. Dr. Miller, Miss Nobbs. Three semester hours.

333  Lives and Letters of English Authors
This course combines a detailed study of the Wordsworths and Carlyles, with wide reading in biography and letters. Reports and critical essays are required.
First semester. Dr. Brown, Mr. Rogers. Two semester hours.

337  European Drama to 1890
A study of great plays in translation from Greek drama to Ibsen, with particular reference to their literary significance and their influence upon English drama. Not open to students who have had General Literature 124A.
First semester. Miss Eicher. Two semester hours.
338 Modern Drama
A study of the plays of Ibsen, Pinero, Jones, Galsworthy, Shaw and others, with a careful inquiry into the relations among the Continental, the English, and the American dramas.
Second semester. Miss Eicher. Two semester hours.

390 Anglo-Saxon
The purpose of Anglo-Saxon 390 is to give the student some acquaintance with Old English grammar and Old English forms as a foundation for more thorough study and understanding of modern English. An elective for English Majors and Minors.
Not offered in 1951-52. Dr. Brown. Three semester hours.

391 Chaucer
As much as possible of Chaucer's poetry is read in the original with special attention to pronunciation, grammar, and meter. The life and time of Chaucer are carefully studied as an aid to the interpretation of his poetry. Required of Secondary English Majors and an elective for others.
Second semester. Dr. Brown. Three semester hours.

Open to Seniors and Graduates

409(120) English Literature of the Romantic Period
A study of the main currents of English literature near the beginning of the nineteenth century, beginning with Blake and Burns and emphasizing Wordsworth, Coleridge, Scott, and the major criticism of the period.
First semester. Dr. Limpus. Three semester hours.

409(121) English Literature of the Romantic Period
A continuation of 309A, emphasizing Byron, Shelley, Keats, Hazlitt, Lamb, and DeQuincey.
Second semester. Dr. Limpus. Three semester hours.

413(184) The Modern Novel
A study of social interpretation in the English novel from Jane Austen to John Galsworthy.
First semester. Dr. Brown. Two semester hours.

414(160) Shakespeare's Tragedies
Elective course for graduates and for seniors who wish one term of Shakespeare. Prerequisite: 10 hours of College English Literature.
Second semester. Dr. Brown. Three semester hours.

415(161) Shakespeare's Comedies
Elective course for graduates and for seniors who wish one term of Shakespeare. Prerequisite: 10 hours of College English Literature.
Not offered in 1951-52. Dr. Brown. Three semester hours.
416(177)  English Literature from the Restoration to 1730
The works of leading literary figures of the period, with emphasis on satire.
First semester.  Dr. Miller.  Three semester hours.

417(178)  English Literature from 1730 1798
Not offered in 1951-52.  Dr. Miller.  Three semester hours.

421(181)  American Literature
A survey of the literature of the colonial and early national period, including the writings of Freneau, Irving, Bryant, Emerson, Thoreau, Hawthorne, Poe, and Melville.
Second semester.  Dr. Miller.  Two semester hours.

422(182)  American Literature
A study of representative prose and poetry from 1870 to the present. Individual assignments cover schools and tendencies, with emphasis upon Whitman, Mark Twain, Henry James, O'Neill, Robinson, Steinbeck, and Hemingway.
Not offered in 1951-52.  Miss Nobbs.  Two semester hours.

TEACHING

300  Teaching of English
This course aims to give the prospective teacher in the junior and senior high school the best available information relative to the content and teaching of English. This course is strongly recommended for secondary English majors.
First semester.  Miss Walker.  Two semester hours.

LANGUAGES

MATHILDE STECKELBERG  HERMANN E. ROTHFUSS
HERB B. JONES  MARION TAMIN
EUNICE E. KRAFT  MURIEL RIX VINCENT
FRANCES E. NOBLE  MYRTLE WINDSOR

Twenty-four semester hours are required for a major in foreign languages and fifteen for a minor. A two-hour course numbered above the one-hundreds is required for minors. The minimum requirement does not include the first year of a language, if taken as a part of a curriculum leading to a secondary teaching certificate. No credit will be given for less than eight semester hours of a beginning language.

Students desiring to do directed teaching in foreign languages must have completed a minimum of fifteen semester hours and must be approved by the head of the department. Teaching of Latin 342 is prerequisite to directed teaching in Latin. Phonetics 305 and France and the French 207A, B are required of students minoring or majoring in French. Latin Writing 305 is required of all students majoring in Latin.
A course in modern European history is desirable for students majoring or minoring in a modern foreign language.

Students are urged to take the advanced courses as full year units, although credit may be obtained for one semester upon consultation with the instructor.

**FRENCH**

**100A Elementary French**

This course is designed to give the basic foundation needed to read a simple text in French. It aims also, from the outset, to give training in understanding spoken French and an elementary knowledge of pronunciation with the help of records and wire recorder.

First semester. Dr. Noble, Miss Tamin, Miss Windsor. Four semester hours.

**100B Elementary French**

This course is a continuation of the basic grammar, pronunciation drill, and work in oral comprehensions begun in French 100A. About 150 pages of reading will be used as a basis for conversation practice. French records and the wire recorder will be used frequently.

Second semester. Dr. Noble, Miss Tamin, Miss Windsor. Four semester hours.

**102A Intermediate French**

This course consists of a thorough review of French grammar with frequent written and oral exercises aiming at making grammar functional. About 200 pages of texts chosen from literature, novels, short stories and plays are read. The composition consists of reproduction of texts read in class; other texts are read outside for comprehension and enjoyment.

First semester. Dr. Noble, Miss Tamin. Four semester hours.

**102B Intermediate French**

This is a continuation of 102A. In this semester 300 pages of reading are completed.

Second semester. Dr. Noble, Miss Tamin. Four semester hours.

**201A Conversation and Free Composition**

This course is intended to develop ease and accuracy in the use of everyday French. Prerequisite: two years of high school French or equivalent.

First semester. Miss Tamin. Two semester hours.

**201B Conversation and Free Composition**

This is a continuation of 201A.

Second semester. Miss Tamin. Two semester hours.

**203A Nineteenth Century French Literature**

A study of romanticism and the development of realism, with readings from Chateaubriand, Victor Hugo, Alfred de Vigny, George Sand. Prerequisite: Elementary French 100A, B, Intermediate French 102A, B, or equivalent.

First semester. Dr. Noble. Three semester hours.
203B Nineteenth Century French Literature
This is a continuation of 203A. It is a study of naturalism, with readings from Balzac, Flaubert, Zola, Maupassant; and the Parnassian and symbolistic schools of poetry.
Second semester. Dr. Noble. Three semester hours.

207A France and the French
This course is required of those specializing in French, but is conducted in English and open to those not in the Department of French. A study is made of geography, art, historical monuments, and contemporary problems of French life.
First semester. Dr. Noble. One semester hour.

207B France and the French
This is a continuation of 207A.
Second semester. Dr. Noble. One semester hour.

305 Phonetics
This course is intended to give a corrective description of the difficulties encountered by students of French with Anglo-American habits of pronunciation. Required of all students majoring or minoring in French. Prerequisite: two years of college French or equivalent.
First semester. Miss Tamin. Three semester hours.

306 Advanced Composition and Grammar Review
This course is intended to verify and to strengthen the knowledge of fundamental principles of grammar in those students who are planning to teach French. Prerequisite: two years of college French or equivalent.
Second semester. Miss Tamin. Three semester hours.

307A Contemporary French Literature
A study of a few outstanding novels by leading writers of the period between the two wars, with a definite effort to find out the different trends of thought of contemporary writers. Prerequisite: three years of college French or equivalent.
Not offered in 1951-1952. Miss Tamin. Two semester hours.

307B Contemporary French Literature
This is a continuation of 307A. It consists of a study of the evolution of the drama in France from the beginning of the twentieth century, with careful reading of a few outstanding plays. Prerequisite: three years of college French or equivalent.
Not offered in 1951-1952. Miss Tamin. Two semester hours.

310A Seventeenth Century French Literature
This is a study of the development of classicism against the social background of the seventeenth century. An anthology of the prose and poetry of the period is used as the center of interest. Prerequisite: three years of college French or equivalent.
Miss Tamin. Three semester hours.
### 310B Seventeenth Century French Literature

This is a study of the great dramatists: Corneille, Racine, Molière, with a thorough study of some of their best-known plays. Prerequisite: three years of college French or equivalent.

Miss Tamin. Three semester hours.

### 313A Survey of French Literature

This course is intended to acquaint students with the masterpieces of French literature, with special emphasis on the medieval period and the Renaissance. Prerequisite: three years of college French or equivalent.

Not offered in 1951-1952. Miss Tamin. Two semester hours.

### 313B Survey of French Literature

This is a continuation of 313A with emphasis on the eighteenth century philosophers and their influence on the political reformers in America.

Not offered in 1951-1952. Miss Tamin. Two semester hours.

### GERMAN

#### 100A Elementary German

This course aims to give the student an understanding of the fundamentals of German grammar, and some facility in speaking and writing the language. Ability to read German is developed by the study of 100 pages of prose. One year of high school German may be applied on the elementary course.

First semester. Dr. Rothfuss, Miss Steckelberg. Four semester hours.

#### 100B Elementary German

This is a continuation of 100A. Approximately 100 pages of prose are read, and grammar, oral work, and composition are correlated. No credit is given for 100A unless 100B is completed.

Second semester. Dr. Rothfuss, Miss Steckelberg. Four semester hours.

#### 102A. Intermediate German

The work of this course consists principally of the reading of novelistic and dramatic German. The composition work consists of reproductions of texts read, short compositions on assigned topics, and reports on books assigned for collateral reading. The memorizing of poems is required. Prerequisite: one year of college German or two years of high school German.

First semester. Dr. Rothfuss, Miss Steckelberg. Four semester hours.

#### 102B Intermediate German

This is a continuation of 102A.

Second semester. Dr. Rothfuss, Miss Steckelberg. Four semester hours.

#### 103A Scientific German

This is a course in the extensive reading of scientific material. Students are given an opportunity for specialization in the field of their major interests. Prerequisite: one year of college German or two years of high school German.

First semester. Miss Steckelberg. Four semester hours.
103B Scientific German
This is a continuation of the extensive reading of scientific material. Unedited material from encyclopedias of science and from current science magazines is introduced.
Second semester. Miss Steckelberg. Four semester hours.

201A German Conversation and Composition
The aim of this course is to supplement the practice in speaking and writing German done in the reading courses. It is required of students majoring in German. Prerequisite: the equivalent of two years of college German.
First semester. Dr. Rothfuss. Two semester hours.

201B German Conversation and Composition
This is a continuation of 201A.
Second semester. Dr. Rothfuss. Two semester hours.

305A German Literature to 1825
This is a survey of German literature through the time of Lessing, with readings from early German epics and lyrics and a detailed study of the times and works of Lessing. Prerequisite: the equivalent of two years of college German.
First semester. Miss Steckelberg. Four semester hours.

305B German Literature to 1825
This is a study of the classical period, and a continuation of 305A. The life and works of Goethe, Schiller, and other poets of the period are studied. Selected dramas, lyrics, and the prose of Goethe and Schiller are read.
Second semester. Miss Steckelberg. Four semester hours.

306A German Literature from 1825 to the Present
The romantic movement in Germany and German drama through the time of Hebbel are studied. The works of the romanticists and the dramas of Kleist and Hebbel are read. Prerequisite: the equivalent of two years of college German.
Not offered in 1951-1952. Dr. Rothfuss. Four semester hours.

306B German Literature from 1825 to the Present
This course is a continuation of 306A. The work covers German literature from Grillparzer to the present. A study is made of the dramatic, epic, and lyric poetry of the period, with readings from Grillparzer, Hauptmann, Sudermann, Hugo von Hofmannstahl, and other poets.
Not offered in 1951-1952. Dr. Rothfuss. Four semester hours.

LATIN

100A Elementary and Second-Year Latin
This course is designed for those students who need two units of Latin for admission to the A.B. curriculum or to a medical, law, or other profes-
sional course. With 100B it covers the work of two units of high school language requirement.

First semester. Miss Kraft, Mrs. Vincent. Four semester hours.

100B Elementary and Second-Year Latin

A continuation of 100A.

Second semester. Miss Kraft, Mrs. Vincent. Four semester hours.

Note.—A student may present one unit of high-school Latin and enter the course in the second semester.

102A Cicero and Ovid

Orations and letters of Cicero are read. One day each week is devoted to Latin composition. Prerequisite: two units of high school Latin or Elementary and Second-Year Latin 100A, B.

First semester. Mrs. Vincent. Four semester hours.

102B Cicero and Ovid

This course is a continuation of 102A. Selections from Cicero and from Ovid's "Metamorphoses" are read.

Second semester. Mrs. Vincent. Four semester hours.

103A Virgil

The first books of the Aeneid are read and a survey of the whole is begun. A study of Greek and Roman mythology accompanies the reading. Prerequisite: three units of high school Latin or Cicero and Ovid 102A, B.

First semester. Mrs. Vincent. Four semester hours.

103B Virgil

This is a continuation of 103A. Intensive study of the first six books is continued, and the survey of the whole is completed.

Second semester. Mrs. Vincent. Four semester hours.

104A Latin Literature

A survey of Roman literature with reading of representative Latin authors is the aim of this course. Selections from Books I, V, XXI, XXII, XXVII, XXX of Livy are read. Prerequisite: four units of Latin.

Not offered in 1951-1952. Miss Kraft. Four semester hours.

104B Latin Literature

This is a continuation of 104A. Selections from Cicero's philosophical works, Pliny's Letters, and the Latin poets are studied.

Not offered in 1951-1952. Miss Kraft. Four semester hours.

202 Mythology

This is a survey of the principal myths and legends of Greece and Rome. It is accompanied by a study of their representations in painting and sculpture, and by appropriate readings in English literature. Credit from this course may be applied on Group I or on an English major and minor.

Second semester. Miss Kraft. Two semester hours.
204A Horace
The *Odes*, *Epodes*, and *Satires* are read. A study of the philosophy of Horace accompanies the reading.
First semester. Miss Kraft. Four semester hours.

204B Horace and Latin Comedy
The epistles of Horace are read, the *Ars Poetica* acting as an introduction to the study of the rise and development of Latin comedy, which is represented by selected plays of Plautus and Terence.
Second semester. Miss Kraft. Four semester hours.

305 Latin Writing
Practice is given in the fundamental principles of correct expression in Latin. Required of all students majoring in Latin.
First semester. Miss Kraft. Three semester hours.

306 Roman Life
The distinctive features of Roman private and public life are presented with a view to the needs of the high-school teacher. Since a knowledge of Latin is not required, the enrollment is not limited to students of the department.
Not offered in 1951-1952. Miss Kraft. Three semester hours.

310 Catullus, Tibullus, and Propertius
Selections from these poets and a study of the period in which they wrote.
First semester. Miss Kraft. Two semester hours.

311 Lucretius, Martial, and Juvenal
The study includes selections from the *De Rerum Natura* of Lucretius, the *Epigrams* of Martial, and the *Satires* of Juvenal.
Second semester. Miss Kraft. Two semester hours.

SPANISH

100A Elementary Spanish
The elements of grammar and pronunciation are given particular attention. The use of oral Spanish is encouraged, and reading is begun very early in the year.
First semester. Mr. Jones, Miss Windsor. Four semester hours.

100B Elementary Spanish
This is a continuation of 100A.
Second semester. Mr. Jones, Miss Windsor. Four semester hours.

102A Intermediate Spanish
The study of grammar is continued. A short novel is read and work in composition is based upon the text. Prerequisite: two years of high-school Spanish or Elementary Spanish 100A, B.
First semester. Mr. Jones, Miss Windsor. Four semester hours.
102B Intermediate Spanish
This is a continuation of 102A.
Second semester. Mr. Jones, Miss Windsor. Four semester hours.

201A Spanish Conversation and Composition
This course is intended to develop ease and accuracy in the use of everyday Spanish. Prerequisite: two years of high school Spanish or Elementary Spanish 100A, B. It will be offered if there is sufficient demand.
First semester. Mr. Jones. Two semester hours.*

201B Spanish Conversation and Composition
This is a continuation of 201A.
Second semester. Mr. Jones. Two semester hours.

203A Advanced Spanish
Emphasis will be placed on advanced composition and the reading of advanced texts. It is also the purpose of this course to give a knowledge and understanding of the Spanish-speaking nations. Prerequisite: Elementary Spanish 100A, B, and Intermediate Spanish 102A, B.
First semester. Four semester hours.

203B Advanced Spanish
This is a continuation of 203A. Business correspondence is introduced.
Second semester. Four semester hours.

207A Latin American Life and Culture
This course is a survey of the customs, arts, and literature in Latin American countries, with particular attention to Mexico. It is conducted in English.
First semester. Mr. Jones. Two semester hours.

305A Spanish-American Literature
Selected Spanish-American literary texts are studied. Prerequisite: Spanish 203A, B or its equivalent.
Mr. Jones. Two semester hours.

305B Spanish-American Literature
More difficult Spanish-American texts are studied. Courses 305A and 305B together represent a survey of the entire history of Spanish-American literature. Prerequisite: Spanish 305A or its equivalent.
Mr. Jones. Two semester hours.

306A Spanish Literature
Readings from Spanish literature from the sixteenth century to the present are selected for this course. Prerequisite: Spanish 305A, B, or consent of the instructor.
Not offered in 1951-1952. Mr. Jones. Two semester hours.

306B Spanish Literature
This is a continuation of 306A. A survey of the entire history of the literature of Spain is represented by the two courses. Prerequisite: 306A.
Not offered in 1951-1952. Mr. Jones. Two semester hours.
A major sequence in speech consists of courses 105A, B, 206, 210, 215, 225, 231, 320, and one other course. Since 215 and 320 are offered only in the second semester, it is imperative that majors take 215 during their sophomore year.

A minor sequence in speech consists of courses 105A, B, 206, 210, and other courses to bring the total to a minimum of 15 semester hours.

A minor sequence in speech correction consists of courses 105A, 230, 231, 318, 319.

For students specializing in English, courses 105A, B, 210, 310, 315, and 316 are recommended.

Students majoring in speech are strongly urged to minor in English.

99 Special Speech Problems

This course is designed to meet the needs of students with emotional conflicts or speech difficulties. Emphasis is placed upon the solution of the individual speech problem through applied mental hygiene and intensive speech practice.

Each semester. Dr. Van Riper. No credit.

105A Fundamentals of Speech

The basic course for all work in the department. A study and application of the fundamental principles underlying the use of the voice and the body for effective communication. Credit will be given for this course alone, but it is strongly urged that 105A and 105B be taken as a unit.

Each semester. The Staff. Three semester hours.

105B Fundamentals of Speech

Further study of principles, with additional opportunity for individual practice. Students interested in speech are advised to elect both 105A and 105B the first year. Prerequisite: Fundamentals of Speech 105A.

Each semester. The Staff. Three semester hours.

201 Parliamentary Usage

Designed for upperclassmen who desire some knowledge of how to organize meetings and conduct business according to parliamentary procedure. Study of such matters as motions and their order of precedence, committees and their duties, and election of officers. Constant application in the classroom of the principles studied.

Second semester. Dr. Becker, Dr. C. Brown, Miss Lindblom. One semester hour.
202 Discussion
A study of discussion technique and application of it in various situations from the standpoint of the leader and the discussant. Includes the round table, panel, forum, and committee meeting. Especially planned for those anticipating teaching the social sciences or speech, or engaging in administrative work. Prerequisite: Fundamentals of Speech 105A, B.
Second semester. Dr. Becker, Dr. C. Brown, Miss Lindblom. Three semester hour.

206 Public Speaking
Introductory study of the rhetorical principles of public speech and audience psychology. The primary aim is to develop clear thinking and ease and effectiveness in speaking. Frequent opportunity for platform work is given. Designed for upperclassmen. Prerequisite: Fundamentals of Speech 105A, B.
Each semester. Dr. Becker, Dr. C. Brown, Mrs. Herman, Miss Lindblom, Mr. Murphy. Three semester hours.

210 Interpretive Reading
Analysis and oral interpretation of the more simple types of prose and poetry. Prerequisite: Fundamentals of Speech 105A, B.
Each semester. Miss Bush, Miss Caughran, Mr. Garneau, Miss Shaw, Dr. York. Three semester hours.

215 Acting
Improvisation and practical work on the stage. Through class discussion and criticism from the instructor, the student acquires an understanding of the basic principles of the art of acting. Prerequisite: Fundamentals of Speech 105A, B, Interpretive Reading 210, or consent of instructor.
Second semester. Miss Bush, Miss Shaw. Three semester hours.

220 Stage Design
A course for speech and art majors. Class makes practical use of knowledge of scene painting, lighting, and mechanics of staging, in connection with the midwinter play.
First semester. Mr. Kemper, Dr. York.
Note.—This course may be counted for credit in either speech or art.

225 Argumentation and Debate
A thorough study of the principles of argumentation and frequent practice in debating current public questions. Attention is also given to the problems of coaching and judging debates. Students planning to participate in intercollegiate debate are advised, so far as possible, to elect this course first. Prerequisite: Fundamentals of Speech 105A, B.
First semester. Dr. Becker, Mrs. Herman, Miss Lindblom, Mr. Murphy. Three semester hours.
DESCRIPTION OF COURSES

226 Intercollegiate Debating

Application of argumentative principles to actual platform debate. The basis of this forensic practice is the intensive study of the questions used for intercollegiate debate.

Each semester. Mrs. Herman, Mr. Murphy. Three semester hours. Maximum of six semester hours allowed during college course.

230 Introduction to Speech Correction

A course designed to acquaint the student with the scope, history and nature of speech correction. Topics considered are: the development of speech in the child, the psychology of the speech defective, the relationship of speech disorders to reading disabilities, and other psycho-educational problems.

First semester. Dr. Van Riper. Three semester hours.

231 Principles of Speech Correction

A course intended especially for students in speech, speech correction, special education, and elementary education. The course is designed to acquaint the student with the general principles of speech correction as they relate to the types, causes, and development of the various speech disorders.

Second semester. Dr. Van Riper. Three semester hours.

240 Introduction to Radio Speaking

A study of radio technique, giving practice in various types of announcing, and adapting interpretive reading and acting to the microphone. Prerequisite: Fundamentals of Speech 105A, B, Interpretive Reading 210 or Public Speaking 206, or consent of instructor.

Each semester. Miss Bush, Mr. Garneau. Three semester hours.

241 Radio Production

The class will study production techniques employed in radio and recording. Each person will be given practice in handling controls, in arranging sound effects, musical effects, and other details peculiar to radio. Prerequisite: Introduction to Radio Speaking 240, or consent of instructor.

Each semester. Mr. Garneau. Three semester hours.

300 Applied Speech Correction

This course is for students interested in the actual practice of speech correction. The course will involve training in the remedial treatment of speech defectives in the college clinic and schools associated with the college, service in a traveling speech clinic, and the study of the principles of clinical practice. Prerequisite: Fundamentals of Speech 105A, B, Principles of Speech Correction 231, and consent of instructor.

Each semester. Dr. Van Riper. Three semester hours.

305 Speech for the Classroom Teacher

The course is designed to help the teacher become more effective in speak-
ing and reading. The content of the course will be adjusted to meet the specific speech needs of the individual members of the class.

Offered in the summer. The Staff. Three semester hours.

310 Advanced Interpretive Reading

Advanced work in the oral interpretation of literature, with special emphasis on character delineation. Prerequisite: Fundamentals of Speech 105A, B, Interpretive Reading 210, Acting 215.

Offered as needed. Miss Shaw. Two semester hours.

315 Acting

A continuation of the work done in Acting 215, with more intensive work in the techniques of creative acting. Each student will create at least one role in a play. Prerequisite: Fundamentals of Speech 105A, B, Interpretive Reading 210, Acting 215.

First semester. Miss Shaw. Two semester hours.

316 Oral Interpretation of the Drama

Platform reading of the one-act and the three-act play. Through class analysis and criticism, a basis for judging the drama is established. Prerequisite: Fundamentals of Speech 105A, B, Interpretive Reading 210, Acting 215, and Advanced Interpretive Reading 310, or consent of instructor.

Offered as needed. Miss Shaw. Two semester hours.

318 Phonetics

This course is designed to acquaint the student with the standard of pronunciation, with the methods of sound formation and phonetic transcription, and with the application of these methods to foreign language, dialect, interpretive reading, dramatics, and speech correction.

Second semester. Dr. Van Riper. Three semester hours.

319 Basic Voice and Speech Science

This course is for students majoring in speech or speech-correction. Topics considered include: anatomy and physiology of hearing; speech and hearing; anatomy and physiology of articulation and phonation; the neurological organization of the speech function; the physics and physiology of quality, pitch, and intensity; and the psychology of speech. Prerequisite: Fundamentals of Speech 105A, B.

Second semester. Dr. Van Riper. Three semester hours.

320 Play Production

Methods of staging plays, including direction, stage settings, costumes, and make-up. Plays are presented by the class. Each student directs at least one play. Prerequisite: Fundamentals of Speech 105A, B. Interpretive Reading 210, Acting 215, and consent of instructor.

Second semester. Miss Shaw. Three semester hours.

331 Stuttering and Allied Disorders

This course is designed to provide the student with more detailed knowledge of the nature, causes, development, and treatment of the more serious
speech disorders. The literature of stuttering, cleft palate, deaf, and aphasic individuals will be surveyed, and the various methods of treating these disorders will be described in detail. Case studies and presentation will be provided. **Prerequisite:** Principles of Speech Correction 231. 
Second semester. Dr. Van Riper. Three semester hours.

### 341 Utilization of Radio and Recordings in the Classroom

An exhaustive study will be made of the sources of radio programs and transcriptions available to supplement other teaching aids. The group will study methods of preparation for utilization, techniques of class-listening, and follow-up procedures. Each student will be given an individual utilization project. Resource persons will be brought in. **Prerequisite:** junior standing.

Second semester. Mr. Garneau. Two semester hours.

### 342 Introduction to Radio Script-writing

An analysis will be made of radio scripts—commercial, sustaining, and educational. The class will study techniques of radio which present special problems to the radio script-writer. Emphasis will be placed on preparing scripts in various subject-matter fields. Resource persons will be brought in. **Prerequisite:** junior standing and consent of instructor.

First semester. Mr. Garneau. Two semester hours.

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**Open to Seniors and Graduates**

### 406(131) Advanced Public Speaking

Advanced study of speech composition and audience psychology, analysis of model speeches, and frequent practice in constructing speeches for special occasions. Students interested in coaching or participating in oratorical contests will find this course useful. **Prerequisite:** Fundamentals of Speech 105A, Public Speaking 206, or consent of instructor.

Dr. C. Brown. Two semester hours.

### 408(191) Direction of Forensic Activities

For students who expect to direct forensic activities in connection with other teaching duties. The course includes the principles of teaching debate and other forms of public speaking. Opportunities will be given for directing local speaking activities. **Prerequisite:** a major or minor in speech and consent of instructor.

Dr. Becker. One semester hour.

### 420(198) Teachers' Workshop in Dramatics

A practical workshop in the skill of theatre production with an emphasis on stagecraft and directing for the high school teacher who has had no formal training in theatre.

Summer session. Dr. York. Four semester hours.
440(151) Fundamentals of Broadcasting
Instruction concerning every department of the broadcasting studio. Prerequsite: Fundamentals of Speech 105A, B, Public Speaking 206 or Interpretive Reading 210, or consent of instructor.
Mr. Garneau. Two semester hours.

441(197) Teachers' Workshop in Radio
A practical workshop in radio with emphasis upon the use of radio equipment. Planning program series, directing radio productions, and editing radio scripts.
Summer session. Mr. Garneau. Four semester hours.

449(D212) Teaching of Speech Correction
A study of the methods of individual and group therapy for common disorders of speech.
Dr. Van Riper. Two semester hours.
ADMISSION REQUIREMENTS

All students enrolled in the Basic Course must be citizens of the United States, be physically qualified, be accepted by Western Michigan College as regularly enrolled students, be not less than fourteen years of age, and may be required to pass qualification tests.

Students meeting the above requirements who have completed the Basic Course, or who have completed one year of military service and are selected by the President of the college and the Professor of Military Science and Tactics may be admitted to the Advanced Course.

BASIC COURSE

The first two years of military science are designated as the Basic Course. The Basic Course consists of two hours each week of class work and one hour each week of drill for the two year period. Six semester hours of credit toward graduation are given for the two years' work.

ADVANCED COURSE

The third and fourth years of military science are designated as the Advanced Course. The Advanced Course consists of four hours each week of class work and one hour each week of drill for the two year period. Twelve semester hours of credit toward graduation are given for the two year's work.

A contract with the Army obligating the student to complete the course, to attend summer camp between the junior and senior years, and to accept a commission upon graduation is a prerequisite for enrollment in the Advanced Course. In return the student is paid a subsistence allowance during the school year, receives a transportation allowance to and from summer camp, and is paid the salary of a grade seven (7) enlisted man during summer camp. Upon completion of the Advanced Course and graduation from college, the student is eligible for appointment as a Second Lieutenant in the Quartermaster Corps Reserve, Army of The United States.
DIVISION OF PHYSICAL EDUCATION, HEALTH, AND RECREATION

Mitchell J. Gary, Chairman

The Division includes the Department of Physical Education for Men and the Department of Physical Education for Women. It functions through a committee consisting of the respective heads of these departments. The heads of the departments and the departmental counselors will advise students relative to requirements for majors or minors in these departments and concerning any special requirements set up by the departments.

PHYSICAL EDUCATION FOR MEN

MITCHELL J. GARY
EDWARD A. GABEL
JOHN W. GILL
CHARLES H. MAHER
CLAYTON J. MAUS
MATTHEW L. PATANELLI
WILLIAM PERIGO
THOMAS C. SLAUGHTER
RAYMOND F. SORENSON
ROY J. WIETZ

All men students must participate in general physical education beginning with the first semester of residence, until a minimum of four semester hours is completed, except that the requirement for men who attended Western Michigan College of Education prior to July 1, 1946, will remain at 3½ semester hours. An A course and a B course in the 100 group must be completed before the student enrolls in the 200 group. An A course and a B course in the 200 group must be completed before the student enrolls in the 300 group.

A medical examination is required of all students upon initial entrance. Members of the varsity or freshmen athletic squads, upon recommendation of the coach concerned, may substitute activity on an athletic squad for general physical education participation during the semester in which the sport is in season.

All men students, including those who may anticipate being excused subsequently from participation in general physical education classes because of physical disability or substitute activity, must enroll for physical education classes. They must also attend the first meeting of the class or report to the head of the Department of Physical Education, so that proper arrangements may be made to satisfy the physical education requirement.

Students transferring from other institutions, and students with irregular programs will consult the head of the Department of Physical Education to determine what recommendation shall be made for satisfactory completion of the general physical education requirement.

Required courses for the twenty-four hour major in physical education are 105A, 105B, 205A, 205B, 206, 208, 209, 210, 211, 305, 306, 310, 320. Strongly recommended electives are 207, 309, 312. Education 343 is required of those who plan to do directed teaching in physical education.
Minimum requirements for men who elect physical education as their minor are 105A, 105B, 208, 209, 210, 211, 312, 320.

**THE GENERAL PHYSICAL EDUCATION REQUIREMENT**

**102A General Physical Education**
Activities of this course are especially designed to meet the physical needs of college freshmen. Emphasis is on fundamentals of the sports of the season, calisthenics, gymnastics, tumbling, and military drill.
First semester. Mr. Maher, Mr. Maus, Mr. Perigo, Mr. Slaughter, Mr. Sorenson, Mr. Wietz. Two-thirds semester hour.

**102B General Physical Education**
A continuation of the activities of 102A.
Second semester. Mr. Gill, Mr. Maher, Mr. Maus, Mr. Perigo, Mr. Patanelli, Mr. Sorenson, Mr. Wietz. Two-thirds semester hour.

**103A General Physical Education**
Similar in content to 102A above except that class meets three hours per week.
First semester. Mr. Maher, Mr. Maus, Mr. Patanelli, Mr. Slaughter, Mr. Sorenson, Mr. Wietz. One semester hour.

**103B General Physical Education**
A continuation of the activities of 103A.
Second semester. Mr. Gill, Mr. Maher, Mr. Maus, Mr. Patanelli, Mr. Sorenson, Mr. Wietz. One semester hour.

**202A General Physical Education**
Activities of this course follow the general pattern of the 100 group, emphasis on participation in the sports in season, with advanced work in gymnastics and tumbling.
First semester. Mr. Maher, Mr. Maus, Mr. Perigo, Mr. Slaughter, Mr. Sorenson, Mr. Wietz. Two-thirds semester hour.

**202B General Physical Education**
This is a continuation of 202A.
Second semester. Mr. Gill, Mr. Maher, Mr. Maus, Mr. Perigo, Mr. Sorenson, Mr. Wietz. Two-thirds semester hour.

**203A General Physical Education**
Content similar to 202A except class meets three hours per week.
First semester. Mr. Maher, Mr. Maus, Mr. Patanelli, Mr. Perigo, Mr. Slaughter, Mr. Sorenson, Mr. Wietz. One semester hour.

**203B General Physical Education**
This is a continuation of 203A.
Second semester. Mr. Gill, Mr. Maher, Mr. Maus, Mr. Patanelli, Mr. Sorenson, Mr. Wietz. One semester hour.
302A General Physical Education
This class is organized to give additional participation in activities covered in the 100 and 200 groups with opportunities for students to spend special time in activities of major interest.
First semester. Mr. Maher, Mr. Maus, Mr. Patanelli, Mr. Perigo, Mr. Slaughter, Mr. Sorenson, Mr. Wietz. Two-thirds semester hour.

302B General Physical Education
This is a continuation of 302A.
Second semester. Mr. Gill, Mr. Maher, Mr. Maus, Mr. Sorenson, Mr. Wietz. Two-thirds semester hour.

303A General Physical Education
Similar in content to 302A except that class meets three hours per week.
First semester. Mr. Maher, Mr. Maus, Mr. Patanelli, Mr. Slaughter, Mr. Sorenson, Mr. Wietz. One semester hour.

303B General Physical Education
This is a continuation of 303A.
Second semester. Mr. Gill, Mr. Maher, Mr. Maus, Mr. Patanelli, Mr. Perigo, Mr. Sorenson, Mr. Wietz. One semester hour.

COURSES FOR SPECIALIZING STUDENTS

105A General Athletics and Elementary Gymnastics
Covers material used in physical education classes for elementary and high school level. In the fall, the fundamentals and playing of soccer are stressed. The winter activity consists of fundamentals on the buck, side horse, high bar, parallel bars, ladder, etc., with some attention to the fundamentals of boxing.
First semester. Mr. Perigo, Mr. Wietz. One semester hour.

105B Elementary Gymnastics and Outdoor Games
A continuation of 105A with the addition of wrestling, softball, and touch football.
Second semester. Mr. Perigo, Mr. Wietz. One semester hour.

205A Advanced Athletics and Gymnastics
This course advances the skills covered in 105A and stresses leadership. The work is outdoors during seasonable weather and takes up gymnastics indoors during the winter months.
First semester. Mr. Maus, Mr. Patanelli. One semester hour.

205B Advanced Gymnastics and Outdoor Games
This continues 205A, but in the spring playground games and activities are covered and a track pentathlon suitable for playground uses.
Second semester. Mr. Maus, Mr. Patanelli. One semester hour.
206 History and Principles of Physical Education

In this course the experiences of past peoples in the physical development of youth are considered, principles are deduced therefrom and adapted to modern economic and political conditions.

Each semester. Mr. Slaughter, Mr. Sorenson. Three semester hours.

207 Camping and Scouting

History, principles, and aims of the Boy Scout movement. Tests are passed and techniques mastered. General camping material is presented and tested in evening and overnight hikes. Good background for potential scoutmasters.

Second semester. Mr. Slaughter. Three semester hours.

208 Fundamentals and Technique of Football

Fundamentals of football coaching, with special emphasis on blocking, tackling, passing, kicking, and line and backfield maneuvers. Building an offense, principles of defense formations, scouting and rules.

Each semester. Mr. Gill, Mr. Wietz. Two semester hours.

209 Fundamentals and Techniques of Basketball

This covers the theory and practice of basketball coaching. Foundation skills are stressed, with a study of offensive and defensive systems. A personal textbook involving all material is created.

Each semester. Mr. Perigo. Two semester hours.

210 Fundamentals and Technique of Baseball

Theory and practice in base running, fielding, batting, and pitching; detailed study of each position; offensive and defensive team play; officiating; scoring; study of rules.

Each semester. Mr. Maher. Two semester hours.

211 Fundamentals and Technique of Track and Field

The accepted forms of starting, hurdles, distance running, pole vaulting, discus and javelin throwing, and sprinting. Factors affecting speed, endurance, and fatigue. The selection and preparation of contestants for track and field events. Managing of meets.

Each semester. Mr. Maus. Two semester hours.

305 Principles and Technique of Gymnastic Teaching

The materials and skills covered in the 105 and 205 courses are now presented from the angle of the prospective teacher. Knowledge of all mastered and skilled leadership developed. Notebook.

Each semester. Mr. Maus. Two semester hours.

306 First Aid and Athletic Training

Knowledge and skill in meeting emergencies. The use of massage, strappings, and training room techniques from the coach's point of view. Prerequisites: Anatomy 211A, Physiology 211B.

Each semester. Mr. Gabel. Three semester hours.
309 Tests and Measurements in Physical Education
A study of the historical development of measurement in physical education with consideration of the tests currently used. Prerequisites: Anatomy 211A, Physiology 211B.
Second semester. Mr. Gary. Three semester hours.

310 Swimming
This course for physical education majors and minors is basic. Instruction is given to beginners with emphasis on the various strokes. Competent swimmers may participate in qualification tests for Senior Life Saving.
Each semester. Mr. Gabel. One semester hour.

312 Psychology of Coaching
Considers principles of psychology and their application to athletics and athletic coaching. Phases considered are: preparation for coaching; practice sessions; presenting material effectively; planning the season's campaign; personality and will power.
Each semester. Mr. Gill. Two semester hours.

320 Playground and Community Recreation
Nature and function of play; age periods and adaptations of activities; social environment; needs and objectives; playground development; construction, management and supervision. Study of outstanding programs in operation. A survey of recreational material.
Each semester. Mr. Slaughter. Three semester hours.
DESCRIPTION OF COURSES

PHYSICAL EDUCATION FOR WOMEN

CRYSTAL WORNER
MARY BOTTJE
HELEN BROWN

MARGARET LARGE

ISABEL CRANE
ELEANOR N. DOUGLASS
DORIS A. HUSSEY

The Department of Physical Education for Women aims to provide an interesting and beneficial program of physical activity for each student. Physical fitness of the individual for participation is determined by medical and posture examinations. No student is excused from physical education, but program adjustments are arranged to take care of those with physical handicaps. Uniforms obtainable at the Campus Store are required for activity classes.

Requirements for the Physical Education major are: Physical Education 151, 251, 270, 271, 273, 274, 275, 276, 285, 344, 345, 351, 361 and 373, Biology 100, Hygiene 112, Anatomy 211A and Physiology 211B. A twenty-four hour major planned for students who do not intend to teach in this field only, may be arranged with the head of the department.

Requirements for a Physical Education minor are six semester hours of Physical Education Theory and Practice, Elementary School Physical Education 270A, B, or Secondary School Physical Education 274A, B, and additional courses to make a total of fifteen hours selected from the following: 175, 271, 275, 276, 285, 344, 345.

THE GENERAL PHYSICAL EDUCATION REQUIREMENT

100 Physical Education

The aim of this course is to give the student an understanding of the values of participation in physical activities, and to aid her in determining her physical abilities and needs.

Each semester. Miss Bottje, Miss Douglass, Miss Large. Two-thirds semester hour.

101 Square Dancing

Each semester. Miss Bottje, Miss Worner. Two-thirds semester hour.

105 Physical Education

Volleyball, folk dancing, basketball, softball, and other seasonal sports.
Prerequisite: Physical Education 100.
First semester: Miss Bottje. Two-thirds semester hour.

108 Restricted Exercise


109 Individual Gymnastics

A course of remedial exercise for students who do not pass the posture examination. Credit will be given in this course for one repetition only.
First semester. Miss Hussey. Two-thirds semester hour.
110  **Swimming**  
Swimming, diving, and life-saving. Prerequisite: Physical Education 100. Each semester. Miss Bottje, Mrs. Brown, Miss Hussey, Miss Large. Two-thirds or one semester hour.

111  **Advanced Basketball**  
Prerequisite: Physical Education 100.  
First semester. Miss Douglass. Two-thirds semester hour.

113  **Tennis**  
Prerequisite: Physical Education 100.  
Second semester. Miss Bottje, Miss Douglass, Miss Hussey, Miss Worner. Two-thirds semester hour.

114  **Golf**  
Practice of form for the various shots, with some work on the course. Prerequisite: Physical Education 100.  
Second semester. Miss Douglass. Two-thirds semester hour.

115  **Folk Dancing**  
Prerequisite: Physical Education 100.  

116  **Advanced Swimming**  
A course in swimming and life-saving; open to students who have passed the beginners' swimming test. Prerequisite: Physical Education 100.  
First semester. Miss Hussey. Two-thirds semester hour.

117  **Winter Sports**  
Skiing, skating, and hiking during the winter season. Prerequisite: Physical Education 100.  
Not offered in 1951-1952. Two-thirds semester hour.

118  **Archery**  
Prerequisite: Physical Education 100.  
Each semester. Miss Douglass. Two-thirds semester hour.

119  **Tap Dancing**  
Prerequisite: Physical Education 100.  

120  **Badminton**  
Prerequisite: Physical Education 100.  
Each semester. Miss Bottje, Miss Douglass, Miss Hussey. One-third or two-thirds semester hour.

121  **Modern Dance**  
Individual and group study of expression through rhythmical movement. Prerequisite: Physical Education 100.  
122  Social Dancing  

233 Rural School Physical Education  
Indoor and outdoor programs for mixed-age groups. Ideas for track meets, picnics, play days, holiday programs, and student leadership systems. Prerequisite: Physical Education 100. 
Second semester. Miss Bottje. Two-thirds semester hour.

330 Elementary School Physical Education  
A study of the physical, mental, and social nature of children in the early elementary group and of activities suited to their needs. Prerequisite: Physical Education 100. 
Each semester. Miss Bottje. Two-thirds semester hour.

332 Secondary School Physical Education  
A course giving in theory and practice physical education activities suitable for high-school students. Prerequisite: Physical Education 100. 
Each semester. Miss Douglass. Two-thirds semester hour.

COURSES FOR SPECIALIZING STUDENTS*  

151A Physical Education Theory and Practice  
Fundamental skills, body mechanics, folk dancing, social dancing, swimming, and hockey or soccer.  
First semester. Mrs. Brown, Miss Douglass, Miss Hussey, Miss Worner. Two semester hours.

151B Physical Education Theory and Practice  
Baseball, social dancing, folk dancing, tennis, and swimming.  
Second semester. Mrs. Brown, Miss Douglass, Miss Hussey, Miss Worner. Two semester hours.

171A First Aid  
The standard course in first-aid techniques leading to the Red Cross certificate.  
First semester. Miss Douglass. One semester hour.

251A Physical Education Theory and Practice  
A selection of activities for the elementary-school age level in relationship to the development of the fundamental skills and play interests.  
First semester. Miss Bottje, Mrs. Brown, Miss Hussey, Miss Worner. Three semester hours.

*Students who are neither majoring nor minoring in Physical Education may elect courses from this group with consent of the departmental adviser. These courses may not be used to fulfill the general Physical Education requirement.
251B Physical Education Theory and Practice
An activity program which offers an opportunity for organization and participation in simple games, simple team games, stunts, track and field, skill tests, rhythms and dances.
Second semester. Mrs. Brown, Miss Douglass, Miss Hussey, Miss Worner. Three semester hours.

270A Elementary School Physical Education
Concerned with the play interests, needs, and characteristics of children at the elementary-school level. An analysis of activities in terms of these needs.
Not offered in 1951-1952. Miss Bottje. Two semester hours.

270B Elementary School Physical Education
Contribution of play to the physical, mental, emotional, and social growth of children. Organization of groups and activities as a means of developing a physical-education curriculum.
Not offered in 1951-1952. Miss Bottje. Two semester hours.

273 Applied Anatomy
Analysis of the mechanics of bodily movement. A study is made of the location and action of the large muscles in developmental activities and exercises. Prerequisite: Anatomy 211A, Physiology 211B.
First semester. Miss Hussey. Two semester hours.

274A Secondary School Physical Education
A study of the rules and methods of coaching team games of secondary level; also experience in the organization and management of tournaments and play days.
First semester. Miss Douglass. Two semester hours.

274B Secondary School Physical Education
A study of the rules and methods of coaching individual sports of secondary level, such as tennis, archery, and badminton.
Second semester. Miss Douglass. One semester hour.

275 History and Principles of Physical Education
A brief historical survey of physical education. In addition, a study is made of the principles of physical education and of the types of programs that develop through their application.
First semester. Miss Worner. Three semester hours.

276 Community Recreation, Scouting, and Camp Fire
The study of the organization and administration of community play.
First semester. Miss Worner. Two semester hours.

285 Health Education
In this course the fundamental scientific principles of healthful living are developed through a study of school health problems. An effort is made
to make prospective teachers aware of modern methods and materials useful in helping school children solve their health problems.

Each semester. Miss Crane, Miss Worner. Two semester hours.

351A Physical Education Theory and Practice
This course offers instruction in the theory and practice of group and team games of secondary level, individual sports, such as pingpong and ring tennis, and practice in marching, gymnastics, apparatus, tumbling, and dance.
First semester. Mrs. Brown, Miss Douglass, Miss Hussey. Two semester hours.

351B Physical Education Theory and Practice
A continuation of instruction in the theory and practice of activities suitable for secondary-school level.
Second semester. Mrs. Brown, Miss Douglass, Miss Hussey. Two semester hours.

361A Physical Education Theory and Practice
Advanced work in sports, swimming, and dancing, with opportunities for teaching and officiating.
First semester. Miss Douglass, Miss Hussey. Two semester hours.

361B Physical Education Theory and Practice
Continuation of the work begun in 361A with changes in the sports to suit the season.
Second semester. Miss Douglass, Miss Hussey. Two semester hours.

373 Individual Gymnastics
The study of preventive as well as prescribed exercises for remedial defects in case of curvature and physical abnormalities. Practice with patients will be given. Prerequisite: Anatomy 211A, Physiology 211B, Applied Anatomy 273.
Second semester. Miss Hussey. Three semester hours.
DIVISION OF RURAL LIFE AND EDUCATION

Wm. McKinley Robinson, Chairman

The Division includes the Departments of Agriculture and Rural Life and Education. It functions through a committee consisting of the respective heads of these departments. The heads of the departments and the departmental counselors will advise students relative to requirements for majors or minors in these departments and concerning any special requirements set up by the departments. In certain cases, where a group major or minor is possible and advisable, the chairman of the Division should be consulted.

AGRICULTURE

HOWARD D. CORBUS

The four major objectives of the Department of Agriculture are: (1) to prepare teachers of agriculture and shop work in rural consolidated schools and other schools in agricultural districts of the state; (2) to assist in the preparation of elementary teachers in rural schools; (3) to offer a pre-professional program for students who plan to transfer to schools of forestry, veterinary science, and specialized fields of agriculture; (4) to provide a general education in the field of agriculture as it relates to our national economy.

It is recommended that students in the first group elect basic science courses in biology, general chemistry, geology, and geography, and also basic courses in economics, sociology, history, and government for background information which is closely associated with all production and marketing practices in agriculture. Basic courses in industrial arts are also recommended in combinations of agriculture and shop courses, making possible major and minor sequences in these fields. Courses in education and directed teaching should be arranged with the counselor of the Division of Rural Life and Education. Majors in agricultural subjects with or without combinations in other departments can be arranged. Courses 107, 108, 109, 200, 201, and 202 are included in Group II.

105 Rural School Agriculture

A course designed to present to prospective rural school teachers as much information and materials as time permits concerning the environment surrounding representative rural schools. Consideration is given to the amounts and sources of cash used to support family and school costs in farming areas.

First semester. Mr. Corbus. Three semester hours.

106 Introduction to Agriculture

An introduction to the national institution of farming, where it operates, the rewards and compensations, the main problems, and opportunities present which may support acceptable living standards for families living on farms and also for those investing capital in the business of farming.

First semester. Mr. Corbus. Three semester hours.
107 Animal Husbandry

An introduction to the industry of animal production, the development, consumption characteristics, marketing systems, and producer and consumer price relationships.

First semester. Mr. Corbus. Three semester hours.

108 Dairying and Feeding

A course to open up to possible producers and consumers of milk products the possibilities of cash income from producing milk and butterfat, and the accompanying factors affecting success in the business.

Second semester. Mr. Corbus. Three semester hours.

109 Poultry

Poultry courses include the consideration of likely cash incomes from poultry enterprises, with the hazards, sources of stock, care, and marketing problems examined.

Second semester. Mr. Corbus. Three semester hours.

200 Soils

This course is intended to open new interests, establish scientific thinking, and promote more specific and continued observations with personal understandings of the importance of soils in the lives of everyone.

First semester. Mr. Corbus. Three semester hours.

201 Farm Crops

This course includes a survey of areas of crop production in the country, and in state and local communities, together with the study of cultural practices used to produce crops for market.

Second semester. Mr. Corbus. Three semester hours.

202 Horticulture

Organized to develop more fully the possibilities of financially supporting a farm family, using horticultural products as the sources of income. Handicaps, specific problems, marketing, and approved practices are studied.

Second semester. Mr. Corbus. Three semester hours.

300 Farm Management

This part of farm organization has been divided from the Farm Crops course in order to examine more fully the records of The College Farm enterprises that are now a part of farm income.

Second semester. Mr. Corbus. Three semester hours.

301 Land Use and Soil Conservation

This course is aimed at establishing an understanding of the movement promoting better use of the various types of land, and the recommended practices for conserving the productivities of these lands.

First semester. Mr. Corbus. Three semester hours.
310 Organizations in Agriculture
This is a specialized course in which the wide variety of farm organizations are studied so that the purpose, personnel, and influence of the organizations can be better observed.
Second semester. Mr. Corbus. One semester hour.

RURAL LIFE AND EDUCATION

WM. MCKINLEY ROBINSON JAMES O. ANSEL

Students completing degrees—elementary or secondary—in Rural Life and Education select in their senior year two or more rural seminars.
Rural Education Courses count in Group IV; Rural Social Science Courses count in Group III.

RURAL EDUCATION COURSES

140 Curriculum
A study of the objectives of education relating to rural children and rural needs, and curriculum practices in carrying out the objectives. Students have a wide range of experience in observation and in the examination and development of materials suitable for rural schools.
Each semester. Dr. Ansel. Three semester hours.

240 Introduction to Directed Teaching
A functional study of the general principles underlying good teaching and management in the various types of rural schools. Group and individual observation and participation opportunities on and off campus are provided.
Each semester. Dr. Ansel. Three semester hours.

241 Directed Teaching
The Hurd One-Teacher and the Portage Rural Agricultural Schools are used for students in the department. Selected students are permitted to do practice teaching while in residence for six weeks in a school district in one of the several counties in the service area of the college.
Each semester. Supervision. Four or five semester hours.

340 Rural School Administration
Problems met by teachers in rural schools are considered, such as district reorganization, community schools, public relations, support and control, county superintendent, state department, school plant, equipment and supplies, school law, professional ethics.
Second semester. Dr. Robinson. Three semester hours.

345 Rural School Supervision (Seminar)
Planned for principals, supervisors, and superintendents, this includes individual reports on problems related to the curriculum, teaching, and
supervision of all types of rural schools and stresses the in-service education of teachers. Prerequisite: consent of instructor.

First semester. Dr. Ansel. Two semester hours.

346 Rural School Supervision (Seminar)

Continuation of 345. Study of group and individual problems pertaining to supervision and the related administrative activities in rural areas. Field work is afforded. Prerequisite: consent of instructor.

Second semester. Dr. Ansel. Two semester hours.

348 Special Problems of Village and Consolidated Schools (Seminar)

Supplementing 340, considers administrative topics confronting principals and superintendents in rural areas, such as aims and functions of the school in relation to the community, district surveys, location and planning of buildings, finance, transportation, selection, salary and tenure of teachers, extra-curricular activities, PTA. Includes trips to nearby schools. Prerequisite: consent of instructor.

Second semester. Dr. Robinson. Two semester hours.

RURAL SOCIAL SCIENCE COURSES

220 Rural Sociology

Study of life in the rural environment—population trends, community, social institutions, health facilities, libraries, etc. Current magazines and pamphlets supplement the textbooks.

Each semester. Dr. Robinson. Three semester hours.

230 Rural Economics

The fundamental principles are considered in terms of rural life relating to the local community and to the national and international scene. Economic interpretation is given topics touched upon in the elementary and secondary-school curricula; notably, conservation, agricultural extension services, cooperatives, insurance, consumer education, etc.

Each semester. Dr. Robinson. Three semester hours.

320 Rural Life (Seminar)

Critical study of recent advanced books in the field of rural social life with emphasis upon leadership, supplemented with references including research studies. Prerequisite: consent of instructor.

First semester. Dr. Robinson. Two semester hours.

321 Rural Life (Seminar)

Social research, such as local, county, or regional planning of various services and agencies, is considered; members of the class devising forms and schedules for a rural-community study. Individual problems are studied, field trips are included. Prerequisite: consent of instructor.

Second semester. Dr. Robinson. Two semester hours.
DIVISION OF SCIENCE AND MATHEMATICS

Paul Rood, Chairman

The Division includes the Departments of Biology, Chemistry, Geography and Geology, Mathematics, Nursing,* Physics, and Psychology. It functions through a committee consisting of the respective heads of these departments.

Major and minor requirements are listed under the individual departments. The heads of the respective departments will advise students relative to their chosen majors and minors.

In certain cases, where a major or minor in science seems advisable, the Chairman of the Division should be consulted. Acting in conjunction with the heads of the involved departments (Biology, Chemistry, Geography and Geology, Mathematics, Physics, and Psychology), the Chairman will advise students relative to such majors or minors. In such cases the following rules will be observed:

A. For a science major
   1. Thirty or more semester hours are required in the division;
   2. The subjects selected must be taken from no more than two departments;
   3. Fifteen semester hours must be in subjects above the freshman level.

B. For a science minor
   1. Twenty or more semester hours are required in the division;
   2. The subjects selected must be taken from no more than two departments;
   3. At least eight semester hours of the work must be in courses above the freshman level.

The following Division courses are offered:

100A Physical Science
This course is designed for students who are not planning to specialize in any of the physical sciences but who desire a general background in this field. The course offers a correlated presentation of selected topics in astronomy, chemistry, geology, meteorology, and physics.
First semester. Dr. Greenlee. Four semester hours.

100B Physical Science
A continuation of 100A.
Second semester. Dr. Greenlee. Four semester hours.

*For purposes of convenience descriptions of courses offered by the Department of Nursing are listed under other departments: Anatomy and Physiology 213, Bacteriology 214, Chemistry 106, General Psychology 202, and Sociology 244. For the curriculum in Nursing, see pages 123-125.
232 DESCRIPTION OF COURSES

203 Teaching of Elementary Science
This course covers the more important subject matter of the physical and biological sciences with methods for its effective presentation in the classroom, particularly in rural schools.
Not offered in 1951-52. Dr. Greenlee. Three semester hours.

300 Teaching of Physical Science
Prerequisite: a major or minor in physics or chemistry.
Second semester. Dr. Greenlee. Two semester hours.

Open to Graduates

441(D157) The Teaching of Science in the Elementary school
To provide a background of working subject matter and a knowledge of materials, methods, devices, and activities appropriate to the program of elementary science.
Not offered 1951-52. Dr. Greenlee. Two semester hours.

571(D201a) The Teaching of Science in the Secondary School
Analyzes and evaluates the objectives of science as a high school subject and considers modern practices with respect to such topics as classroom method, motivation, laboratory work, directed study, and like problems.
First Semester. Dr. Mallinson. Two semester hours.

LESLIE A. KENOYER             ROY E. JOYCE
LAVERNE ARGABRIGHT            MYRTLE M. POWERS
HARRIETTE V. BARTOO          EDWARD E. REYNOLDS
A. VERNE FULLER              CAROLINE H. SLEEP
JULIAN GREENLEE              EDWIN B. STEEN
FRANK J. HINDS               MERRILL R. WISEMAN

Courses 100A, B serve as the biological foundation for a cultural education and as prerequisites for advanced courses.
A recommended minor for elementary teachers consists of 100A, B and 231A, B. A recommended minor for secondary teachers should include 304; a recommended major for the latter consists of 100A, B; 221A, B; 242A, B; and 304. Students are expected to take 304 before enrolling for directed teaching in biology.
A major for pre-medical and pre-dental students consists of 100A, B; 242A, B; and 8 semester hours selected from 211A, B; 212A, B; 341; or 342. A major for students preparing for forestry, horticulture, or landscape architecture consists of 100A, B; 221A, B; and 242A, B. The required minor for physical education students consists of 100A, B; 211A, B; and 112. The required minor for occupational therapy students consists of 100A, 231A or B and 211A, B.

*
GENERAL COURSES

100A General Biology
This course includes the general organization, structure, and physiology of plants and animals, and the study of type forms of the lower groups, with stress on their importance to man. Anatomy and physiology of the vertebrates is taken up with especial stress on human structures and functions.
First semester. The Staff. Four semester hours.

100B General Biology
A continuation of 100A, including classification and structures of the multicellular plants and animals, and consideration of genetics, embryology, evolution, ecology, and conservation.
Second semester. The Staff. Four semester hours.

101A General Biology
This course is an abridgment of 100A and is designed especially for teachers in service.
Not offered in 1951-1952. The Staff. Three semester hours.

101B General Biology
This is an abridgment of 100B and is offered as a sequel to 101A.
Not offered in 1951-1952. The Staff. Three semester hours.

304 Methods and Materials in Biology
This consists of class discussion, laboratory practice, and field work illustrating the selection, collection, preparation, care, and use of materials for biological teaching with particular reference to high-school conditions. Prerequisite: 100A, B or equivalent. This course should be taken by all who plan to teach biology.
Each semester. Miss Fuller, Dr. Greenlee, Two semester hours.

305 Genetics
The course is a comprehensive treatment of the field of genetics, including its application to plant and animal breeding and to man. Prerequisite: 100A, B or equivalent.
First semester. Dr. Kenoyer. Three semester hours. A two-hour laboratory session is included.

ANATOMY, PHYSIOLOGY, AND HYGIENE

112 Healthful Living
This course deals with the fundamental principles of health promotion and disease prevention and control guiding the student toward a more satisfactory adjustment to his environment. The functional rather than the anatomical phases of hygiene are emphasized, and some attention is given to mental and social hygiene.
Each semester. Mr. Hinds, Mr. Joyce, Miss Powers, Mr. Reynolds, Mrs. Sleep, Dr. Steen. Two semester hours.
211A Anatomy
This course is designed to give the student a thorough knowledge of mammalian anatomy with special reference to man. Each system of organs is taken up in detail. In the laboratory the human skeleton is studied and the cat dissected. Prerequisite: 100A, B or equivalent.
First semester. Mr. Reynolds, Dr. Steen, Mr. Wiseman. Four semester hours.

211B Physiology
This course deals with the fundamental principles of physiology and their application to body functioning, particularly in man. The various metabolic processes are studied in detail. Prerequisite: 100A, B; 211A, or their equivalent.
Second semester. Mr. Reynolds, Mr. Wiseman. Four semester hours.

212 Community Hygiene
This course is a broad study of all forms and agencies of public health. The history of health work; the classification and prevention of disease; the purity of water, milk, and other foods; sewage disposal; housing; school health; and the functioning of organized health agencies are considered. Prerequisite: 100A, B or equivalent.
Each semester. Mr. Joyce. Three semester hours.

213 Anatomy and Physiology (for Nurses)
This course is essentially an abridged combination of Anatomy 211A, and Physiology 211B. The subject content is especially adapted to meet the needs of students in the Bronson Hospital School of Nursing. Prerequisite: 100A, B or equivalent.
First semester. Dr. Steen. Four semester hours.

214 Bacteriology (for Nurses)
This course is adapted to the needs of students in the Bronson Hospital School of Nursing. Prerequisite: 100A, B or equivalent.
Second semester. Mrs. Sleep, Mr. Wiseman. Three semester hours.

312A Bacteriology
This course deals with general techniques in the study of micro-organisms. It includes the bacteria of water, soil, food, and industry in addition to protozoa, molds, and yeasts. Prerequisite: not less than eight hours of previous biological science and some chemistry.
First semester. Mrs. Sleep, Mr. Wiseman. Four semester hours.

312B Bacteriology
This continuation of 312A is a study of pathogenic micro-organisms and the diseases they cause. In the laboratory a considerable part of the work will be the identification of unknowns. Prerequisite: 312A Bacteriology.
Second semester. Mrs. Sleep, Mr. Wiseman. Four semester hours.
313 Problems in Personal and Community Health

The course will be given on the seminar plan. Each student will study intensively several problems of his own choice, under the guidance of the instructor. The class hours will be devoted to discussion and group criticism of each student's reports. Open to juniors and seniors. Prerequisite: Healthful Living 112 and Community Hygiene 212B, or consent of the instructor.

Each semester. Mr. Joyce. Two semester hours.

Open to Seniors and Graduates

414(271) Materials for School Health Education

A practical course of lectures and demonstrations in which emphasis is placed on the effective health supervision of school children, the principles and practices of health teaching in the various grades, and the interrelation of this teaching to that of the other subjects in the curriculum.

Second semester. Mr. Hinds. Two semester hours.

BOTANY

221A Botany

A general study of the gross and microscopic structures of higher plants, illustrated by laboratory and field experience. The college greenhouse is used for physiological experiments. A broad view of plant classification is given. Prerequisite: 100A, B or a year of high-school botany.

First semester. Dr. Bartoo. Four semester hours.

221B Botany

This continuation of 221A covers the morphology of the plant phyla, plant identification in field and laboratory, and the principles of plant ecology. Prerequisite: same as 221A.

Second semester. Dr. Bartoo. Four semester hours.

NATURE STUDY

231A Nature Study

The aims of this course are to develop an ability to interpret natural phenomena with scientific accuracy, and an understanding and appreciation of some of the laws of nature. Materials are autumn flowers, seed dispersal, flowerless plants, insects, spiders, winter birds, heat, light, weather, and astronomy. Field trips are part of the scheduled work.

First semester. Miss Argabright, Miss Fuller. Four semester hours.

231B Nature Study

Rocks, minerals, electricity, spring flowers, pond life, and migratory and resident birds are included in discussions, laboratory, and field work, which continue the aims of 231A.

Second semester. Miss Argabright, Miss Fuller, Miss Powers. Four semester hours.
234 Bird Study
This course undertakes to develop knowledge and appreciation of the birds through study of their plumage, song, flight, migration, nesting habits, relation to environment, and importance to man. The student learns to identify a minimum of 100 birds in the laboratory and 50 in the field.
Second semester. Miss Fuller. Three semester hours.

ZOLOGY

242A Invertebrate Zoology
This course deals with the structural characteristics, physiology, life histories, habits, distribution, and classification of the invertebrates. Identification of local forms and economic values are emphasized. Prerequisite: 100A, B or equivalent.
First semester. Mr. Hinds. Four semester hours.

242B Vertebrate Zoology
The work of this course covers the classes of vertebrates with emphasis on classification, anatomy, physiology, ecology, and economic aspects. Field work is included. Prerequisite: same as 242A.
Second semester. Mr. Hinds. Four semester hours.

341 Cytology and Histology
This course deals with the structures and properties of cells and of the fundamental tissues; also with the grouping of the latter into organs and systems. Prerequisite: 100A, B or equivalent and eight additional hours of Biology.
Not offered in 1951-1952. Four semester hours.

342 Vertebrate Embryology
This course takes up in detail the embryological development of the vertebrates with special emphasis on human development. In the laboratory the starfish, the frog, the chick, and the pig or mouse illustrate the course of development. Prerequisite: same as for 341.
Second semester. Dr. Steen. Four semester hours.

CHEMISTRY

Gerald Osborn                Daniel V. Lent
James W. Boynton             Lillian H. Meyer
Robert J. Eldridge          Alfred H. Nadelman
Lawrence G. Knowlton        Lauri E. Osterberg

A major in chemistry consists of one year of general chemistry (8 semester hours) and 16 semester hours from the following: 201, 202, 303A, B, 306A, B, 341, 350, 351. Students majoring in chemistry in the general degree curriculum and desiring an industrial laboratory position upon graduation should plan to take an additional ten hours of chemistry. Students majoring in chemistry should have a minor in physics.
A minor sequence in chemistry consists of 8 hours of general chemistry and 8 hours from the following: 201, 202, 306A, B, 341, 350, 351.

**BASIC CHEMISTRY COURSES**

**100A General Chemistry**

The fundamental principles of chemistry are studied in such a way as to prepare both those students who wish to teach and those who expect to go on to more advanced work in the subject. This course may also be taken as a cultural subject. Prerequisite: one year of algebra. Designed for students who have had no high school chemistry.

First semester. Mr. Eldridge. Four semester hours.

**100B General Chemistry**

A continuation of General Chemistry 100A. Prerequisite: General Chemistry 100A.

Second semester. Mr. Eldridge. Four semester hours.

**101A General Chemistry**

This is a more advanced course than 100A. The theory and fundamental principles of chemistry are emphasized. It is a foundation course. Prerequisite: one unit of high school chemistry and one unit of algebra.

Each semester. Chemistry Staff. Four semester hours.

**101B General Chemistry**

A continuation of course 101A. Prerequisite: General Chemistry 101A.

Each semester. Chemistry Staff. Four semester hours.

**105A General Chemistry**

The fundamental principles and theories of chemistry are studied, along with some of the common non-metallic elements and their compounds. Open only to students in the Department of Home Economics.

First semester. Dr. Meyer. Four semester hours.

**105B General Chemistry**

A continuation of course 105A. Some applications of inorganic chemistry to home economics, elementary organic chemistry, introduction to the chemistry of foods and the body, and to textiles and dyeing. Open only to students in the Department of Home Economics. Prerequisite: General Chemistry 105A.

Second semester. Dr. Meyer. Four semester hours.

**106 Chemistry (for Nurses)**

The fundamentals of chemistry are studied with a view to applying them to the field of nursing. Credit for this course applies only to the combined curriculum in letters and nursing.

First semester. Dr. Meyer. Four semester hours.
201 Qualitative Analysis

A lecture and laboratory course treating the theory and practice of separation and identification of both cations and anions. Prerequisite: General Chemistry 100A, B or 101A, B. A knowledge of common logarithms is essential.

Each semester. Dr. Osborn. Four semester hours.

202 Quantitative Analysis

This course includes the theory and practice of volumetric and gravimetric analysis. Prerequisite: Qualitative Analysis 201. A knowledge of quadratic equations and common logarithms is essential.

Second semester. Mr. Boynton, Dr. Knowlton. Four semester hours.

205 Everyday Chemistry

Through the media of lecture—demonstrations, sound films, and field trips the student will be given an introduction to the role of chemistry in everyday living. This course is designed for those students who have never studied chemistry. It should be especially helpful to elementary teachers and to all other teachers who are non-specialists in science.

Summer 1951. Dr. Osborn. Two semester hours.

210 Engineering Materials

An elementary study of the manufacture and properties of the ferrous and non-ferrous alloys, cements, clay products, protective coatings, fuels, and water softening. This is a non-laboratory course for pre-engineers. This course should be accompanied by a metal-processing course. Prerequisite: General Chemistry 100A, B or 101A, B.

First semester. Mr. Eldridge, Dr. Knowlton. Three semester hours.

303A Physical Chemistry*

The course includes studies in kinetic theories of gases, liquids, solids, solutions, thermodynamics, physical basis for molecular structure, thermochemistry, homogeneous equilibria, heterogeneous equilibria, etc. Prerequisite: Quantitative Analysis 202, Physics 203A, B; College Algebra and Analytic Geometry 104A, B or equivalent; and Calculus 205A, B.

First semester. Mr. Boynton, Dr. Knowlton. Three semester hours.

303B Physical Chemistry*

A continuation of course 303A. The course includes radioactivity, quantum theory, atomic structure, conductance of solutions, polepotentials, oxidation potentials, polarization, chemical thermodynamics, colloids, etc. Prerequisite: Physical Chemistry 303A.

Second semester. Mr. Boynton, Dr. Knowlton. Five semester hours.

305 Advanced Qualitative Analysis

This course consists of laboratory work, readings, and quizzes. Emphasis is placed on the analysis of alloys and mixed solids.

Given on request. Dr. Osborn. One or two semester hours depending on amount of work.

*Also open to Graduate Students.
306A Organic Chemistry

Preparation and reactions of organic compounds, of both the aliphatic and the aromatic series, are studied. These courses are valuable, not only to those students who wish to teach chemistry, but also to those who may later study medicine, dentistry, or chemical engineering. Prerequisite: General Chemistry 100A, B or 101A, B. Open to qualified sophomores.

First semester. Mr. Eldridge, Dr. Osborn. Four semester hours.

306B Organic Chemistry

A continuation of course 306A. Prerequisite: Organic Chemistry 306A. Second semester. Mr. Eldridge, Dr. Osborn. Four semester hours.

307 Advanced Quantitative Analysis

Special determinations will be selected by the student upon approval of the instructor. Analysis of limestone and brass will generally be included depending upon the previous background of the student. Prerequisite: Quantitative Analysis 202. Given on request.

Mr. Boynton, Dr. Knowlton. One or two semester hours depending on the amount of work.

308 History of Chemical Theory*

This course is taught from the point of view of the history of chemical theory in which the evidence for the theories is critically presented. Prerequisite: two years of college chemistry.

Second semester. Dr. Osborn. Two semester hours.

341 Food Chemistry

This will be mainly a laboratory course and includes the quantitative analysis of foods for important components such as carbohydrates, proteins, fats, and vitamins; tests for preservatives and adulteration; and food colors. Prerequisite: Organic Chemistry 306A or General Chemistry 105A.

First semester. Dr. Meyer. Two semester hours.

350 Elementary Biochemistry

Elementary study of the chemistry of the body; digestion, metabolism, excretion, the endocrines, and vitamins. Prerequisite: Organic Chemistry 306A. Open only to Juniors and Seniors.

Second semester. Dr. Meyer. Two semester hours.

351 Biochemistry Laboratory

Analysis of blood, urine, and gastric juice, and other experiments according to the needs of the student and the number of hours credit elected. To accompany Elementary Biochemistry 350. Prerequisite: Quantitative Analysis 202, and Organic Chemistry 306A.

Second semester. Dr. Meyer. One or two semester hours.

396A Organic Preparations

Methods for preparing the aliphatic compounds with an effort to produce the maximum yield at the minimum of expense. Theoretical interpretations

*Also open to Graduate Students.
of facts are sought. Classroom, one hour a week; laboratory, ten hours a week. Consult instructor before enrolling.

Given on request. Mr. Eldridge. Two semester hours.

396B Organic Preparations
Methods of preparing the aromatic organic compounds. Classroom, one hour a week; laboratory, ten hours a week. Consult instructor before enrolling.

Given on request. Mr. Eldridge, Dr. Osborn. Two semester hours.

398 Inorganic Preparations
Consult instructor before enrolling. Laboratory work only.

Given on request. Mr. Eldridge, Dr. Osborn. One or two semester hours.

399 Organic Analysis
Determination of carbon, hydrogen, and nitrogen by combustion methods. Laboratory work only. Consult instructor before enrolling.

Given on request. Mr. Eldridge. Two semester hours.

PULP AND PAPER TECHNOLOGY

130A Orientation to Pulp Technology
The course stresses the basic processes used in the manufacture of pulp and prepares the student for summer mill practice.

Each semester. Dr. Nadelman. One semester hour.

130B Orientation to Paper Technology
A continuation of course 130A. The fundamentals of paper making are studied. Prerequisite: Orientation to Pulp Technology 130A.

Second semester. Dr. Nadelman. One semester hour.

131 Summer Mill Practice
In order to gain practical experience, students of pulp and paper technology are required to work in a mill for ten weeks following the second semester. Employment must be secured and/or approved by the Advisory Committee of the Paper Industry. Prerequisite: Orientation to Pulp and Paper Technology 130A, B.

Dr. Nadelman, Dr. Osborn, Mr. Lent. Two semester hours.

230A Pulp Manufacture
A detailed description of production equipment and chemistry of the processes used in the manufacture of pulp. Visits to various pulp mills are coordinated with the lecture course. Prerequisite: Orientation to Pulp and Paper Technology 130A, B; General Chemistry 101A, B or 100A, B.

First semester. Dr. Nadelman. Two semester hours.

230B Paper Manufacture
A study of the technological aspects of paper making with discussion of various types of stock-preparation equipment and paper machines. Several mill visits give a deeper understanding of the processes discussed. Pre-
requisite: Orientation to Pulp and Paper Technology 130A, B; General Chemistry 101A, B or 100A, B; Pulp Manufacture 230A.
Second semester. Dr. Nadelman. Two semester hours.

231 Summer Mill Practice
A continuation of paper-mill work to give the student diversified practical experience. It is expected that the student will work in pulp and paper mills at least two out of three summers. Prerequisite: Pulp and Paper Manufacture 230A, B.
Dr. Nadelman, Dr. Osborn, Mr. Lent. Two semester hours.

331 Summer Mill Practice
Course 331 is optional for students who receive credit for courses 131 and 231.
Dr. Nadelman, Dr. Osborn, Mr. Lent. Two semester hours.

332A Pulp Testing
A lecture and laboratory course treating the evaluation of chemical and physical characteristics of pulp. Prerequisite: Pulp and Paper Manufacture 230A, B; Quantitative Analysis 202.
First semester. Mr. Lent, Dr. Nadelman. Two semester hours.

332B Paper Testing
This course consists of laboratory work and a limited number of lectures pertaining to the evaluation of chemical and physical characteristics of paper. Prerequisite: Pulp and Paper Manufacture 230A, B; Quantitative Analysis 202, Pulp Testing 332A.
Second semester. Mr. Lent, Dr. Nadelman. Two semester hours.

333 Fiber Microscopy
A general study of the microscopic structure of fibers used in making paper. Qualitative and quantitative fiber analyses are part of the scheduled work. Prerequisite: Pulp and Paper Manufacture 230A, B, Electricity and Light 203B.
First semester. Mr. Lent, Dr. Nadelman. One semester hour.

334A Elements of Industrial Chemistry
A study of the most important industrial chemical processes from the point of view, not only of the chemical reactions, but of the conditions and equipment necessary to carry on these reactions. Prerequisite: General Chemistry 101A, B, or 100A, B.
First semester. Mr. Lent. Two semester hours.

334B Elements of Industrial Chemistry
A continuation of course 334A. Prerequisite: Elements of Industrial Chemistry 334A, Organic Chemistry 306A.
Second semester. Mr. Lent. Two semester hours.
335 Wood Chemistry
A lecture course which includes the chemistry of cellulose, hemicellulose, lignin and extractives. Prerequisite: Pulp and Paper Manufacture 230A, B, Organic Chemistry 306A.
Second semester. Dr. Nadelman. Two semester hours.

336 Coloring and Filling of Paper
This course includes the evaluation of fillers, pigments, and dyestuffs. Filled and colored sheets are produced in the laboratory in order to familiarize the student with color matching and development of color formulae. Prerequisite: Pulp and Paper Manufacture 230A, B.
Second semester. Mr. Lent, Dr. Nadelman. One semester hour.

337 Mill Inspection Trip
One week's inspection trip to representative pulp and paper mills.
Mr. Lent, Dr. Nadelman. One semester hour.

432 Bleaching, Pulp Purification, and De-inking
A lecture and laboratory course treating the theory and technique of producing bleached pulp, dissolving pulp and de-inked secondary stock. Prerequisite: Wood Chemistry 336A.
First semester. Mr. Lent, Dr. Nadelman. Two semester hours.

433 Auxiliary Equipment for Pulp and Paper Mills
A discussion of pumps, boiler-house operation, generation of electricity, electric motors, heating, and ventilation. The subjects are presented with the assistance of experienced engineers serving the pulp and paper industry. Prerequisite: Pulp and Paper Manufacture 230A, B, Mechanics, Sound, and Heat 203A, Electricity and Light 203B.
First semester. Dr. Nadelman. One semester hour.

434 Chemistry and Technology of Plastics
A general survey of the chemistry and technology of plastics with emphasis upon the synthetic resinous materials used by paper makers and converters. Prerequisite: Organic Chemistry 306A, B, Wood Chemistry 336A.
Second semester. Mr. Lent. Two semester hours.

435 Converting of Paper
A thorough study of a variety of converting operations presented with the assistance of qualified members of the converting industry. Prerequisite: Pulp and Paper Manufacture 230A, B.
Second semester. Dr. Nadelman. One semester hour.

436A Thesis
Laboratory development work on a problem pertaining to pulp and paper technology preceded by a survey of available literature.
Given on request. Mr. Lent, Dr. Nadelman. Two semester hours.

436B Thesis
A continuation of course 436A.
Given on request. Mr. Lent, Dr. Nadelman. Two semester hours.
GEOGRAPHY AND GEOLOGY

WILLIAM J. BERRY  
MARGUERITE LOGAN  
C YRIL L. STOUT

Geography, either 105A, B or 305, must precede all other undergraduate geography courses except Conservation of Natural Resources 312, Introduction to Economic Geography 218, and Meteorology 225. There is no required sequence in the courses in regional geography.

Successful completion of Geographic Techniques 303 is prerequisite to receiving departmental recommendation for directed teaching or for a teaching position in geography.

A major in geography consists of 24 semester hours: Geography 105A, B, Dynamic Geology 230A, Climatology 325, Field Geography 340, Geographic Techniques 303 or equivalent, Regional Geography, and an elective for three hours.

A major in earth science consists of Geology 230A, B and 16 semester hours additional in geography and geology. Two of the six semester hours earned in Physical Science 100A, B may be counted toward a major or a minor in earth science.

A minor in geography consists of 17 semester hours, including Field Geography 340 or Geographic Techniques 303. County normal geography will not be counted toward a major or minor in geography.

FOUNDATIONAL COURSES

105A Human Geography

Designed to build an understanding of major human activities in relation to environmental factors throughout the world. Consideration is given to effects of climate, soil, minerals, topography, and the biotic environment on occupational pursuits of people, transportation and communication, density of population and growth of cities.

Each semester. The Staff. Four semester hours.

105B Regional Geography of the World

A continuation of 105A. The continents are studied by geographic regions. Attention is given to patterns of agricultural land use, of mining, manufacturing, fishing, recreation, and other major uses of land and other resources.

Each semester. The Staff. Four semester hours.

305 Introductory Geography for Juniors and Seniors

Course should be elected instead of 105A, B by students who do not begin the study of geography before the junior year. Not open to students who have received credit for Geography 105A or 105B.

First semester. Dr. Berry. Three semester hours.
SURVEY REGIONAL COURSES

206 United States and Canada
Study of areal differentiation in Anglo-America and of present-day problems, with emphasis upon occupational crises in selected regions. Prerequisite: Geography 105A, B or Geography 305.
Each semester. Dr. Berry. Three semester hours.

207 Europe
Course discloses the ways man has adjusted his economic, political, and social life to the natural environmental conditions within the regions of the continent. Prerequisite: Introductory Geography 105A, B or Geography 305.
First semester. Miss Logan. Three semester hours.

208 South America
Regional study of the several countries of South America with attention to the interrelationships of the physical and cultural environments. Historical background necessary for the interpretation of the present political, social and economic conditions are included. Prerequisite: Geography 105A, B or Geography 305.
First semester. Dr. Stout. Three semester hours.

209 Mexico and the Caribbean Lands
Includes the geography of Mexico, Central America and the West Indian Island; present economic, social, and political development of these regions; their potentialities and trends. Prerequisite: Geography 105A, B or Geography 305.
Second semester. Dr. Stout. Two semester hours.

307 Asia
Interpretation of the major geographic regions of Asia. Special emphasis is given to the organization of materials into geographic units. Prerequisite: Geography 105A, B or Geography 305.
Second semester. Miss Logan. Three semester hours.

308 Africa
The evolution of the present political pattern of the continent; governmental policies of the colonial powers; the geography of the major areas of economic exploitation; impending changes related to opposition to colonial status. Prerequisite: Geography 105A, B or Geography 305.
Not offered in 1951-1952. Dr. Berry. Three semester hours.

309 Islands of the Pacific
Study of populations and natural resources of Pacific Islands with emphasis upon economic and political problems which have arisen. Prerequisite: Geography 105A, B or Geography 305.
Second semester. Dr. Stout. Three semester hours,
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INTENSIVE REGIONAL COURSES

304 The British Isles
Geographical analysis of their present and potential development. Prerequisite: Geography 105A, B or Geography 305, and Europe 207.
Not offered in 1951-1952. Miss Logan. Two semester hours.

306 Michigan
Detailed but non-technical study of Michigan in which are taken up the major-economic, social, and recreational activities with a view to explaining their existence in the parts of the state where each activity is prominent. Prerequisite: Geography 105A, B or Geography 305.
Not offered in 1951-1952. Dr. Berry. Two semester hours.

311 The South
Study of the regions of the southeastern part of the United States with particular attention to the natural resources, the manner in which they have been utilized, and the economic problems which exist today. Prerequisite: Geography 105A, B or Geography 305.
Second semester. Dr. Stout. Two semester hours.

320 Japan
Detailed study of the geography of Japan, with attention focused on present developments and future potentialities. Prerequisite: Geography 105A, B or Geography 305.
Not offered in 1951-1952. Miss Logan. Two semester hours.

323 Union of Soviet Socialist Republics
Analysis of the geography of the whole of the Soviet realm. Prerequisite: Geography 105A, B or Geography 305.
First semester. Miss Logan. Three semester hours.

FUNCTIONAL COURSES

218 Economic Geography
Course dealing with important commercial products from the standpoint of their places of origin, cultural and natural factors in their production, their flow in commerce, and principal regions of their consumption.
Each semester. Dr. Stout. Three semester hours.

225 Meteorology
Study of the elements of weather: temperature, precipitation, and pressure; the reading of weather maps; and the characteristics of fronts and air masses. Thermodynamics and the mechanics of atmosphere are used to explain weather phenomena. The course is non-technical.
First semester. Dr. Stout. Two semester hours.

303 Geographic Techniques
Guidance is given in the selection, interpretation, and use of all major types of geographical materials such as texts, library materials, pictures,
and maps. Special emphasis is placed upon the organization of geographic findings. Prerequisite: Geography 105A, B or Geography 305.

Each semester. Miss Logan. Three semester hours.

310 Geographic Background in American Development

Study of the relations between the natural environmental elements and the settlement and development of the United States. Prerequisite: Geography 105A, B or Geography 305.

Not offered in 1951-1952. Dr. Berry. Three semester hours.

312 Conservation of Natural Resources

Critical evaluation of certain of the natural resources of the United States, such as minerals, soils, forests, water, and wild life; and study of the utilization of these resources so as to yield the greatest ultimate good. Methods in teaching conservation.

Both semesters. Dr. Berry. Two semester hours.

325 Climatology

Study of the distribution and character of the major climatic types of the earth. Fundamentals of air physics as applied to this distribution are discussed. Prerequisite: Geography 105A, or Geography 305 or Meteorology 225, or consent of instructor.

Second semester. Dr. Stout. Two semester hours.

350 Cartography and Graphics

Study of maps, the construction of them for reproduction, and the projections and symbolism most commonly used; also the graphical presentation of statistical material. Prerequisite: Geography 105A, B or Geography 305.

Not offered in 1951-1952. Dr. Stout. Two semester hours.

FIELD GEOGRAPHY

340 Field Geography

Intensive study of type areas near Kalamazoo with the purpose of observing how agricultural and industrial development, transportation, commercial organization, and the urban pattern have made adjustments in these areas. The course is based primarily upon field work. Prerequisite: Geography 105A, B or Geography 305.

Second semester. Dr. Berry. Three semester hours.

341 Advanced Field Geography

Planned for students who desire to do independent field work in geography. The amount of credit will depend on the size of the project and the intensity with which the work is done. A complete report written in scientific style is required. Not a residence course. Enrollment must be made with the Extension Division and fees paid at that office. Residence credit is given. Prerequisite: Field Geography 340 or an approved equivalent and consent of the instructor.

Each semester. The Staff. One, two, or three semester hours.
361 Geography of the Local Community

Agriculture and industries that provide livelihood for people living in the community will be studied, and with these activities will be considered climatic, edaphic, and locational factors to which they are related.

Off-Campus course giving residence credit. The Staff. Three semester hours.

Open to Seniors and Graduates

406(163) Geography of Michigan

Detailed but non-technical study of Michigan in which are taken up the major economic, social, and recreational activities with a view to explaining their existence in the state where each activity is prominent. Prerequisite: Geography 105A, B or Geography 305, or equivalent, or consent of instructor.

Not offered in 1951-1952. Dr. Berry. Two semester hours.

410(130) Library and Laboratory Techniques in Geographic Investigations

Utilization of maps, literature, and data in developing regional concepts. There will be field excursions for the purpose of observing landscape phenomena of geographic significance. Prerequisite: one year of college geography.

Not offered in 1951-1952. Dr. Berry. Two semester hours.

416(135) Political Geography

Study of the resources, peoples, and geographic-political problems of the various nations and empires of the world from the point of view of the reciprocal relations involved.

Not offered in 1951-1952. Miss Logan. Two semester hours.

Open to Graduates

506(120) Cultural Geography of North America

Migrations and routes of travel of the various European colonizers, together with the geographical conditions encountered in developing each part of the continent for human use. Prerequisite: Geography 105A, B, or consent of instructor.

Not offered in 1951-1952. Dr. Berry. Two semester hours.

578(145) Pro-seminar in Economic Geography

Each member of the class carries on an individual investigation of some problem in economic geography. Theory and technique of research in economic geography, and the treatment of graphic forms as applied to geography. Prerequisite: Geography 105A, B or Geography 305 and Commercial Geography 218, or consent of instructor.

Not offered in 1951-1952. Dr. Stout. Two semester hours.
230A  Dynamic Geology
Study of the origin and development of surface features of the earth and processes involved in their development. It comprises principally studies of the work of streams, glaciers, and wind, and of volcanic and diastrophic activity.
First semester. Dr. Berry. Four semester hours.

230B  Historical Geology
Course includes a study of the origin of the earth, development of plant and animal life as shown by fossils, and major changes that have occurred in elevation, size, and form of continents. There will be at least three Saturday field trips. Prerequisite: Dynamic Geology 230A.
Second semester. Dr. Berry. Four semester hours.

332  Physiography of United States
Characteristics of the land forms in the United States and the geologic processes which have produced them. Laboratory work will consist largely of examination and interpretation of selected topographic maps. Prerequisite: Dynamic Geology 230A.
Not offered in 1951-1952. Dr. Berry. Two semester hours.

335  Mineralogy
Study of the physical and chemical properties, occurrence, uses, and determination of approximately 100 of the more common minerals. Classroom, 1 hour a week; laboratory, 2 hours a week. Desirable antecedents: General Chemistry and Dynamic Geology 230A.
Not offered in 1951-1952. Dr. Berry. Two semester hours.

350  Field Geology—Summer Trip
A survey of geologic factors responsible for the landscape features between Kalamazoo and western South Dakota. Rock formations of the Black Hills Region. Field mapping techniques. Enrollment is with the Extension Division, but residence credit is given. Required of students with minor in geology. Prerequisite: Geology 230B or the equivalent.
Post-summer session. Dr. Berry. Four semester hours.

MATHEMATICS

CHARLES H. BUTLER
FRED A. BEELER
WILLIAM H. CAIN

PEARL L. FORD
HERBERT H. HANNON
JOSEPH K. PETERSON

CONWAY C. SAMS

Courses in the Department of Mathematics are designed to meet the needs of students presenting three types of preparation in high school. A freshman electing work in mathematics for the first time should be careful to select from courses 100A, 103A, and 104A, or 105A the one best adapted to the amount of high-school mathematics for which he has credit.
The department offers four sequences leading to calculus. Sequence A (104A, 104B) is designed for students who present trigonometry as part of their high school preparation. Sequence B (103A, 103B) is designed for students who present one and a half years of algebra, but no trigonometry, as part of their preparation. Sequences C and D are for students who have completed but one year of algebra and one year of geometry in high school; sequence D (100A, 100B*, 100C, 104A, 104B), the one regularly pursued by such students, requires two years to reach calculus; for exceptional cases in which students having but one year of high school algebra desire to enter calculus in the second year of their college course, sequence C (100A, 100B*, 100C, 115, 116) is offered; this requires the student to make up deficiencies in his high school course by taking two courses (115 and 116) in the summer session following his freshman year. Note that the four sequences are mutually exclusive.

Following courses 205A and 205B, which are taken the second year, a student has the privilege of electing several courses for which calculus is a prerequisite. Juniors may make their selection of courses after consultation with the chairman of the department.

For students interested in mathematics of business there is offered by the department a group of subjects consisting of the following courses: Mathematics of Finance 227A, Mathematics of Finance 227B, Introduction to Statistics 211, or Elementary Statistical Practice 209. One or more of these courses will be offered each semester at eleven o'clock.

The attention of the students who plan to teach mathematics is directed to the following subjects: Teaching of Arithmetic 101, Teaching of Secondary Mathematics 401.

A minor in mathematics comprises not less than eight semester hours of work completed subsequent to any one of courses 103B, 104B, 116, and elected with the approval of the departmental adviser.

A major in mathematics comprises not less than eight semester hours of work completed subsequent to a year's course in calculus and elected with the approval of the departmental adviser.

Students desiring to do directed teaching in mathematics must have completed a major or a minor in this subject and have included in this preparation Teaching of Secondary Mathematics 401. History of Mathematics 315A, B is also recommended.

100 Basic Mathematics

This course is designed primarily for those students who enter college with a minimum of mathematical background but feel a need for more training in order to understand the role which mathematics assumes in the solution of everyday-life problems. While credits in this course will not be accepted toward the requirement for a major or minor in mathematics, they may be used by other students to fill general requirements for Group II.

Each semester. Mr. Hannon. Four semester hours.

*Solid Euclidean Geometry 100B may be taken in combination with course 100A or course 100C, either the first or the second semester.
100A Intermediate Algebra

Designed for students who present for admission only one year of algebra. For such students it should precede all other college courses in mathematics. The course includes a review of the important topics of the first year's course, together with the work usually given in the third term of the high school course. Prerequisite: one year of high school algebra and one year of high school geometry.

Each semester. Mr. Cain, Mr. Sams, and others. Three semester hours.

100B Solid Euclidean Geometry

Designed for those students who present for admission only one year of geometry. This course, if not taken in high school, should be taken by all majors in mathematics. Theorems and constructions, including the relations of planes and lines in space; the properties of the sphere and the spherical triangle. Prerequisite: one year of high school geometry.

First semester. Miss Ford. Two semester hours.

100C Plane Trigonometry

Trigonometric identities and equations, inverse function, theory and use of logarithms, circular measure of angles, solution of triangles. Prerequisite: Intermediate Algebra 100A or a year and a half of high school algebra, and at least one year of Euclidean geometry.

Second semester. Three semester hours.

100D Spherical Trigonometry

This course extends the theory of plane trigonometry so as to cover the case of a triangle formed by arcs of a great circle on a sphere. Applications are made to problems in geography, navigation, aviation, surveying, and cartography. Prerequisite: Plane Trigonometry 100C.

Will be offered if requested in 1951-1952. Mr. Cain. One semester hour.

101 Arithmetic

Lectures and discussions on the history and teaching of the subject, with assigned reading. Extended treatment of typical problems of applied arithmetic. This course gives credit in education.

Each semester. Miss Ford, Mr. Hannon. Three semester hours.

103A Elementary Mathematical Analysis

Designed primarily to prepare students for subsequent work in mathematics, this course emphasizes the study of those parts of plane trigonometry, college algebra, and analytic geometry which seem to be most important in providing a good foundation for the advanced courses. Some of the simpler parts of calculus are included so that numerous applications and interactions can be currently noted. The work should be carried throughout a full school year. Prerequisite: Plane Geometry and one and one-half years of algebra.

Each semester. Staff members. Five semester hours.
103B Elementary Mathematical Analysis
A continuation of course 103A treating the same subject matter and with the same aims.
Each semester. Staff members. Five semester hours.

104A Elementary Mathematical Analysis
The aim is the same as for courses 103A and 103B, and the subject matter is the same except that trigonometry is not included. Prerequisite: Plane Trigonometry.
First semester. Staff members. Four semester hours.

104B Elementary Mathematical Analysis
A continuation of course 104A treating the same subject matter and with the same aims.
Second semester. Staff members. Four semester hours.

105A Introduction to College Mathematics
This elementary mathematics analysis course is specially designed to qualify business administration majors for the business mathematics sequence. Prerequisite: two years of high school mathematics.
First semester. Dr. Butler, Mr. Hannon. Four semester hours.

105B Introduction to College Mathematics
This course is a continuation of Introduction to College Mathematics 105A.
Second semester. Dr. Butler, Mr. Hannon. Four semester hours.

112 Applied Mathematics
For students in industrial arts who desire a course in the application of elementary mathematics to machines and designs.
Each semester. Mr. Hannon. Three semester hours.

115 College Algebra
A review of exponents, radicals, and quadratic equations, including systems of quadratic equations, progressions, the binomial theorem, complex number; theory of equation, including Horner's method, determinants, permutations and combinations. Prerequisite: one and one-half years of high school algebra and one or one and one-half years of high school geometry, or equivalent.
Each semester. Dr. Beeler. Three semester hours.

116 Analytic Geometry
Analytic geometry of the straight line, circle, and conic sections; change of axes; properties of conics, involving tangents, diameters and asymptotes. Prerequisite: trigonometry and college algebra.
Each semester. Mr. Cain. Four semester hours.

120A Business Mathematics
This course includes diagnostic and remedial work in the functional operations of arithmetic, followed by study of elementary business problems, such as methods of check and proofs of computations, common fractions
and decimals, percentage, simple interest and discount. This course is intended primarily for students in the department of business studies.

Each semester. Staff members. Two semester hours.

120B Business Mathematics

This course is a continuation of course 120A and is also designed for students in the department of business studies. The following topics will be studied: simple algebraic operations; ratio and proportion; theory and use of logarithms; and probability.

Each semester. Staff members. Two semester hours.

200 Mathematics of Buying and Investment

This course is designed to cover the application of cash and installment buying, interest, discount, and annuities to business and budgetary problems. It is intended primarily for students who desire an elementary knowledge of some of the topics covered in Mathematics of Finance 227A and 227B. Prerequisite: high school algebra and geometry.

First semester. Mr. Hannon. Two semester hours.

205A Calculus

Functions, limits, continuity, the derivatives of algebraic, trigonometric, inverse, exponential, and logarithmic functions; applications of the derivatives, the differential, curvature, motion. Prerequisite: Elementary Mathematical Analysis 104A.

First semester. Dr. Beeler, Miss Ford. Four semester hours.

205B Calculus

Elementary indefinite and definite integrals, trigonometric integrals, substitution, rational fractions, applications of the definite integral, indeterminate forms, curve tracing, infinite series, functions of several variables, multiple integrals. Prerequisite: Calculus 205A.

Each semester. Dr. Beeler, Miss Ford, and others. Four semester hours.

209 Elementary Statistical Practice

Method of procedure underlying statistical analysis, covering measures of central tendency, dispersion and relationship. Planned especially for those with a minimum of mathematical background, and stresses applications in educational and psychological investigations. Prerequisite: a college mathematics course.

Second semester. Dr. Butler and others. Three semester hours.

210 Surveying

A course in field work, involving actual problems in surveying and leveling. The final test consists of field notes and a map from a personal survey of an irregular tract. Prerequisite: Trigonometry.

Offered if there is sufficient demand. Dr. Butler. Three semester hours.
211 Introduction to Statistical Theory
Essentially the same material as course 209 from more advanced viewpoint, and stressing applications to business. Prerequisite: Math. 103B, 104B, or 105B.
Each semester. Mr. Sams and others. Three semester hours.

227A Mathematics of Finance
Simple and compound interest, annuities. Amortization and sinking funds. Valuation of bonds. Depreciation and perpetuities. Prerequisite: Math. 103B, 104B, or 105B.
Each semester. Mr. Peterson and others. Three semester hours.

227B Mathematics of Finance
The general case of annuities. Reinvestment. Elements of the mathematics of life insurance. Prerequisite: Math. 227A.
Each semester. Mr. Peterson and others. Two semester hours.

230 College Geometry
The nature of proof, as exhibited in advanced theorems involving the triangle and circle, followed by a survey of various geometrical systems, notably non-Euclidean and projection. Especially recommended for those planning to teach geometry in high schools. Prerequisite: 103B or 104B.
Offered if there is sufficient demand. Mr. Sams. Three semester hours.

305 Vector Analysis
Algebra of vectors; applications to geometry and mechanics; calculus of vectors; gradient, curl, divergence; line and surface integrals; theorems of Green and Stokes; applications to physics. Prerequisite: Calculus 205B.
First semester. Mr. Peterson. Three semester hours.

315A History of Mathematics
Treats of the history of geometry and trigonometry from earliest times to the present. Prerequisite: Analytic Geometry 116.
First semester. Two semester hours.

315B History of Mathematics
Treats of the history of arithmetic and algebra.
Second semester. Mr. Blair. Two semester hours.

321 Differential Equations
An elementary course in ordinary differential equations. Prerequisite: Calculus 205B.
Each semester. Three semester hours.

322 Theory of Equations
Complex numbers, properties of polynomial functions, trigonometric solution of equations, cubic and quartic equations, algebraic criteria for ruler and compass constructions, approximation to the roots of numerical equations, symmetric functions, determinants. Prerequisite: Calculus 205B.
First semester. Dr. Beeler, Mr. Sams. Two semester hours.
254 DESCRIPTION OF COURSES

323 Solid Analytic Geometry
Coordinates of three dimensions, the plane, surfaces of the second degree, conicoids referred to their axes, plane sections of conicoids, generating lines of conicoids. Prerequisite: Calculus 205B.
Second semester. Dr. Beeler, Mr. Sams. Two semester hours.

325 Theoretical Mechanics
A vectorial treatment of the kinematics and dynamics of particles and of rigid bodies, with emphasis on problem solving. Velocity, acceleration, relative motion; angular velocity, angular acceleration; reduction of the forces acting on a rigid body, equilibrium; moments of inertia, principal axes of inertia; moment of momentum; motion of a rigid body, gyroscopes. Prerequisite: Vector Analysis 305.
Second semester. Mr. Peterson. Two semester hours.

331 Advanced Calculus
A review of the fundamentals of calculus. Continuity. Properties of definite integrals, with special reference to improper definite integrals, the Gamma function, Green's theorem, Laplace's equation. Prerequisite: Calculus 205B.
Second semester. Dr. Beeler. Three semester hours.

Open to Seniors and Graduates

401(D235) Teaching of Secondary Mathematics
The aim of this course is to give the prospective secondary-school teacher the best educational information concerning the scope of content and the teaching of secondary mathematics. The actual learning of subject matter is employed to a considerable extent as furnishing a most effective background for teaching and illustrating principles of instruction. This course is prerequisite to directed teaching in mathematics. Prerequisite: Analytic Geometry.
First semester. Dr. Butler. Three semester hours.

PHYSICS
PAUL ROOD
GROVER C. BAKER

EDWIN S. FOX
JULIAN GREENLEE

WALTER G. MARBURGER

The Department of Physics offers two kinds of courses: (1) those for the non-specialist who will choose classes of a general cultural nature such as Physical Science 100A, B, Astronomy 210, Elementary Acoustics 110, Physics 205A, B (required for medical and dental students), etc.; and (2) those for students who plan to major or minor in physics and who therefore will take Mechanics, Heat, and Sound 203A, Electricity and Light 203B (both required for all engineering students) and a selection from the second-year courses listed below.
A major in physics consists of 24 semester hours; a minor 15 semester
hours. Acceptable sequences of courses are arranged in consultation with the departmental adviser.

Students wishing to do directed teaching in physics must offer a major or minor in this field. It is advisable to defer directed teaching until the senior year, after a considerable portion of the major or minor has been completed.

110 Elementary Acoustics

In this course are studied the nature of sound, how sounds are produced, reflection and absorption, reverberation, the physics of hearing, and the physical basis of musical scales. It is a required course for students majoring in music. Open to any student who is not majoring or minoring in physics.

Each semester. Two semester hours.

200 Slide Rule

A course in the use of the slide rule.

Each semester. Mr. Baker. One semester hour.

202 Household Physics

A study of the problems related to the home, such as machines, heat control and refrigeration, light and gas bills and meter reading, electrical devices and illumination. Open only to women students. Required in Home Economics.

Second semester. Mr. Baker. Two semester hours.

203A Mechanics, Sound, and Heat

A general college course dealing with the laws of mechanics, of sound, of heat, and their applications. Required of all engineering students. Recommended for students planning to major in physics. Open to freshmen. Prerequisite: high school physics and trigonometry.

Each semester. Mr. Fox, Dr. Rood. Five semester hours.

203B Electricity and Light

This course follows 203A and consists of studies in electricity, magnetism, and light. Prerequisite: Mechanics, Sound, and Heat, 203A.

Each semester. Mr. Fox, Dr. Rood. Five semester hours.

205A General Physics

A general college physics course in the principles and practical applications of mechanics, sound, and heat. Required of all medical and dental students. Recommended for students desiring a four-hour course in physics. Prerequisite: high school physics and trigonometry.

First semester. Mr. Marburger. Four semester hours.

205B General Physics

A general college physics course in the principles and practical applications of magnetism, electricity, and light. Prerequisite, 205A.

Second semester. Mr. Marburger. Four semester hours.
210 Astronomy
A non-mathematical course in descriptive astronomy including the study of the solar system, stars and constellations, and nebulae. Frequent use is made of a Spitz planetarium and a 4½” refracting telescope.
Each semester. Dr. Rood. Three semester hours.

220 Photography
This is an elementary course in the theory and use of photographic materials. To enroll in this course students should get permission from the instructor.
Each semester. Mr. Baker. Three semester hours.

320 Statics
This satisfies the requirements for a course in statics in mechanical engineering. It includes a study of the general principles of forces in equilibrium and their application to hanging cables, problems in friction, and stresses in frameworks of various types. Prerequisite: Electricity and Light 203B, Calculus 205A, B.
Each semester. Mr. Fox. Three semester hours.

340 Atomic Physics
A study is made of the electron, the photoelectric effect, thermionic emission, the physics of X-rays, quantum theory, devices for accelerating nuclear particles, isotopes, spectra, and atomic structure. Prerequisite: Electricity and Light 203B, Calculus 205A, B.
First semester. Three semester hours.

341 Nuclear Physics
Designed to follow Atomic Physics 340. It includes natural and artificial radioactive transformations, the experimental methods of nuclear physics, properties of neutrons, binding energy, nuclear reactions, nuclear structure, fission, and cosmic rays. Prerequisite: Atomic Physics 340.
Second semester. Three semester hours.

342 Heat and Elementary Thermodynamics
An intermediate course dealing with expansion, specific heats, change of state, kinetic theory and the elementary principles of thermodynamics. One laboratory period and two class periods per week. Prerequisite: Mechanics, Sound, and Heat 203A, Electricity and Light 203B, Calculus 205A, B.
First semester. Three semester hours.

350A Light
This is a course in physical optics. The main topics discussed are: light as a wave motion, interference, and diffraction. Prerequisite: Electricity and Light 203B, Calculus 205A, B.
First semester. Dr. Rood. Three semester hours.
350B  Light
Designed to follow Light 350A. It includes a study of the dispersion of light, polarization, double refraction, reflection, magneto- and electro-optics. Prerequisite: Light 350A.
Second semester. Dr. Rood. Three semester hours.

361  Introduction to Electronics
This course includes an introduction to electric circuit analysis with particular reference to electron-tube circuits. The more important uses of electron tubes are considered in some detail. Prerequisite: Electricity and Light 203B and Calculus 205A, B.
Each semester. Mr. Marburger. Three semester hours.

362  Electrical Measurements
This course deals with the theory and use of instruments to measure electrical and magnetic quantities. Both AC and DC bridge methods are included. Prerequisite: Introduction to Electronics 361, Calculus 205A, B.
Second semester. Mr. Marburger. Three semester hours.

365  Principles of Radio Communication
The electrical principles involved in different radio frequency communication systems are treated in this course. Laboratory work includes measurements of electrical properties and quantities at audio and radio frequencies. Prerequisite: Introduction to Electronics 361, Calculus 205A, B.
First semester. Mr. Marburger. Three semester hours.

390  Laboratory Techniques
Prerequisite: Electricity and Light 203B.
Not given in 1951-1952. Mr. Marburger. One semester hour.

399  Advanced Laboratory Physics
A course in laboratory experimentation more advanced than that in 203A, B. May be elected only on arrangement with the instructor. Prerequisite: Electricity and Light 203B and at least one advanced course in physics.
Both semesters. Mr. Marburger, Dr. Rood. Two semester hours.

Open to Seniors and Graduates

440(105)  Modern Physics
Same as Atomic Physics 340 with the additional requirements of reading certain assignments in the current literature of the subject and a thesis.
First semester. Three semester hours.
General Psychology 200 is prerequisite to all other courses in this department, except courses 100 and 102. A major in psychology may be obtained by completing 24 semester hours of work in the department, including course 201. A minor consists of 15 semester hours.

Students majoring in psychology are advised to elect from the Department of Biology and the Department of Sociology.

100 Introduction to Learning and Adjustment
Psychological principles of effective learning will be presented; methods of note-taking, reading, memorizing, and organization will be discussed. Emphasis will be placed upon problems of personal, educational, and social adjustment. This course may not be counted toward a major or a minor in psychology or in fulfillment of the requirements in Group II.
Each semester. Mrs. Bishop, Mr. Carter. One semester hour.

102 General Psychology (for Nurses)
An introductory course intended to fit the needs of students of nursing. Not open to regular students. It covers the recommendations of the “Curriculum Guide for Schools of Nursing”.
First semester. Miss McGinnis. Two semester hours.

200 General Psychology
A brief survey of the elementary principles of psychology. This course affords a general introduction to the field.
Each semester. Staff. Three semester hours.

201 Elementary Experimental Psychology
An introduction to current psychological problems and laboratory methods through experimental work in motivation, emotion, memory, learning, and perception. This is a course for majors. Permission of instructor.
Second semester. Dr. Forgays. Three semester hours.

204 Applied Psychology
An overview course introducing the student to the various areas of psychology at work. Some areas covered are: education, industry, business, military, clinical, criminal, and legal.
First semester. Dr. Forgays. Two semester hours.

205 Comparative Psychology
A general treatment of the behavior, sensory and perceptual processes, and learning of the lower animals as bearing on the problem of the evolution and development of human behavior. Consult instructor before enrolling.
Second semester. Dr. Buck, Dr. Forgays. Two semester hours.
207 Psychology of Personality

Attention is given to individual differences, traits, content, and synthesis of personality; modification of behavior and varieties of adjustive behavior. Emphasis is placed upon constructive personal adjustment and the manner in which it is achieved in various interpersonal relations.

Each semester. Dr. Buck, Dr. Forgays, Mr. Carter. Four semester hours.

210 Psychological Aspects of Business

This course deals with the basic wants and the motives that make men buy and sell, work for a living, like or dislike their jobs. It points out the learning principles involved in adjusting to their work, and in bringing about desirable decisions in customers, superiors, and subordinates.

First semester. Dr. Buck. Three semester hours.

213 Psychology of Adolescence

This course deals with the various kinds of development in the adolescent. It discusses his problems and difficulties and the proposals for reducing his difficulties and improving his adjustment.

Second semester. Dr. Buck, Dr. Forgays. Three semester hours.

300 Introduction to Industrial Psychology

This course introduces the student to the many applications of psychology in industry, such as: evaluation of the worker's worth, training on the job, promotion, rating, wages and job evaluation, working conditions as they affect safety, efficiency, morale, and labor turnover.

Second semester. Dr. Buck. Two semester hours.

302 Laboratory in Psychological Testing

The course will consider selecting, administration, and interpretation of educational, personality, and aptitude tests. A competency in interviewing techniques will be developed.

First semester, lecture and laboratory. Mr. Carter, Miss McGinnis. Three semester hours.

305 Abnormal Psychology

A discussion of the deviant individual, with particular attention to the recognition of disordered behaviors, to the factors contributing to their development and to the principles of therapy. Consult instructor before enrolling.

Each semester. Dr. Buck, Dr. Forgays. Three semester hours.

307 Mental Testing

The purpose of this course is to provide training in the administration, scoring, and interpretation of various mental tests. This course supplements 302 in giving the student practice in use of diagnostic tests.

First semester. Mr. Carter, Miss McGinnis. Two semester hours.
308 Elementary Statistical Methods in Psychology
Computation and interpretation of statistical techniques useful in the production and understanding of psychological and educational research.
First semester. Dr. Forgays, Dr. Mallinson. Three semester hours.

309 A, B, C Clinical Psychology
This course considers theory and practice of the case study. It involves individual case studies, home visits, interviewing, conferences, laboratory, and clinical procedures. Courses 309 B or C involve additional cases and practice in clinical procedure. Prerequisite: Psychology 302, 305, and 307, or consent of instructor.
Second semester. Mr. Carter, Miss McGinnis. Two to four semester hours.

310 A, B, C Special Projects in Psychology
General prerequisites must include twelve hours in psychology, and the permission of the instructor. Arrangements will be made for adequately prepared students to undertake individual problems under the direction of a member of the staff. This is a course for majors.
Each semester. Dr. Buck, Dr. Forgays. One or two semester hours.

315 Emotion
The various theories of emotion. The physiology of emotion. Emotional expression and control. The crucial part it plays in human adjustment, with particular reference to disordered behavior.
First semester. Dr. Buck. Two semester hours.

Open to Seniors and Graduates

404(122) Occupational Analysis and Classification
Sources of occupational information; procedures and techniques of job analysis and job classification; applications in employment procedures, placement, and vocational counseling.
Not offered 1951-52. Dr. Buck. Two semester hours.

405(142) The Deviant Individual
Study of the gifted, mentally defective neurotic, delinquent and criminal, and psychotic; with particular attention to factors in development and to distinctive manifestations of these deviations from the normal.
First semester. Dr. Buck. Two semester hours.

406(132) Vocational Psychology
The problems of vocational choice and of occupational group-differences. Lectures, reading, and an occasional laboratory period substituted for a class hour.
Not offered in 1951-52. Dr. Buck. Two semester hours.
408(173) Survey of Personnel Psychology
An introduction to the psychological problems of personnel administration and to the methods of personnel psychology. Lectures, discussions and visits to personnel offices.
Not offered 1951-52. Dr. Buck. Two semester hours.

410(145) Learning and Motivation
A survey of the general principles of learning and motivation and an introduction to learning theory. Lectures and laboratory.
Second semester. Dr. Forgays. Two semester hours.
DIVISION OF SOCIAL SCIENCES

Leonard C. Kercher, Chairman

The Division includes the Departments of Economics, History, Philosophy, Political Science, and Sociology. It functions through the Divisional Planning Committee, working in conjunction with the department heads and the staff members of the Division.

Majors and minors in individual departments of the Division must have the approval of the heads of the respective departments. Special requirements are listed under the separate department headings.

Students preparing for social work should consult the head of the Sociology Department concerning their departmental or group major in the social sciences and their minor in social work. See the Social Work Curriculum for special requirements.

Group majors and minors in the Division, except those of students pursuing the Social Work Curriculum, must have the approval of Mr. Crawford, Room 108, Health and Personnel Building.

A. A group major must include:
   1. Thirty or more semester hours in the Division.
   2. A minimum of fifteen semester hours in one department of the Division.
   3. Acceptable courses in at least three departments of the Division.
      (Introduction to Contemporary Society 101A, B, do not alone satisfy this requirement.)

B. A group minor must include:
   1. Twenty or more semester hours in the Division.
   2. A minimum of ten semester hours in one department of the Division.
   3. Acceptable courses in at least three departments of the Division.
      (See rule A-3 above.)

C. A group minor for students in non-teaching curricula.
   1. Sixteen or more semester hours in the Division.
   2. Open only to students in the following non-teaching curricula: Pre-professional, Non-teaching Professional and Combined Curriculum; Vocational and Practical Arts Education Curricula; and the General Degree Curriculum without a teaching certificate.
   3. May be developed around any one of the following content patterns:
      Foundations of Western Civilization, 100 A, B .......... 8 hrs.
      Introduction to Contemporary Society, 101 A, B .......... 6 hrs.
      Electives ........................................... 2 hrs.
      or
      Foundations of Western Civilization, 100 A, B .......... 8 hrs.
      Political Science (minimum) ........................ 2 hrs.
      Electives ........................................... 6 hrs.
      or
      Introduction to Contemporary Society, 101 A, B .......... 6 hrs.
      Electives ........................................... 10 hrs.
D. Students in the Secondary Curriculum may not count courses in the Philosophy Department toward a group major or minor.

E. Students taking a group major or minor in the social sciences must complete at least one minor in a field outside the Division.

The general education offerings of the Division include two sequences, one an eight semester hour unit in history, and the other a six semester hour sequence in the combined social studies. In addition there are three independent courses that are especially designed to meet personal needs in the general education of the student.

The history sequence is made up of the two courses, Foundations of Western Civilization 100 A, B. These courses, which are described under History, carry only history credit. They are especially recommended for those students who know in advance that they will take a group or departmental major or minor in the Division.

The combined social studies sequence consists of the two courses, Introduction to Contemporary Society 101 A, B, described below. Credit for these courses is allotted in either group or departmental majors or minors on the basis of two semester hours each to Economics, Political Science and Sociology. If both courses are taken they satisfy the state requirement in government.

Foundations of Western Civilization 100 A, B, and Introduction to Contemporary Society 101 A, B, may all be counted toward group majors or minors in the Division.

The three independent courses that are designed to serve the personal needs of students are Economics of Consumption 223, listed under Economics, Modern Marriage 245, listed under Sociology, and Social Values 291, listed under Philosophy. Credit for these courses is allotted in the particular department in which each is listed.

101A Introduction to Contemporary Society

This is an integrated study of contemporary economic, political, and social institutions and problems. Trends and processes of social change are analyzed in order to provide a background for the consideration of selected contemporary problems during the latter part of the course.

Each semester. Mr. Bowers, Dr. Clark, Dr. Woods. Three semester hours.

101B Introduction to Contemporary Society

A continuation of course 101A. Emphasis is placed upon the study of a representative group of contemporary problems, viewed as a product of the changing social structure. Prerequisite: Introduction to Contemporary Society 101A.

Second semester. Mr. Bowers, Dr. Clark, Dr. Woods. Three semester hours.

Open to Seniors and Graduates

400(D156) Teaching of the Social Studies

Teaching of the social studies in the Junior and Senior High School. Definition of objectives. Selection, organization and development of content
DESCRIPTION OF COURSES

materials. Study of the procedures and problems of effective teaching in the social studies.

Second semester. Dr. Woods. Two semester hours.

ECONOMICS

FLOYD W. MOORE
JOHN D. AMEY, JR.
HOWARD F. BIGELOW

CONTRIBUTION TO

Robert S. Bowers
Theodore L. Carlson
Marguerite Patton

Courses in economics are designed (1) to contribute to general education by attempting to make students more familiar with the ways and means by which men make their living in modern times; (2) to fulfill the requirements for the training of teachers in certain professional groups, such as commerce and business administration; and (3) to furnish courses and explore areas of economic thought which are prerequisite to graduate study and are recommended as pre-professional in business administration, engineering, journalism, law, medicine, and social work.

All majors and minors in economics must include Principles of Economics 220A, B. These two courses are prerequisite to all other courses offered in the Department of Economics, except 223.

220A Principles of Economics
A study of the fundamental principles of economics and their application to some of our more important economic problems.
Each semester. Mr. Amey, Mr. Bigelow, Dr. Bowers, Dr. Carlson, Dr. Moore, Mrs. Patton. Three semester hours.

Note.—Principles of Economics 220A and 220B form a single course, which is prerequisite to advanced work in the field. A student planning to take only a single semester's work in economics should consult with the instructor before electing Principles of Economics 220A.

220B Principles of Economics
A continuation of Principles of Economics 220A. Prerequisite: 220A.
Each semester. Mr. Amey, Mr. Bigelow, Dr. Bowers, Dr. Carlson, Dr. Moore, Mrs. Patton. Three semester hours.

223 Economics of Consumption
A study of the problems the individual and the family face in trying to satisfy their wants with the money income and other resources at their disposal. No prerequisites.
Each semester. Mr. Bigelow. Three semester hours.

320 Public Finance
A study of government expenditure, revenues, debts, and problems of fiscal administration. Prerequisite: Principles of Economics 220A, B. Work in government may be substituted in special cases by permission of the instructor.
Second semester. Mr. Bigelow. Three semester hours.
321A Money and Credit
In this course an examination is made of the evolution and functions of money, monetary standards, and credit. Some attention is given to the history of currency in the United States, experiments with paper money, and price-level control, together with considerable factual material relative to credit and credit instruments. Prerequisite: Principles of Economics 220A, B.
First semester. Dr. Carlson. Two semester hours.

321B Money and Credit
A continuation of 321A with special emphasis on banking and other financial institutions. Prerequisite: Money and Credit 321A.
Second semester. Dr. Carlson. Two semester hours.

322 Corporations
A study of the nature of the modern business corporation, and its place in modern business life. Consideration is given to problems of organization, direction, finance, and control. Prerequisite: Principles of Economics 220A, B.
First semester. Mr. Bigelow. Three semester hours.

323 Marketing
A study of the principles, methods, and problems of marketing. Included in the study is a general criticism of the existing market structure and some proposals for its improvement. Prerequisite: Principles of Economics 220A, B.
First semester. Dr. Moore. Three semester hours.

324 Transportation
An analysis of the various means of transportation, including the items of service, cost, revenues, and government regulation. Prerequisite: Principles of Economics 220A, B.
First semester. Dr. Carlson. Three semester hours.

325A Labor Problems
An analysis of the nature and underlying causes of the problems facing the worker in modern economic society. Prerequisite: Principles of Economics 220A, B.
First semester. Dr. Bowers. Two semester hours.

325B Labor Problems
A study of the methods by which workers, employers, and the public have been and now are attempting to solve labor problems. Present programs are evaluated in the light of underlying economic principles in order to develop sound thinking about these problems. Prerequisite: Labor Problems 325A.
Second semester. Dr. Bowers. Two semester hours.

326 Business and Government
A study of the regulatory policies of government and their impact on private enterprise. The course seeks to explain the need for regulation,
and to provide an analysis and evaluation of the various laws from the viewpoint of encouragement, subsidization, and control. Special attention will be directed to certain aspects of concentration of economic power, public ownership, and nationalization programs. Prerequisite: Principles of Economics 220A, B. Work in Political Science may be substituted in special cases by permission of the instructor.

Second semester. Dr. Carlson. Three semester hours.

327 Economic Statistics
A course designed to promote the importance and use of statistical devices and formulae as applied to economic data; to enable the student to collect or assemble basic statistical data and to organize them; and to develop his capacity to use summary statistics as interpretative tools and aids in economic studies and practical management operations. Prerequisite: Mathematics 209 or 211 or consent of the instructor; Principles of Economics 220A, B.

Each semester. Mrs. Patton. Two semester hours.

328 Comparative Economic Systems
The economic institutions and conditions of capitalism, socialism, communism, fascism, and the cooperative movement are critically examined as to ideology and actual operation. Prerequisite: Principles of Economics 220A, B.

Second semester. Dr. Bowers. Two semester hours.

329 Business Administration
This course deals with the elementary principles of internal organization and management of industrial enterprises. It includes a discussion of plant location and types of construction; material equipment and power; planning and routing; statistics and accounting; marketing methods and problems; production management; personnel administration; purchasing, traffic, credit, and collections. Prerequisite: Principles of Economics 220A, B.

Second semester. Mr. Amey, Dr. Moore. Three semester hours.

330 Business Cycles
A historical and theoretical analysis of business cycles. Prerequisite: Principles of Economics 220A and 220B.

Second semester. Mr. Amey. Two semester hours.

Open to Seniors and Graduates

421A(121) Labor
Introductory course dealing with background and development of the American Labor movement. Considers problems of workers and labor unrest, including insecurity, wages, collective bargaining. Appraises possible remedies by employers, unions, and the government. Prerequisite: Principles of Economics 220A,B.

First semester. Dr. Bowers. Two semester hours.
422(152) Price Theories and Policies
A re-examination of the forces which, normally, determine price, together with an analysis of special types of markets and price policies which currently affect our price system. Prerequisite: Principles of Economics 220A, B.
Not offered in 1951-1952. Dr. Moore. Two semester hours.

425(193) Consumption and Standards of Living
A comparative study of standards and levels of living, designed to acquaint the student with the ways people actually live in different types of communities and various economic levels. Of special interest to the teacher. Prerequisite: Principles of Economics 220A, B or consent of the instructor. Second semester. Mr. Bigelow. Two semester hours.

426(197) Programs of Social-Economic Reform
A comparative study of economic systems. Socialist, cooperative, and capitalistic institutions are examined in the light of history and theory, and in relation to problems of inequality and democracy. The Soviet economy is given special attention. Prerequisite: Economics 220A, B.
Not offered in 1951-1952. Dr. Bowers. Two semester hours.

428(255) History of Economic Thought
The course aims to give the student the historical background for modern economic thinking. Beginning with the leaders of ancient economic thought, the main currents of such thinking are brought down through feudalism, mercantilism, the physiocrats, Adam Smith's influence, the English classical school, socialistic tendencies, and the controversial theories of the present experimental era. Prerequisite: not fewer than 12 semester hours in Economics.
Not offered in 1951-1952. Dr. Moore. Two semester hours.

429(141) International Trade
A general course in international relations with special emphasis on the fundamentals of international trade theory and the impact of national economic policies on international relations. Prerequisite: Principles of Economics 220A and B.
Second semester. Dr. Carlson. Two semester hours.

Students preparing to teach in the later elementary grades are advised to take Foundations of Western Civilization 100A, B, and a sequence of courses in United States history.
Students who have had a thorough course in United States history in high school and have made good grades in the subject should not take United States History 201A, B, but should instead select advanced courses in the field—305A, B; 306A, B; 312; 313; 317; 403A; 404; 406B; 418.

Students are advised not to take both English History 109A, B, and 100A, B, or 108A, B, except in special cases. English history is offered primarily to meet the needs of students who are pursuing the pre-law curriculum and students who are specializing in English literature.

Credit is not given for both Foundations of Western Civilization 100B and Modern Europe 108A, B.

A major in history should include at least 12 semester hours in courses numbered above the one-hundreds and at least part of the higher number courses must be selected from those that deal intensively with a short period and, therefore, afford students a better opportunity to become acquainted with methods of advanced historical study—305A, B; 306A, B; 308; 309; 315; 316; 322A; 403; 404; 406B; 418.

A minor in history should include at least 3 semester hours in courses numbered above the one-hundreds.

Since a reading knowledge of French or German, or both, is helpful in advanced courses in history and essential in graduate work in the field, students majoring in history are urged to elect at least two years of French or German.

100A Foundations of Western Civilization

This course is designed to give the student an understanding and an appreciation of contemporary institutions and culture through a study of their origins and development. It is essentially a history of culture which shows how the present is a product of the past, and how peoples widely separated in space and time have contributed to the present.

Each semester. Dr. Friedmann, Dr. Macmillan, Dr. Mange, Mr. Mowen, Dr. Seibert, Mr. Starring. Four semester hours.

100B Foundations of Western Civilization

Continuation, from the seventeenth century on, of course 100A. It surveys significant developments in the Orient as well as those in the Western world. Special emphasis is placed upon the twentieth century. Prerequisite: Foundations of Western Civilization 100A.

Each semester. Dr. Friedmann, Dr. Macmillan, Dr. Mange, Mr. Mowen, Dr. Seibert, Mr. Starring. Four semester hours.

108A Modern Europe, 1500-1815

A study of the Reformation; the struggle between Spain and England; the rise of the Dutch Republic; the growth of absolutism in France; the establishment of parliamentary supremacy in England; the rise of Russia and Prussia; colonial conflict, social and political ideas of the eighteenth century; the French Revolution; and the era of Napoleon.

Offered in the Summer Session. Three semester hours.
108B Modern Europe, 1815 to the Present Time

The reactionary period after 1815; the industrial revolution; the liberal and national movements of the nineteenth century; the Near Eastern question; the expansion of Europe in Asia and Africa; international relations; World War I; the peace treaties; causes and results of World War II.

Offered in the Summer Session. Three semester hours.

109 English History to 1689

The course deals with all aspects of English history, social, economic, political, cultural, and religious, but emphasizes constitutional and legal developments. Scotland and Ireland are given brief attention.

First semester. Dr. Macmillan. Three semester hours.

109B English History, 1689 to the Present

A general survey of British history for the period, with emphasis as in 109A. The course includes the history of the acquisition and government of the British Empire and the relations of Great Britain and Ireland.

Second semester. Dr. Macmillan. Three semester hours.

201A United States History to 1865

A general survey of American history from the beginning of the Thirteen Colonies to the end of the Civil War.

Each semester. Dr. Knauss, Dr. Macmillan, Dr. Russel, Mr. Starring. Three semester hours.

201B United States History, 1865 to the Present

A general survey of United States history for the period.

Each semester. Dr. Knauss, Dr. Macmillan, Dr. Russel, Mr. Starring. Three semester hours.

305A United States History, 1783-1815

An intensive study of selected topics. A principal object is to acquaint students with the various classes of historical materials and to introduce them to methods of advanced historical study. Prerequisite: six semester hours of history.

Not offered in 1951-1952. Dr. Russel. Two semester hours.

305B United States History, 1845-1877

This course deals principally with the great sectional struggle over slavery. It is conducted in the same manner as 305A. Prerequisite: six semester hours of history.

Not offered in 1951-1952. Dr. Russel. Two semester hours.

306A United States History, 1877-1901

An intensive study of a short period. The course is conducted in a manner similar to that of 305A, B. Prerequisite: six semester hours of history.

First semester. Dr. Russel. Two semester hours.
306B United States History, 1901 to the Present
This course is conducted in a manner similar to that of 305A, B, and 306A, but a greater effort is made to present a complete outline. Prerequisite: six semester hours of history.
Second semester. Dr. Russel. Two semester hours.

307 Latin American History
A survey of the history of the Latin American countries. Particular attention is given to the political, the economic, and the social institutions and problems of Latin America.
First semester. Dr. Knauss. Two semester hours.

308 Europe: 1900-1925
A study of the evolutionary promise of the New Enlightenment and the forces that led to its end in World War I; the frustrated opportunities of the peace ending at Locarno. Emphasis on evaluating significant trends of Liberalism; the relationship of domestic and foreign policies. Open to Juniors and Seniors only.
First semester. Mr. Mowen. Three semester hours.

309 Europe: 1925 to Present
An investigation into the nature of the crucial problems and the varied solutions offered. Special study of the World Depression; the revolutionary alternatives posed by Fascism and Communism; tensions and ideological conflicts culminating in World War II; the positions of victor and vanquished after modern war. Open to Juniors and Seniors only.
Second semester. Mr. Mowen. Three semester hours.

311 Economic History of Europe
A study of the evolution of the economic institutions of Europe with comparisons of Europe and the United States.
Not offered in 1951-1952. Dr. Russel. Three semester hours.

312 Economic History of the United States
A general survey of the subject. A general knowledge of United States history such as may be gained from 201A, B is presupposed and a knowledge of the principles of economics is very helpful.
Each semester. Dr. Russel. Three semester hours.

313 History of Michigan
A course designed to show the development of the contemporary political, social, and economic status of Michigan. The relation of the history of the state to that of the nation is stressed.
Each semester. Dr. Knauss. Three semester hours.

314 History of China and Japan
A course designed to show in outline the development of civilization in the two countries. A study is made of their chief present-day problems.
Second semester. Dr. Knauss. Two semester hours.
315 The Old Regime
A study of the development of absolute monarchy; of the institutions, life, and thought of the eighteenth century, with special emphasis upon France; the causes of the French Revolution, and belated efforts at reform. Prerequisite: An introductory course in European history.
First semester. Dr. Seibert. Two semester hours.
Note.—Courses 315 and 316 are sequential courses for juniors and seniors. Each course may, however, be taken separately.

316 The French Revolution and Napoleonic Era, 1789-1815
The overthrow of the French Monarchy and establishment of the First French Republic, the rise and fall of the Napoleonic Empire, and the spread of revolutionary principles throughout Europe. Prerequisite: An introductory course in European history.
Second semester. Dr. Seibert. Two semester hours.
Note.—See note under course 315.

317 Constitutional History of the United States
A study of the evolution of the political institutions of this country from colonial times to the present with emphasis on the growth of the federal constitution. A general knowledge of the United States history, such as may be gained from 201A, B, is presupposed.
Second semester. Dr. Russel. Three semester hours.

319 History of Russia
This course stresses (1) those phases in the evolution of the Russian people necessary to an understanding of the present; (2) conditions and tendencies in Russia. Prerequisite: six hours of history.
First semester. Dr. Mange. Three semester hours.

320 Ancient Greece
Background: Near East and Aegean civilization—The Homeric Age; rise and fall of Athens; Alexander the Great; Hellenism. Political achievements; the cultural legacy of the Greeks.
First semester. Dr. Friedmann. Three semester hours.

321 Ancient Rome
Its growth, expansion, civil wars, imperialism, and final decline. Constitutional history, Roman law. The rise of the Christian church until the sixth century.
Second semester. Dr. Friedmann. Three semester hours.

322A Renaissance and Reformation (1350-1650)
Italian Renaissance, the awakening of the modern mind. Humanism. Lutheranism; Calvinism; Anglicanism, Anabaptism. The Catholic Reformation. Resulting European civilization.
First semester. Dr. Wichers. Three semester hours.
322B The Modern Near East
A study of the east Mediterranean lands formerly part of the Ottoman Empire; the problems resulting from racial conflict, economic imperialism, and the rise of nationalism.
Second semester. Dr. Mange. Three semester hours.

323 Modern Nationalism in Europe and America
Second semester. Dr. Macmillan. Two semester hours.

Open to Seniors and Graduates

403(161) American Foundations:
The English Colonies in America, 1607-1763.
Mainland and island settlements; development of society and institutions; policy and administration.
Not offered in 1951-1952. Dr. Knauss. Two semester hours.

404(162) The Era of the American Revolution, 1763-1787
The causes, character, and consequences of the American Revolution.
Not offered in 1951-1952. Dr. Macmillan. Two semester hours.

406B(182) United States from the Spanish American War to the Present
A general survey of the period with emphasis upon the Progressive Movement, the New Deal, and our entrance into World War II.
Not offered in 1951-1952. Dr. Russel. Two semester hours.

418(177) The Old South
A study of economic, social, and cultural conditions in the ante-bellum South with emphasis on the plantation system and Negro slavery and the social and political philosophy of Southern leaders.
Not offered in 1951-1952. Dr. Russel. Two semester hours.

Open to Graduates

511(282) Studies in the Near East
Studies pertaining to the major aspects of the history of the Near East; involving lectures, supplementary reading, and the critical use of historical materials in the preparation of papers.
Second semester. Dr. Mange. Two semester hours.

513(201) Studies in Michigan History
Studies in the history of Michigan since its admission as a state. Attention is given to the critical use of historical materials and the preparation of bibliographies.
Second semester. Dr. Knauss. Two semester hours.
515(285) Studies in Western Europe: Eighteenth Century Enlightenment
Lectures and reading on the character of the eighteenth century enlightenment, with special attention to France; and the critical use of historical materials in the preparation of papers on significant philosophes.
First semester. Dr. Seibert. Two semester hours.

519(262) Studies in Russian History
Lectures and reading on those phases of Russian history necessary for an understanding of the present. The critical use of historical materials in the preparation of papers on topics of current significance along two general lines: (a) problems connected with Russia's borderlands; (b) the evolution of Soviet institutions.
Not offered in 1951-1952. Dr. Mange. Two semester hours.

PHILOSOPHY
ROBERT FRIEDMANN

290 Design for Living
Man viewed as an individual: life with and without a design. Conflict situations of life and the issue of freedom. Meaning of life; responsibilities toward ourselves and toward our neighbors. Concern, service, love.
First semester. Dr. Friedmann. Two semester hours.

291 Social Values
Man viewed as member of organized society: forms of social relationships and social responsibilities. Democracy and its moral implications. Individualism, cooperation, and the problem of planning. The need for international order. Essence of liberty.
Second semester. Dr. Friedmann. Two semester hours.

390 Introduction to Philosophy
A first acquaintance with the problems of philosophy; relationship between philosophy, science, and religion. Theoretical and practical philosophy. Problems of philosophy: universe, man, inner life, moral conduct, esthetics. Different schools of thought.
First semester. Dr. Friedmann. Two semester hours.

391A History of Philosophy: Greek and Christian Philosophy
The great thinkers of the Greeks and Romans, Plato, Aristotle, Stoicism, etc. The church fathers and the schoolmen of the Middle Ages up to the Renaissance.
Not offered in 1951-1952. Dr. Friedmann. Two semester hours.

391B History of Philosophy: Modern and Recent Thinkers
The new world view since the Renaissance. Bruno, Galileo, Descartes, Spinoza, Leibnitz, English thinkers: Locke to Hume; Kant to Hegel; the more recent thinkers of both Europe and America.
Not offered in 1951-1952. Dr. Friedmann. Two semester hours.
392 Philosophy of Science
   Logical foundations, methodology of sciences. The eternal principles of
   the universe as discussed by physics, chemistry, and biology. Law and
   causality. Mechanism and vitalism.
   Second semester. Dr. Friedmann. Two semester hours.

393 Philosophy of History
   The theories about the laws and principles of history. Fate or contin-
   gency? Meaning of historical happenings, their inner morphology. Tradi-
   tion and revolutions. Discussion of Toynbee, Sorokin, Spengler, and other
   theorists.
   Not offered in 1951-1952. Dr. Friedmann. Two semester hours.

394 Great Religions of the World
   Analysis of religious experiences and of the types of religious phe-
   nomena. Primitive religions, Mythology. Religions of India, China and
   Japan. Persian religion. The religion of the Old and New Testament,
   Judaism and Christianity. Islam.
   Not offered 1951-1952. Dr. Friedmann. Three semester hours.

POLITICAL SCIENCE

D. C. SHILLING  WILLIAM V. WEBER
SAMUEL I. CLARK  ELSWORTH P. WOODS

Many of the states require that some instruction in this field be given in
all tax-supported institutions of higher learning. The Michigan require-
ment is met by one of the following courses: Political Science 230, 231,
or 234. Majors and minors must select 230 and 231.

230 American National Government
   A study of the national government of the United States, including
   its structure, functions, and operations, with special stress on the last two.
   Each semester. Dr. Clark, Dr. Shilling, Dr. Weber, Dr. Woods. Three
   semester hours.

231 American State and Local Government
   An effort is made to acquaint the student with the organization, aims,
   and problems of state, county, and municipal government. Special em-
   phasis on Michigan.
   Each semester. Dr. Clark, Dr. Shilling, Dr. Weber, Dr. Woods. Three
   semester hours.

234 Survey of American Government
   This course covers national, state, and local governments, and is in-
   tended for those who do not find time for the more extensive courses 230
   and 231.
   Each semester. Dr. Weber. Two semester hours.
330 Political Philosophy
An introduction to a selected portion of the political thought that has influenced the thinking of all ages and areas. Prerequisite: Political Science 230.
Second semester. Dr. Clark. Three semester hours.

331 Public Administration
Analysis of the principles of administrative organization and supervision, and of fiscal and personnel agencies, with special reference to current problems in American government. Prerequisite: Political Science 230 and 231.
Not offered in 1951-1952. Dr. Clark. Two semester hours.

332 American Rural Government
A critical appraisal is made of rural government, together with a study of recent changes and plans proposed for further reorganization, especially in Michigan. Desirable antecedent: Political Science 231.
Not offered in 1951-1952. Dr. Shilling. Two semester hours.

333 Political Parties and Electoral Problems
A detailed study of the nature and activities of the political parties of the United States, including their rise, development, and mechanism. Elections, ballots, and civil service are given emphasis. Prerequisite: Political Science 230 and 231.
First semester. Dr. Shilling. Three semester hours.

334 Municipal Government and Administration
The main emphasis will be placed upon administration, studying such services as planning, zoning, police, welfare, utilities, and public works. Problems of metropolitan communities will be considered. Prerequisite: Political Science 231.
Not offered in 1951-1952. Dr. Shilling. Three semester hours.

335 Comparative Governments
The organization and procedure of the political institutions of England, the British self-governing dominions, and Switzerland, together with an examination of the political trends and forces challenging or reshaping democratic institutions. Prerequisite: Political Science 230.
Second semester. Dr. Weber. Three semester hours.

336 Constitutional Law
The nature, principles, and view of the government in the United States as embodied in written constitutions and judicial decisions are considered. Leading cases in Constitutional Law will be read and discussed. Alternates with International Law 338. Prerequisite: Political Science 230 and 231.
Not offered in 1951-1952. Dr. Weber. Three semester hours.
DESCRIPTION OF COURSES

337A Contemporary Economic and Governmental Problems
A study of some of the more important politico-economic and politico-social problems, recent and pending in Congress, in state legislatures, and the world. Prerequisite: Economics 220A, B, or Political Science 230 and 231.
Not offered in 1951-1952. Dr. Weber. Two semester hours.

337B Contemporary Economic and Governmental Problems
A continuation of 337A. Credit will be given for either 337A or 337B taken separately.
Second semester. Dr. Weber. Two semester hours.

338 International Law
Relations of nations in war and in peace, and the accepted usages regarding the rights of neutrals and belligerents, contraband, blockade, visit and search, changes of sovereignty, extradition, expatriation, and similar subjects. Changes brought about by World War II. Prerequisite: six semester hours of government.
First semester. Dr. Weber. Three semester hours.

339 International Politics
A study of forces which have operated to bring conflict among states in the international community. The need for international cooperation will be emphasized. Prerequisite: Political Science 230.
Not offered in 1951-1952. Dr. Woodt. Three semester hours.

340 Government and Politics of Central and South America
A study of the form and structure of the political institutions and party organization of Latin American Republics and the conflict between democracy and totalitarianism. Desirable prerequisite: history and geography of these countries.
First semester. Dr. Weber. Two semester hours.

341 Government and Politics of the Far East
A survey of the political institutions and processes of governments in the Far East during the last two centuries. Prerequisite: geography and history of the Far East.
Not offered in 1951-1952. Dr. Weber. Two semester hours.

Open to Seniors and Graduates

430(184) American Political Thought
A survey of the leading American contributions to our political thought, grouped around each of several great eras and issues of our national development. Lectures, textbook, and source material will be used. Prerequisite: Political Science 230.
First semester. Dr. Clark. Two semester hours.
431(142) Municipal Government and Administration
While both organization and administration are studied, special emphasis is placed on the latter. Prerequisite: Political Science 231. Second semester. Dr. Shilling. Two semester hours.

432(151) British Government and Politics
The organization and operation of the government of Great Britain and a survey of contemporary British political issues and problems. Prerequisite: Political Science 230. Not offered 1951-1952. Dr. Weber. Two semester hours.

433(152) Governments of the Soviet Union and Eastern Europe

439(163) Foreign Policy of the United States
A survey of the diplomatic history of the United States. Prerequisite: Political Science 230 or History 201A and B. First semester. Dr. Woods. Two semester hours.

440(164) Conduct of American Foreign Relations
A study of the conduct of American foreign relations and the instrumentalities through which they are carried on. Prerequisite: Political Science 230 or History 201A and B. Second semester. Dr. Woods. Two semester hours.

Open to Graduates

536(166) International Organization
Organization and methods devised by states for dealing with their common problems. Special attention given to the problems arising in the United Nations. Prerequisite: Political Science 230 or History 201A and B. Not offered in 1951-1952. Dr. Woods. Two semester hours.

537(167) Contemporary Problems in International Relations
Analysis of the problems facing the international community, with special emphasis on those problems affecting the United States. Prerequisite: Political Science 230 or History 201A and B. Not offered in 1951-1952. Dr. Woods. Two semester hours.

SOCIOMETRY

LEONARD C. KERCHER
PAUL B. HORTON
EDWIN M. WILLIAMSON

CHESTER L. HUNT
NELLIE N. REED

Courses in sociology are designed (1) to give students in general a better understanding of the significant factors and processes of modern life; (2) to meet the needs of students preparing to teach in the social-science field; (3)
to prepare students to do graduate work in the field of sociology; and (4) to stimulate interest in and provide some prerequisite study for the profession of social work.

A major in the field consists of 24 semester hours and a minor of 15 semester hours of course work.

Courses 241 and 242 are required of all students majoring or minoring in sociology and should constitute a minimum selection for students preparing to teach "Community Civics." All courses may be taken separately, and may be taken in any order by students who have had the prerequisite courses.

The curriculum in social work requires a major in sociology or a major in social science with a sociology concentration and a minor in social work, consisting of courses 255, 348, 351, 353, 355, 358A and 358B. Students intending to pursue this curriculum should seek counsel and guidance early from the instructor in social work.

**SOCIOLOGY COURSES**

**241 Principles of Sociology**

A study of man's social nature and of the social world in which he lives. The biological, social, and cultural factors underlying the development of human personality and the various forms and processes of group association are analyzed.

Each semester. Dr. Horton, Dr. Hunt, Dr. Kercher. Three semester hours.

**242 Modern Social Problems**

A general survey of some of the major social problems now confronting American society, such as inter-group conflict, physical and mental ill health, economic insecurity, juvenile delinquency and crime, population changes, and mass communication. Prerequisite: Principles of Sociology 241.

Each semester. Dr. Horton, Dr. Hunt, Dr. Kercher. Three semester hours.

**243 Social Psychology**

A study of the social and cultural aspects of individual personality, together with an analysis of the problems of personal adjustment that arise from the interaction of personalities and from the relation of the individual to the social environment in general. Prerequisite: Principles of Sociology 241.

First semester. Dr. Horton. Two semester hours.

**244 Sociology (for Nurses)**

An introductory course in sociology especially adapted to the needs of students of nursing. Not open to regular students.

First semester. Dr. Horton. Two semester hours.

**245 Modern Marriage**

A general education course designed to help young people prepare for successful marriage. Courtship, choosing a mate wisely, planning for marriage, adjusting to one's partner, preparing for successful parenthood
are considered. Should not be taken by students expecting to take Marriage and the Family 345.

Each semester. Dr. Horton and resource persons. Two semester hours.

246 Juvenile Delinquency and the Community

A study of child delinquency as a community problem. Extensive use is made of the research opportunities, the leadership, the youth service agencies, and other social resources of the local community. Prerequisite: Principles of Sociology 241, or consent of instructor.

Not offered in 1951-1952. Dr. Kercher. Three semester hours.

248 Cultural Anthropology

A descriptive and comparative study of the cultures of primitive peoples; their technology, art, social life, and religion. The course includes also a consideration of the origins and functional interrelationships of significant aspects of contemporary culture.

First semester. Dr. Hunt. Three semester hours.

340 Urban Community

A study of community life as influenced by the processes of industrialization and urbanization. Community problems and social planning for community life are given appropriate consideration. Prerequisite: Principles of Sociology 241.

Second semester. Dr. Horton. Two semester hours.

341 Social Control

A study of the means and the forms of social control. Emphasis is upon the systematic analysis of social control situations. Limited research project assigned. Prerequisite: Principles of Sociology 241 and Modern Social Problems 242.

Not offered in 1951-1952. Dr. Hunt. Two semester hours.

342 Criminology

A study of crime as a social problem. Course includes (1) an analysis of causative factors in crime, (2) a study of American police and court systems, (3) a survey of the problems of penology, and (4) a consideration of crime prevention. Visits to institutions are made. Prerequisite: Principles of Sociology 241.

Second semester. Dr. Kercher. Three semester hours.

343 Population

A study of the causes and implications of major contemporary population changes, both quantitative and qualitative, in the United States and in the world. Prerequisite: Principles of Sociology 241.

First semester. Dr. Kercher. Three semester hours.

344 History of Social Thought

A critical survey of the social thinking of outstanding students of society from Plato to those of modern social science. Prerequisite: Principles of Sociology 241 or consent of instructor.

First semester. Dr. Hunt. Two semester hours.
345 Marriage and the Family
A study of both the personal and the institutional aspects of marriage and family living. Courtship and mate selection, marital adjustment, parent-child relations, family disorganization, and the adaptation of the family to modern society are considered. Credit not given to persons with credit for Modern Marriage 245. Prerequisite: Principles of Sociology 241.
Each semester. Dr. Horton. Three semester hours.

347 Race and Inter-Group Relations
A study of race and inter-group conflict, stressing (1) the meaning of race, (2) the nature and roots of race prejudice, race discrimination, and inter-group conflict, and (3) the character and effectiveness of various means of adjustment to the problem. Prerequisite: Principles of Sociology 241.
Second semester. Dr. Hunt. Two semester hours.

348 Introduction to Social Research
An introductory course in the principles and techniques of social investigation. The leading research approaches are surveyed. Procedures for planning, organizing, and conducting limited research projects are analyzed. Statistical concepts and methods are studied. Each student will take part in a group study project. Prerequisite: 12 semester hours of social science other than history.
Second semester. Dr. Kercher. Three semester hours.

349 Contemporary Social Movements
A study of the growth and place in contemporary society of selected social movements, including communism, fascism, Ku Klux Klan, the Townsend movement, and the like.
Second semester. Dr. Horton. Two semester hours.

350 The Community and the School
A study of the social functions of education in promoting constructive community life. When offered off-campus for resident credit each student, working singly or in small committees, is expected to develop an instructional unit for practical classroom use. Prerequisite: Principles of Sociology 241 or equivalent.
Not offered in 1951-1952. Dr. Horton. Three semester hours.

Open to Seniors and Graduates

444(180) Race and Culture Contacts
A study of racial and cultural minorities with particular reference to those prominent in American culture. Race as a physical and cultural concept; racial myths, doctrines, and movements; conflict and accommodation of majority and minority groups, and proposed solutions of ethnic problems are considered. Prerequisite: Principles of Sociology 241 or consent of instructor.
Not offered in 1951-1952. Dr. Hunt. Two semester hours.
445(162) Cooperative Social Organization
A study of cooperative enterprise and cooperative movements; covering principles, historical developments, forms and manifestations, problems of operation, and place in contemporary society.
Not offered in 1951-1952. Dr. Kercher. Two semester hours.

446(159) Juvenile Delinquency
Extent, causes, and methods of control of juvenile maladjustment. Prerequisite: Principles of Sociology 241 or equivalent.
Not offered in 1951-1952. Dr. Kercher. Two semester hours.

447(118) Migrations
A study of major human migrations, both historical and contemporary. The nature of these migrations, the factors responsible for them, and the problems arising in relation to them are emphasized. Prerequisite: Principles of Sociology 241 or equivalent.
Not offered in 1951-1952. Dr. Kercher. Two semester hours.

Open to Graduates

541(158) Advanced Studies in Social Control
A consideration of the agencies and means of social control from the standpoint of their relation to different socio-economic systems. Treatment of ridicule, gossip, rewards, coercion, propaganda, and censorship. Term projects in special areas of control. Prerequisite: Principles of Sociology 241 or equivalent.
Second semester. Dr. Hunt. Two semester hours.

543(115) Advanced Population Studies
A study of significant population conditions and changes, both quantitative and qualitative, in the United States and in the world's trouble spots. Facts, causes, consequences, and policies with respect to contemporary population situations are considered.
First semester. Dr. Kercher. Two semester hours.

547(160) Advanced Studies in the Family.
The major aspects of family life are explored. Attention is directed to historical family organizations, the family in other cultures, changing institutional functions, major family problems, and family disorganization and reorganization. Prerequisite: Principles of Sociology 241 or equivalent.
Not offered in 1951-1952. Dr. Horton. Two semester hours.

SOCIAL WORK COURSES

255 The Field of Social Work
A study of social work as a professional field. The philosophy, functions, employment opportunities, patterns of specialization, and methods of social work are surveyed. Interpretative visits to varied types of social work agencies are made.
First semester. Mrs. Reid. Two semester hours.
351 Family and Child Welfare
The development of family and welfare services is traced. The problems of rendering these services are considered from both a private and a public agency point of view. Prerequisite: 12 semester hours of social science other than history.
First semester. Mrs. Reid. Two semester hours.

353 Social Legislation and Public Welfare
The history of social legislation and public welfare and their underlying philosophy are considered from the Elizabethan Poor Law to the Social Security Act. An analysis is made of various aspects of welfare legislation of importance to the social worker. Prerequisite: 12 semester hours of social science other than history.
Second semester. Mrs. Reid. Three semester hours.

355 Principles of Social Work
A course designed for students without social work experience. It constitutes a general introduction to the basic principles and processes of social case work. For those students needing it consideration is also given to the principles, methods, and problems of social group work. Prerequisite: consent of the instructor.
First semester. Mrs. Reid. Three semester hours.

358A Orientation to Field Work
A course in agency observation and study, aiming to orient the student to a specific field work assignment. A minimum of 50 hours of on-the-spot study of the agency's organization, functions, and methods is required. Prerequisite: Principles of Social Work 355, and consent of the instructor.
Each semester. Mrs. Reid. Two semester hours.

358B Supervised Field Work
A continuation of Orientation to Field Work 358A, with emphasis on supervised participation in the work of the agency. Each student is required to complete 100 hours of field work on specific assignments. The student's work is evaluated jointly by the agency supervisor and the instructor. Prerequisite: Orientation to Field Work 358A, and consent of the instructor.
Second semester. Mrs. Reid. Three semester hours.

Open to Graduates

558(258) Psychiatric Information for Social Workers.

559(243) Child Psychiatry
Discussion of causation, symptomatology, prognosis, and treatment of mental and emotional maladjustments of childhood.
First semester. Dr. Williamson. Two semester hours.
560(270) Mental Hygiene in Social Work

This course presupposes the completion of Social Work 269, or its equivalent. It is a continuation of the study of fundamental biological, psychological, and social factors in childhood which later determine mechanisms of behavior in adult life.

Second semester. Dr. Williamson. Two semester hours.
DIVISION OF TEACHER EDUCATION

James H. Griggs, Director

The Division includes the Departments of Education and Librarianship. It functions through a committee consisting of the respective heads of these departments. The heads of the departments and the departmental counselors will advise students relative to requirements for majors or minors in these departments and concerning any special requirements set up by the departments.

### EDUCATION

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<tr>
<th>James H. Griggs</th>
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<tr>
<td>Mary Bottje</td>
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<td>Roy C. Bryan</td>
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<td>George H. Hilliard</td>
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<td>Eunice E. Kraft</td>
<td>Elmer H. Wilds</td>
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Courses in the Department of Education are designed to meet the professional needs of the student preparing to teach. All students pursuing a curriculum for a secondary provisional certificate and a degree are required to take as a minimum 21 semester hours of professional work in education; 24 semester hours for the elementary provisional certificate. The following courses, or their equivalent, are required: Human Growth and Development 251, 3 semester hours; Psychology of Reading 212, 3 semester hours for elementary teachers; Introduction to Directed Teaching 240 or 351, 3 semester hours; and Directed Teaching, Laboratory in Education, and General Educational Problems 370A, B, C, 15 semester hours.

Applicants for the elementary or secondary provisional certificates are not permitted to major in Education.

Elective courses are available in the following fields: early-elementary education, later-elementary education, secondary education, special education, methods of teaching, theory and principles of education, educational measurements, rural education, and health education. Certain special-methods courses are available in other departments of the institution.

Students take Directed Teaching and Laboratory in Education 370A and B, 12 semester hours, during one semester, and General Educational Problems 370C, 3 semester hours, during either semester of the senior year.
Students with advanced credit in education or with irregularities in their professional work should confer with the departmental adviser at the earliest possible date.

**REQUIRED WORK IN EDUCATION**

*(For Provisional Certificate)*

**Sophomore or Junior Year**

**251 Human Growth and Development**

Class meets four periods a week for three hours credit. Course deals with physical, social, emotional, and intellectual growth and development of children and adolescents. Prerequisite: as many honor points as hours of credit.

Each semester. Mr. Buelke, Dr. Ellis, Dr. Mallinson, Dr. Sebaly, Miss Stinson, Dr. Swickard. Three semester hours.

**Junior Year**

**351 Introduction to Directed Teaching**

This course is designed to prepare students for successful student-teaching. Prerequisite: Human Growth and Development 251 or equivalent and as many honor points as hours of credit.

Each semester. Mr. Buelke, Dr. Chiara, Dr. Ellis, Miss Schroeder, Dr. Sebaly, Miss Steele. Three semester hours.

**Senior Year**

**370A, B, C Integrated Professional Education**

For all seniors whose programs will permit them to devote one semester entirely to professional education. A unified course for seniors which is based on needs and problems of students while doing their directed teaching. Prerequisite: Human Growth and Development 251 and Introduction to Directed Teaching 351, or equivalent; and as many honor points as hours of credit.

Mr. Buelke, Dr. Chiara, Dr. Griggs, Mr. Leonardelli, Dr. Mallinson, Dr. Manske, Miss Schroeder, Miss Steele, Dr. Swickard, supervisors, and resource persons. Fifteen semester hours.

**370A Directed Teaching**

Students devote a half day for one semester to Directed Teaching, at which time they have experiences in both the curricular and extra-curricular program of the training school in which they teach. All students expecting to do Directed Teaching should enroll in the Teacher Education Office well in advance of the semester in which the Directed Teaching is to be done.

Each semester. Eight semester hours.
370B Laboratory in Education

Students work individually and in groups on the kinds of problems faced in directed teaching situations in classroom, school, and community. Other problems to be faced later as full-time teachers are considered. Suggestions and guidance are afforded by staff members and by resource persons. The laboratory is divided into elementary and secondary sections.

Each semester. Four semester hours.

370C General Educational Problems

Course content includes such matters as social, political, and economic influences on education; historical and philosophical backgrounds of present-day education; changes and trends in education; and current problems in education.

Each semester. Three semester hours.

OPTIONAL COURSES IN DIRECTED TEACHING

371 Directed Teaching

Only for seniors who have completed most of their professional course work prior to the senior year. Similar to description for 370A. Students should enroll at the Teacher Education Office for Directed Teaching 371, 372, or 373 well in advance of the semester in which the Directed Teaching is to be done. Prerequisite: as many honor points as semester hours of credit acquired.

Each semester. Supervisors. Four semester hours.

372 Directed Teaching

Only for seniors who have previously fulfilled a part of their requirement in directed teaching. Similar to description for 370A.

Each semester. Supervisors. Four semester hours.

373 Directed Teaching

This elective course is planned primarily for those students who wish to extend their teaching over a wider range of grades or subjects, and for students who, in the opinion of the head of the department and the Director of Teacher Education, need more experience in teaching. Prerequisite: Directed Teaching 372 or 370A.

Each semester. Supervisors. Four semester hours.

374 Directed Teaching

A course in the teaching of arts and crafts related to work in occupational therapy in the public schools and in institutions for defective children. Prerequisite: same as for Directed Teaching 371. Open only to students of occupational therapy.

Each semester. Supervisors. Five semester hours.
ELEMENTARY EDUCATION

208 Stories for Childhood
   A study of stories and poems suitable to childhood. Classroom practice in story telling.
   Each semester. Dr. Swickard. Two semester hours.

212 Psychology of Reading
   A summary of the results of the scientific studies made in the field of reading, with suggestions as to the bearing of these studies upon the materials and methods of teaching. Prerequisite: as many honor points as hours of credit.
   Each semester. Mr. Buelke, Miss Schroeder, Dr. Swickard. Three semester hours.

305 Early Elementary Education
   A study of curriculum practices in the early elementary grades. Students will have an opportunity to work with large centers of interest, be introduced to newer courses of study, and afforded the opportunity of actual participation.
   First semester. Dr. Swickard. Three semester hours.

308 Parent Education
   This course will enable students to appraise and organize materials and methods of work suitable for child-study groups or parent-teacher meetings. Efforts will be made to secure practice in handling child-study groups.
   Not offered in 1951-1952. Dr. Swickard. Two semester hours.

309 Nursery School Education
   This course will acquaint students with the history and present-day status of the nursery-school movement. Consideration will be given to the organization, equipment, and curriculum of the various types of existing nursery schools.
   Second semester. Dr. Swickard. Two semester hours.

311A The Elementary Curriculum
   A consideration of content and procedures to adapt experiences of pupils in elementary schools to modern conditions and child needs and interests. Individual or committee reports concerning the improvement of various aspects of the elementary school curriculum will be prepared.
   Not offered in 1951-1952. Dr. Frederick. Two semester hours.

311B The Elementary Curriculum
   A continuation of 311A. Emphasis will be placed on developing and organizing course of study materials for actual use in school systems represented by those taking the course.
   Note.—Open only to those who have had 311A during the preceding semester.
   Not offered in 1951-1952. Dr. Frederick. Two semester hours.
312 Later Elementary Education
A study of the characteristics and needs of pupils in the later-elementary grades and of the materials and methods of instruction. Prerequisite: Human Growth and Development 251.
Not offered in 1951-1952. Miss Schroeder. Three semester hours.

Open to Graduates

506(C175) Psychology of Child Development
Gives a systematic knowledge of the facts and generalizations concerning the growth of children from birth to maturity. The emphasis will be on the child as a whole, while major divisions of the course will deal with physical, mental, social, and emotional development.
First semester. Dr. Ellis. Two semester hours.

507(C177) Education of Young Children
Primarily for teachers and supervisors of nursery-school, kindergarten, and elementary-school children. Reviews the planning of school programs and the scientific bases for innovating practices.
First semester. Mr. Buelke, Dr. Swickard. Two semester hours.

510A(C107a) Psychology of the Elementary School Subjects: Reading and Language
Deals with the psychological principles underlying present and projected practices in the teaching of reading and language.
Not offered in 1951-1952. Mr. Buelke, Dr. Hilliard, Dr. Swickard. Two semester hours.

510B(C107b) Psychology of the Elementary School Subjects: Arithmetic, Spelling, and Social Studies
Deals with the psychological principles underlying the present and projected practices in the teaching of arithmetic, spelling, and the social studies.
Second semester. Mr. Buelke, Dr. Hilliard, Dr. Swickard. Two semester hours.

511(B105) Elementary School Curriculum
Acquaints students with theories, techniques, and practices utilized in curriculum building.
Second semester. Dr. Frederick. Two semester hours.

513(B251) Supervision of Elementary School Instruction
Required of students preparing for the preliminary examination for the doctorate of elementary education. Presupposes training and experience in elementary education and a rudimentary knowledge of public-school administration.
First semester. Dr. Hilliard. Two semester hours.

514(B252) Elementary School Organization and Administration
Deals with the general managerial problems of the elementary school.
Division of Teacher Education

Open to students of maturity and experience who wish to fit themselves for principalships or supervisorships in grades one to eight.

Second semester. Mr. Buelke. Two semester hours.

Secondary Education

321 Secondary School Curriculum
A study of the principles underlying the revision and reorganization of junior and senior high-school curricula and a survey of current practices in adapting the high-school offering to modern social conditions and adolescent needs.

Not offered in 1951-1952. Dr. Frederick. Two semester hours.

323A Basic Elements of a Guidance Program
A study of guidance in elementary and secondary education will be made. The course content includes units on aims and purposes, individual inventory, and counseling techniques.

Not offered in 1951-1952. Dr. Manske. Two semester hours.

323B Basic Elements of a Guidance Program
Emphasis will be placed upon occupational information and techniques, placement, follow-up, and organization and administration of guidance programs.

Not offered in 1951-1952. Dr. Manske. Two semester hours.

Open to Graduates

520(B120) Improvement of Teaching in Secondary Schools
For teachers of experience, high-school principals, and superintendents who desire to consider the larger problems of classroom instruction. Open also to graduate students without teaching experience.

First semester. Dr. Bryan. Two semester hours.

521(B122) The Modern High School Curriculum
Concerned largely with the literature dealing with the high-school program of studies, the criticisms directed against the existing curriculum, and the more significant proposals for its reform.

Second semester. Dr. Frederick. Two semester hours.

522(B139) Organization and Administration of a Guidance Program
Prerequisite: C119. An advanced course in guidance designed primarily for those persons concerned with the organization and administration of a program of guidance services, including purposes and functions, initiating and promoting the program, administrative problems, and evaluative procedures.

Not offered in 1951-1952. Dr. Manske. Two semester hours.
523(C119) Educational Guidance and Adjustment
Deals with the personal, recreational, educational, and vocational guidance of youth. Methods of counseling and techniques of gathering pertinent personnel data will be presented.
First semester. Dr. Manske. Two semester hours.

524(B124) Administration of Secondary Schools
Designed for superintendents, principals, and experienced teachers interested in administrative matters. Makes detailed study of the general problems of organization, supervision, and management of the high school. A master's thesis may be begun.
Second semester. Dr. Bryan. Two semester hours.

525(B156) High School Supervision
Deals with the measure, aims, and principles of supervision of secondary school subjects.
First semester. Dr. Frederick. Two semester hours.

526(C117) Aptitude and Vocational Tests
The nature of vocational aptitudes and the means of disclosing them. Practice in the application of tests and the interpretation of data will be provided.
Not offered in 1951-1952. Dr. Manske. Two semester hours.

527A(B227a) Seminar in Secondary School Curriculum
Especially for students who wish to prepare master's theses in this field. Prerequisite: B192 or C192, or the equivalent of one of these courses.
Not offered in 1951-1952. Dr. Mallinson. Two semester hours.

527B(B227b) Seminar in Secondary School Curriculum
A continuation of 527A.
Second semester. Dr. Mallinson. Two semester hours.

529(C217) Techniques of Guidance
Familiarizes the student with the instruments of guidance and how to apply them. Stresses the interpretation and application of basic data to guidance situations and techniques of counseling. Systematic observations of practices employed in selected institutions and agencies are a requirement of the course.
Second semester. Dr. Manske. Two semester hours.

530(C220) Seminar in Guidance and Adjustment
Research in the field of guidance and adjustment. Restricted to advanced students who wish to prepare theses or engage in other research activities in the field.
Not offered in 1951-1952. Dr. Manske. Two semester hours.
\section*{SPECIAL EDUCATION}

\textbf{231 Introduction to Special Education}

A beginning course in the field of special education, dealing with the education of gifted, subnormal, neurotic, delinquent, speech-defective, blind, deaf, and crippled children. Prerequisite: Human Growth and Development 251.

First semester. Dr. Ellis. Two semester hours.

\textbf{232 Problems of the Deaf and Hard of Hearing}

A study of the handicap of deafness. Topics included are: the history of the treatment and education of the deaf; the social, economic, educational, and psychological problems resulting from a loss of hearing; and the special speech problems encountered.

First semester. Dr. Van Riper. Three semester hours.

\textbf{233 Introduction to Lip Reading}

A course designed to acquaint the student with the various methods of lip reading and the problems encountered in the teaching of this skill. The student is given opportunity to acquire elementary lip reading skill as well as practice in the techniques of teaching.

Second semester. Dr. Van Riper. Three semester hours.

\textbf{235 Introduction to Mental Hygiene}

A course in the mental hygiene of childhood and adolescence. Among the topics considered are: adjustment to home and school; failure, frustration, and aggression; role of the emotions in education; adolescence and its problems; sex development; juvenile delinquency; the mental hygiene of courting, mating, and marital relations; the mental hygiene of religion.

Second semester. Dr. Ellis. Three semester hours.

\textbf{330 Educational Therapy in Reading}

A study is made of the psychological, sociological and physiological factors affecting children's reading ability, together with laboratory application of such knowledge in the prevention, diagnosis and treatment of reading problems. Open only to experienced teachers by permission of the instructor.

Not offered in 1951-1952. First semester. Mr. Carter, Miss McGinnis. Two semester hours.

\textbf{332 Problems in Education of the Mentally Handicapped}

Problems in education and training of mentally handicapped children, including educability; philosophy of education of the mentally handicapped; organization of programs; educational and custodial functions of institutions; vocational guidance and training.

Each semester. Dr. Ellis. Two semester hours.

\textbf{336 Character Education}

The objectives of character education are studied and catalogued. The influences of the curriculum, the cardinal principles of education and social
agencies, in relation to heredity and environment, are observed. A bibliography of reference to methods and materials is collected.

Each semester. Mr. Cooper. Two semester hours.

337 Methods of Teaching Subnormal Children

This course is designed to acquaint the student with the principles and practices of instruction of subnormal children. Prerequisite: Human Growth and Development 251, Education of Exceptional Children 331.

Not offered in 1951-1952. Dr. Ellis. Two semester hours.

338 Audio-Visual Education

Some attention will be given to the historical approach as well as to the philosophy of audio-visual education. Special emphasis will be given to types of audio-visual aids, technical processes, necessary educational procedures, and the administration of audio-visual instruction. Some time will be devoted to the principles and the methods of research in the field.

First semester. Dr. Pellett. Two semester hours.

Open to Seniors and Graduates

431(C130) Education of Exceptional Children

Deals with the problems and methods involved in the adjustment and training of exceptional children in the schools—the mentally retarded, the gifted, the crippled, the deaf, the blind, the emotionally unstable, and the delinquent.

Not offered in 1951-1952. Two semester hours.

432(C230) Education and Control of Mental Deviates

A course in the psychology and the school treatment of subnormal children. Major emphasis will be placed upon the educational treatment of subnormal children and of the moron and borderline classes. Prerequisite: Human Growth and Development 251, or equivalent.

Second semester. Dr. Ellis. Three semester hours.

436(C120) Mental Hygiene of Childhood and Adolescence

Deals with the problems of emotional adjustment and maladjustment in childhood and adolescence.

First semester. Dr. Ellis. Two semester hours.

438(B133) Visual-Sensory Aids in Education

Acquaints school administrators and teachers with the values and uses of visual materials and auditory aids in education.

Second semester. Mr. Snow. Two semester hours.

Open to Graduates

531(C132) Clinical Study of Exceptional Children

This course is intended to illustrate methods of diagnosing and treating the problems of exceptional children.

Not offered in 1951-1952. Two semester hours.
340 **Art Observation**

Observation of art activities in the training school and discussion and illustration of these problems.

First semester. Miss Smutz. One semester hour.

341 **Art Supervision**

A study of the school curriculum and its needs in art activities. A course of study will be outlined and administration problems discussed. Prerequisite: Art Structure 106, Elementary Design 105, Art Composition 208, History of Art 213A, Commercial Art 214.

Second semester. Miss Smutz. Two semester hours.

342 **Teaching of Latin**

The problems of the first two years of high-school Latin are considered. Observations of teaching, reports, and discussions will form a part of the work. This course is prerequisite to directed teaching in Latin.

Second semester. Miss Kraft. Two semester hours.

343 **Organization and Administration of Physical Education**

The planning of physical-education programs for city, village, and rural schools; the organization of health lessons, games, meets, tournaments, and seasonal play; principles of supervision; construction and equipment of building, grounds, swimming pools, athletic fields, stadia.

Each semester. Mr. Gary. Three semester hours.

344 **Methods in Physical Education**

Fundamental principles underlying the selection of subject matter and the technique of teaching gymnastics, games, and rhythmic work for elementary and high-school pupils. Opportunity for observation and making of lesson plans. Prerequisite: Introduction to Physical Education 170.

Second semester. Miss Bottje. Two semester hours.

345 **Administration and Organization of Physical Education**

This course presents the problems that arise in the everyday experience of the instructor. Among the topics considered are administration of activities, physical examinations, excuses, special cases, records, schedules, and relations with other services in the school. Prerequisite: Methods in Physical Education 344.

First semester. Miss Crane. Two semester hours.

346 **Teaching of Business Subjects**

This course is designed for the prospective teacher of high school subjects. Consideration is given to business education programs, equipment, approved teaching procedures and teaching aids.

Second semester. Mr. Lindquist. Two semester hours.
347 Plan and Organization of a School Shop

This is a course to help teachers plan and organize the school shop. Topics concerned include physical needs of the subject, selection of activities, shop layout, purchasing equipment, establishing a supply routine, planning personnel organization, and shop management.

Each semester. Dr. Feirer. Two semester hours.

348 Teaching of Industrial Arts

This course deals with the problems in teaching industrial-arts subjects, the techniques employed in the analysis of instructional units, construction of tests and rating scales, and problems dealing with administration and work. The principal methods of instruction used in industrial-arts subjects will be emphasized.

Each semester. Dr. Feirer. Three semester hours.

449(B227s) Education in An Air Age

This course is intended for elementary and secondary school teachers desiring an understanding of various phases of aviation and their relation to social, political, economic and educational problems in the modern world. Opportunities will be provided to analyze various educational activities that are appropriate to different grade levels, and provision will be made for visiting airports and acquiring some flight experience.

Not offered in 1951-1952. Dr. Giachino. Two semester hours.

THEORIES AND PRINCIPLES OF EDUCATION

352 The Theory and Practice of Creative Education

This course is especially designed for leaders in any field who are interested in the creative way of living and learning. An attempt will be made to discover creative procedures which are more productive of results in setting up learning situations for those groups, in or out of school, who are interested in self-development and community achievement.

Not offered in 1951-1952. Two semester hours.

353 Foundations of Modern Education

This course acquaints the prospective teacher with the historical and philosophical backgrounds of the institution in which he is to work, in order to prepare for intelligent participation in the interpretation of modern educational issues and the solution of present-day educational problems. Prerequisite: Human Growth and Development 251.

Not offered in 1951-1952. Dr. Sebaly, Dr. Wilds. Three semester hours.

451(A125) Philosophy of Education

For graduate students and teachers of experience. Analyzes and interprets the changes in education taking place in this and other countries.

Not offered in 1951-1952. Dr. Sebaly. Two semester hours.
Open to Graduates

550(C102) Advanced Educational Psychology
Will deal with problems of individual differences, learning, and social and emotional adjustment.
Second semester. Dr. Ellis. Two semester hours.

ADMINISTRATION AND RESEARCH

360A School Administration
A course for students preparing for work as school superintendents. Problems commonly met by school superintendents are studied in some detail. Among the problems discussed are the following: relation of city to state educational organization, growth of city school organization, functions of school boards, nature of the superintendent's work, financial organization, building planning, and educational organization.
Not offered in 1951-1952. Dr. Pellett. Two semester hours.

360B School Administration
This course emphasizes the work of the school principal and deals with the following problems: faculty, the pupils and their needs, supervision of classroom teaching, daily program, training the student body, general problems of management, accounting, testing programs, and relation to the community.
Not offered in 1951-1952. Dr. Pellett. Two semester hours.

Open to Graduates

560(B250) Principles of Educational Administration
Deals with the philosophy and principles underlying school administration. Required for the master's degree in general administration and of all students preparing for the preliminary examination for the doctorate in educational administration. Presupposes a rudimentary knowledge of administration and some practical field experience.
First semester. Dr. Norrix. Two semester hours.

561(B255) Social Interpretation
Deals with community education with respect to the educational program. Considers the principles of education interpretative service and their application in every phase of the system, considering specifically the constructive method of continuous community education.
Second semester. Dr. Hilliard, Dr. Norrix. Two semester hours.

562(B192) Methods of Research in Education
Introduces students to the theories and techniques of educational research. Study is made of the selection of problems, preparation of bibliography, statistical treatment of educational data, and the writing of the thesis.
First semester. Dr. Frederick, Dr. Mallinson. Two semester hours.
LIBRARIANSHIP

ALICE LOUISE LEFEVRE

MATE GRAVE HUNT

The Department of Librarianship is fully accredited by the American Library Association as an undergraduate library school specializing in the preparation of school and county librarians.

The curriculum in librarianship provides a choice of two programs: (1) The School Library sequence leading to a B.S. degree including teaching certificate with a major (24 semester hours) in librarianship which prepares the candidate to hold a position as librarian in elementary or secondary schools; provision is also made for students to present a minor in preparation for part-time school-library service. (2) The County Library sequence leading to an A.B. or a B.S. degree with a major in librarianship qualifying the candidate for library service in small communities or in rural areas. Certain of the courses are also open to other students who desire a wider acquaintance with books and other library materials. A departmental laboratory containing the books and other materials for the study of library science is provided.

The courses are open to juniors and seniors with the exception of Reading Interests of Children 202 which is also open to sophomores. The major for either of the above sequences consists of courses 202 or 302, 303, 306, 311, 360, 361, 362, 370, and two other courses. The minor consists of 302 or 202, 303, 305, 311, 360 and 361. Candidates in the School Library sequence spend a part of the practice teaching period (Education 370A) in a supervised school library. Candidates in the County Library sequence will elect 380 to provide a similar period of supervised practice in a county library. Consult the director of the department for further information on selection of courses.

The courses in the Department of Librarianship count in the following subject groupings: Group I, Language and Literature, 202, 302, 303, 304, 306, 311; Group III, Social Science, 362; Group IV, Education, 305, 361, 363; Group VI, Practical Arts, 360, 370, 380.

102 Contemporary Reading Interests

Wide reading of varied types of books of current interest. Attention given to interests of adults, young people, and children. Reading and class discussion centering in the potential influence of books in forming public opinion and in contributing to cultural background.

This course does not count toward major or minor in librarianship.
Not offered 1951-52. Two semester hours.

202 Reading Interests of Children

In association with children, the class will read and evaluate a wide range of books on varying reading levels as a basis for consideration of present-day children's interests in the light of the development of children's reading. There will be opportunity to examine, evaluate, and use printed aids for the selection of books for children.

Each semester. Miss Hunt. Three semester hours.
302 Reading Interests of Youth

Study of the fields of literature of interest to youth. Students will read and evaluate, in association with young people, a wide range of books selected from both adult and juvenile levels. Emphasis is placed on the development of appreciation and methods of awakening interest in reading. Attention is given to sources for selection of such books.

First semester. Miss LeFevre. Three semester hours.

303 Selection of Reading materials*

Building the book collection for the library, with emphasis on the needs of the school clientele and in relation to the community. Attention is given to the evaluation and effective use of sources for selection of books, periodicals, and other materials.

Each semester. Miss Hunt. Three semester hours.

304 Reading Interests of Adults*

Discussion of the methods used in libraries in promoting reading such as reader's advisory service, book talks, forums, radio, films, and booklists. Students have opportunity to examine and read a number of books in various fields of interest and to evaluate them on the basis of their value in meeting specific problems.

First semester. Miss LeFevre. Two semester hours.

305 Curriculum Enrichment

Study of books, pamphlets, periodicals, and audio-visual materials in relation to the elementary and secondary school curriculum. Stresses sources of selection and evaluation of content on the basis of values for various purposes and reading levels. Attention is also given to discussion and practice in methods of instruction in the use of books and other library materials.

Each semester. Miss LeFevre, Miss Hunt. Three semester hours.

306 Storytelling

Underlying principles of the art of storytelling: techniques; content and sources of materials. Practice in telling stories before groups of children is provided. Planning the story-hour program for various ages as a means of developing appreciation of literature and stimulating an interest in reading.

Each semester. Miss LeFevre. Two semester hours.

311 Reference Service*

Students will have opportunity to examine, evaluate and use the kinds of books valuable for use in connection with the curriculum and with the varied needs and interests of children and youth. Includes study of the sources for selection of reference materials. Stresses responsibility of instructing pupils in the use of books and libraries.

Each semester. Miss Hunt. Three semester hours.

360 Organization of Library Materials*

Methods of organizing various types of materials such as books, periodicals, pamphlets, and audio-visual aids for effective use in relation to the
demands of schools and of the community. Emphasis is placed upon practical methods of keeping essential business records, book buying, processing and distributing books with a minimum of routine in schools and in small public libraries.

First semester. Miss Hunt. Two semester hours.

361 Administration of School Libraries*

Consideration is given the functions of the library in the school, its objectives, contributions to the educational program and administrative procedures. Stresses the responsibility of the library in carrying out the aims of the school program. Covers problems of support, housing and equipment, personnel, public relations, and standards of service.

Second semester. Miss Hunt. Two semester hours.

362 The Library in the Modern Community*

The course aims to give the student professional background and opportunity to broaden his own reading program. Surveys the development of libraries in the United States from the Colonial period to the present day with consideration of various types of libraries in relation to their contribution to society. Attention is given the adult education program, county and regional library service, and the services rendered through national, state, and local library agencies.

Second semester. Miss LeFevre. Two semester hours.

363 Administration of County Libraries*

Organization, operation, laws, and finances of county and regional libraries with consideration for the Middle Western area. Emphasizes the library's place in the cultural and educational activities of the community and its relationship to the State Library and to local social agencies.

Second semester. Miss LeFevre. Three semester hours.

370 Classification and Cataloging*

Introduction to the principles of cataloging and classifying the book collection. Includes principles involved in making the dictionary catalog, classifying according to the Dewey Decimal Classification scheme, assigning subject headings, and filing catalog cards. Students are taught to use the unit card system and are given practice in adapting Library of Congress and Wilson printed catalog cards to the needs of small libraries.

Second semester. Miss LeFevre. Three semester hours.

380 Library Observation and Practice*

Opportunity will be given the student to observe various kinds of library service. Candidates in the county library program will elect this course to provide supervised practice periods in selected cooperating county libraries, and candidates in the school library program who have previously completed practice teaching will need to elect this to provide a practice period under supervision in a school library.

Hours to be arranged. Miss LeFevre. Two or three semester hours.

*Starred courses open only to majors and minors in the Department of Librarianship.
DIVISION OF VOCATIONAL AND PRACTICAL ARTS EDUCATION

George Kohrman, Director

The Division includes the Departments of Business Studies, Distributive Education, Home Economics, and Industrial Education. It functions through a committee consisting of the respective heads of these departments. The heads of the departments and the departmental counselors will advise students relative to requirements for majors or minors in these departments and concerning any special requirements set up by the departments. In certain cases, where adjustments need to be made, or where a group major or minor is possible and advisable, the director of the Division should be consulted.

The following divisional courses are offered:

135 Industrial and Business World
This course presents an overview of the industrial and business world. Such topics as sources of raw materials, world transportation patterns, essentials of manufacturing and distribution, safety in business and industry, and relations between employees, employers, and government are included. A study is also made of the relationships between finance, insurance, marketing, transportation, communication, and services in transferring the products of farm and factory to the consumer.

Each semester. Mrs. Patton. Four semester hours.

142 Consumer Problems
A course for both young men and young women. Analysis is made of consumer problems pertaining to buying specific types of commodities, such as food, clothing, shelter, home equipment, home furnishings, home appliances, automobile, and recreation. Principles and methods of consumer buying and major agencies and laws affecting consumers are considered.

Each semester. Miss Stamm, Mr. Trimpe, and others. Three semester hours. Counts toward majors or minors as follows: 2 semester hours in Home Economics and 1 semester hour in Business Education.

145 Effective Home Life
This course is for both young men and young women. Personal appearance, social relationship, recreation, entertainment, and safety in the home are considered. Attention is devoted to planning, furnishing, and beautifying the home. Consideration is given to problems of operation and simple repair of home appliances, selection of clothing, nutrition for health, care of children, and harmony and cooperation in the home.

Each semester. Dr. Giachino, Miss Reed, and others. Three semester hours.
BUSINESS STUDIES

ARNOLD E. SCHNEIDER  
AGNES E. ANDERSON  
WILLIAM BROWN  
WM. L. BURDICK  
GEORGE K. COOPER  
J. WM. CUNDIFF  
BETTY B. FOX  
JOHN B. HEALEY  
ELIZABETH HORMYAK  
GEORGE A. KIRBY

LESTER R. LINDQUIST  
RALPH W. MATTHEWS  
THOMAS W. NULL  
MARGUERITE PATTON  
GLEN C. RICE  
ROSE ANN SCHNEIDER  
HERBERT G. THOMPSON  
ADRIAN TRIMPE  
EDNA F. WHITNEY

The Department of Business Studies offers three main programs. They are: I. The Business Teacher Training Curricula leading to a bachelor's degree. II. The Business Administration Curriculum. This is a four-year training program for various positions in business and industry, leading to the degree of B.S. or A.B. Under this program the student may select one of several majors. III. Technical Business Curricula programs. These are two-year training programs for the many job opportunities in the business and industrial world.

Students who intend to take a major or minor in Business Teacher Education should confer with their adviser as early as possible in their sophomore year. All students desiring to do directed teaching in Business Education are required to take Teaching of Business Subjects 346. Business Mathematics 120 is required as a part of Group II requirements.

The curriculum for high-school vocational coordinators is to be found under the curricula for teachers.

Those planning to teach business subjects in high schools must take twenty-four hours in one of the following fields:

1. Secretarial and related business subjects.
2. Accounting or related business subjects.

Students who desire to minor in Business Teacher Education may select fifteen hours from any one of the four fields listed above, or they may select the following sequence: Secretarial Science 130A, Coordinated Business Experience 200A, Accounting 210A, B or 211A, B, and Business Correspondence 232.

Students desiring to enter on the Terminal Business programs are referred to their specific adviser, as listed above, and to the requirements for these programs as given under the non-teaching curricula. Students may enter on the cooperative work-study programs in retailing or secretarial training, or they may elect the regular technical two-year program with a specialization area in: Clerical Accounting, General Business, and General Clerical.
ACCOUNTING

210A Accounting

This course deals with the elementary principles of accounting and considers the more common technical devices for recording business transactions according to those principles. Prerequisite: Sophomore standing or consent of instructor.

Each semester. Mr. Burdick, Mr. Kirby, Dr. Schneider. Three semester hours.

210B Accounting

A continuation of course 210A, applying the principles developed in the preceding course to partnerships and corporations. Manufacturing accounts and statements, reserves and funds, the voucher system, and the analysis and interpretation of simple financial statements are studied. Prerequisite: Accounting 210A.

Each semester. Mr. Burdick, Mr. Kirby, Dr. Schneider. Three semester hours.

211A Secretarial Accounting

In this course the basic principles of accounting are presented from the viewpoint of the secretary. The accounts of private individuals, professional men, institutions, and small business firms of various types are studied.

First semester. Dr. Schneider. Three semester hours.

211B Secretarial Accounting

A continuation of course 211A in which practical applications will be applied in a large number of work situations. Prerequisite: Secretarial Accounting 211A.

Second semester. Dr. Schneider. Three semester hours.

215 Pay Roll and Social Security Accounting

A study of the accounting records and procedures used in meeting the requirements of the social security laws, procedure of pay roll accounting for federal withholding tax laws, and state unemployment insurance.

Each semester. Mr. Kirby. Two semester hours.

310A Advanced Accounting

A study of evaluation of assets; investments; depreciation, appraisal, and depletion of fixed assets; current, contingent, and fixed liabilities; capital stock; surplus and reserves. Prerequisite: Accounting 210A, B.

First semester. Mr. Burdick, Dr. Cundiff. Three semester hours.

310B Advanced Accounting

A continuation of Accounting 310A, including the following topics: consignments, installment sales, mergers, holding companies, receiverships, estates, and trusts. Prerequisite: Advanced Accounting 310A.

Second semester. Mr. Burdick, Dr. Cundiff. Three semester hours.
311 Cost Accounting
The relation of cost accounting to management for control; general principles involved in constructing a cost system; distribution of cost-materials, labor, and burden; cost records; operating reports; joint and by-product costs and budgetary control. Prerequisite: Accounting 310A or consent of instructor.
Second semester. Dr. Cundiff, Mr. Kirby. Three semester hours.

312 Tax Accounting
A study of the federal income tax laws, social security, and pay-roll tax retabulations as they apply to old-age benefits, state unemployment insurance, pay-roll records, and government reports. Prerequisite: Accounting 310A, or consent of instructor.
First semester. Dr. Cundiff, Mr. Kirby. Three semester hours.

313 Auditing
The theory and practice of making detailed audits of business enterprises. Prerequisite: Senior standing, accounting major.
Second semester. Dr. Cundiff. Three semester hours.

314 Accounting Theory and Problems
Theoretical consideration of accounting problems. Nature and analysis of the type of problems that are to be found in C.P.A. examinations. Prerequisite: Senior standing, accounting major.
First semester. Dr. Cundiff. Three semester hours.

316A Industrial Cost Accounting
A course expressly designed for the training of industrial supervisors in Accounting Principles, Cost Accounting, and the managerial use of accounting data.
First semester. Mr. Kirby. Two semester hours.

316B Industrial Cost Accounting
A continuation of 316A.
Second semester. Mr. Kirby. Two semester hours.

GENERAL BUSINESS

230 Survey of Office Machines
A survey of operating principles and fundamentals and applied usages of the business machines commonly found in industry and business.
Each semester. Mr. Null. Two semester hours.

232 Business Correspondence
Provision is made in this course for an analysis of and practice in writing various types of business letters and reports. A study is made of the principles of effective expression in all letters of business correspondence.
Each semester. Dr. Schneider, Mr. Lindquist, Mrs. Patton. Three semester hours.
233 Business Report Writing
A study of the techniques in and applications of management reports and management-report writing. Actual management reports in the various fields will be studied. The development and practice of technical report writing will be stressed.
Second semester. Mrs. Patton, Dr. Schneider. Two semester hours.

235 Business Statistics
An introduction to basic applied business statistics. A study of various statistical and financial ratios as guides to efficient business management and the interpretation of financial data. Prerequisite: Accounting 210A.
Each semester. Mr. Burdick. Three semester hours.

237 Small Business Management
A study of the fundamental principles involved in the operation of a small business enterprise. The structure, functions, and basic operating principles will be discussed and developed.
Second semester. Mr. Thompson. Three semester hours.

239 Office Organization and Management
The flow of office work and the basic purposes served. Areas of office services from the managerial viewpoint. A brief overview of the problems of organizing, constructing, installing, and maintaining office systems.
Second semester. Mrs. Patton, Dr. Schneider. Three semester hours.

322 Business Insurance
A study of risks taken in the business enterprise. How insurance, both voluntary and compulsory, can be used to meet some of these risks. The course deals mainly with property casualty and related insurance areas.
Each semester. Mr. Burdick. Three semester hours.

323 Life Insurance
This course will deal with the place of life insurance in the overall financial picture of economic life of the nation. It will deal with life insurance, not only from its consumer aspects, but also as a vocational field. The various phases of life insurance will be studied.
Second semester. Mr. Burdick. Three semester hours.

320A Business Law
A study of the basic principles of law applicable to business. Law of contracts, negotiable instruments, debtor or creditor relationships, bailment, are studied from the viewpoint of the business man.
Each semester. Dr. Cundiff, Dr. Healey. Three semester hours.

320B Business Law
Continuation of Business Law 320A with emphasis on personal property, real property, statute of fraud, insurance, partnerships, and corporations. Each semester. Dr. Cundiff, Dr. Healey. Three semester hours.
336 Personnel Administration
The personnel office in modern business and industry. The duties and work of the personnel staff, personnel office, records and reports, interviewing, counseling, adjustment of complaints, job analysis, job classification, in-service training, and upgrading of employees. Prerequisite or concurrent: Psychology of Personality 207.
Each semester. Dr. Healey. Three semester hours.

339 Management Problems
An opportunity to approach business from the case-study viewpoint. Problems to be studied will be correlated with the students' major interest in their field of business. Wherever possible, actual business cases in the surrounding business area will be used.
Each semester. Dr. Healey, Dr. Schneider. Three semester hours.

350 Real Estate Fundamentals
A survey course of the principles of real estate as they affect personal and business operations. Real estate as an occupational field, value, land use, and related topics.
Second semester. Dr. Schneider. Three semester hours.

400 Current Business Trends
A study of sources and information which aid in the description, analysis, and prediction of current business trends.
Dr. Schneider. Three semester hours.

RETAILING

100 Coordinated Business Experience
Limited to second-semester students enrolled in Retailing Curriculum. The requirement for credit will be (1) a minimum of 200 clock hours of approved store work, (2) a report from the employer, and (3) a term report by the student.
Each semester. Mr. Rice. Two semester hours.

111 Retail Merchandise Mathematics
An introduction to the mathematics of merchandising. Mark-up, mark-down, discounts, terms, turn-over, ratios, methods of inventory, and specific problems are studied.
Each semester. Miss Hornyak. Three semester hours.

140 Fundamentals of Retailing
In this introductory retailing course a survey of our distributive system is presented. Types of retail establishments and opportunities in the occupational field of retailing are discussed.
First semester. Miss Hornyak. Three semester hours.
141 Selling Fashion Merchandise
A specialized course in the application of salesmanship to fashion merchandise. A study of color and design, fashion history, fashion functions, influences of changes, and the world's key designers and fashion centers. Second semester. Miss Hornyak. Three semester hours.

142 Color and Design in Retailing
Analysis and evaluation of color and design in merchandise. Research, psychology, theory, harmony, and selection of color are emphasized. First semester. Mrs. Fox. Three semester hours.

150 Retail Salesmanship
This course analyzes successful retail selling. Actual sales demonstrations made by experts in the field are an integral part of the course. The various steps in a sale are studied along with their accompanying customer reactions. First semester. Mr. Rice. Three semester hours.

151A Merchandise Information—Non-Textiles
An organized study of non-textile merchandise especially aimed at correlating retail experience with classroom work. Merchandise manuals are studied and developed. First semester. Miss Hornyak. Two semester hours.

151B Merchandise Information—Textiles
A study of fabrics and textile merchandise. The course includes identification and analysis, sources of fibers, processes of creating and finishing cloth, and the fabric suitability and salability as related to specific merchandise. Second semester. Miss Hornyak. Two semester hours.

200A Coordinated Business Experience
Limited to second-year students who are currently enrolled in Store Organization 251. Credit will be granted upon completion of (1) a minimum of 200 clock hours of approved store work, (2) a report from the employer, and (3) a term paper by the student. First semester. Mr. Rice. One semester hour.

200B Coordinated Business Experience
Continuation of 200A open to students currently enrolled in Retail Personnel Management 252. Second semester. Mr. Rice. One semester hour.

211A Retail Accounting
Elementary principles of retail accounts, cash handling, the asset side of sales transactions, the liability side of purchases, income and sales audit, operating expenses, and planning for profit. First semester. Mr. Kirby. Two semester hours.
211B Retail Accounting
Continuation of course 211A, emphasizing expense and budgeting control, department statements, survey of weak departments, taxes, small-store operation, and the balance sheet.
Second semester. Mr. Kirby. Two semester hours.

240 Retail Advertising
Newspaper, radio, direct-mail advertising; display plans and techniques of sales promotion; the publicity calendar and budget.
First semester. Miss Hornyak. Three semester hours.

241 Retail Credit and Collections
A practical and detailed study of the meaning and importance of credit. The areas of study in this course are: Extent of Retail Credit; Sources of Credit Information; Legal Aspects, Policies and Procedures; Collection Problems.
First semester. Mr. Matthews. Three semester hours.

242 Selling Home Furnishings
A study of period styles, materials, construction, and arrangement of furniture as a selling factor. The proper use of accessories, such as lamps, wall decorations, plastics, etc., is emphasized.
Second semester. Mrs. Fox. Two semester hours.

243 Retail Buying Techniques
This course deals with the work of the store buyer. Where, how and when to buy. Terms, prices, invoices, legal aspects, and other arrangements with vendors are all studied.
Second semester. Miss Hornyak. One semester hour.

251 Store Organization
A study of the basic principles and accepted practices of successful store organization, operation, and management. An opportunity is given to each student to make a study of some particular phase of retailing.
First semester. Mr. Rice. Two semester hours.

252 Retail Personnel Management
Problems of selection and placement of employees, employee induction and training, personnel ratings, records needed in personnel offices, labor relations, sources of labor supply, wage plans, and personnel budgeting.
Second semester. Mr. Rice. Two semester hours.

SALESMASTERSHIP AND MANAGEMENT

340 Salesmanship
This is an introduction to the principles of selling as a career and a profession. A detailed study of the principles of selling along with an analysis of customer reactions in the various fields of selling are studied.
First semester. Mr. Thompson. Three semester hours.
341 Sales Management
The development of sales staff. The promotion of local, state, and national sales programs. The development of various types of sales promotions and campaigns.
Second semester. Mr. Thompson. Three semester hours.

342 Advertising
An analysis of the principles and practices used in various types of advertising such as newspaper, radio, and direct mail advertising. Attention is devoted to preparing copy and analyzing current advertising practices.
First semester. Mr. Thompson. Three semester hours.

345 Credit Management
An introduction to the principles of credit, credit control, and credit management from the viewpoint of manufacturing, wholesale and retail firms. Effective use of credit as a financial and sales device and certain definite aspects of credit such as policies and procedures, collection and legal aspects are studied.
Second semester. Mr. Thompson. Three semester hours.

347 Marketing and Market Analysis
The fundamental principles and techniques employed in the conduct and analysis of qualitative marketing surveys, with specific research projects to show how the findings are used in the formulation of policies.
Mr. Thompson. Three semester hours.

348 Purchasing Principles and Practices
Organization and operation of the purchasing department, basic materials, substitutes, imitations, sources of supply, catalogs, terms, discounts, and relations with salesmen.
Second semester. Mr. Thompson. Three semester hours.

SECRETARIAL COURSES

100A Shorthand
A study of the theory and principles of Gregg shorthand. Typewriting 101A or its equivalent is a requirement for course credit.
First semester. Miss Anderson, Mrs. Whitney. Three semester hours.

100B Shorthand
A continuation of 100A. Dictation is given at various rates of speed. Typewriting 101B or its equivalent is a requirement for course credit. Prerequisite: Shorthand 100A and Typewriting 101A.
Second semester. Miss Anderson, Mrs. Whitney. Three semester hours.

101A Elementary Typewriting
The mastery of the keyboard and the proper techniques of typewriting are developed in this course. Open to students with less than one year of high-school typewriting credit.
Each semester. Miss Anderson, Mr. Lindquist, Mrs. Whitney. Two semester hours.
101B Intermediate Typewriting
Special stress is placed upon perfecting the techniques necessary for accuracy and speed in typewriting. A writing rate of 40 words net per minute is required for passing. Prerequisite: Elementary Typewriting 101A or its high-school equivalent.

Each semester. Miss Anderson, Mrs. Whitney. Two semester hours.

130A Secretarial Science
Designed for the development of occupational efficiency of a secretary. Special emphasis is given to the building of accuracy and speed for office transcription. Prerequisite: Shorthand 100B and Typewriting 101B or its high-school equivalent.

Each semester. Miss Anderson, Mrs. Whitney. Five semester hours.

130B Secretarial Science
A continuation of the development of speed and accuracy in shorthand, typewriting, and transcription. Prerequisite: Secretarial Science 130A.

Each semester. Miss Anderson, Mrs. Whitney. Five semester hours.

200A Coordinated Business Experience
This is a work-experience course limited to those students who are currently enrolled in the cooperative office-training program and are currently enrolled in Secretarial Practice 230A.

First semester. Mr. Null. Two semester hours.

200B Coordinated Business Experience
A continuation of course 200A open to students currently enrolled in Secretarial Practice 230B.

Second semester. Mr. Null. One semester hour.

230A Office Machines
This course provides the student with the operating knowledge of office machines that are commonly used in the modern business office.

Each semester. Mr. Null. Two semester hours.

230B Office Machines
A continuation of Office Machines 230A. This course is intended primarily for the student preparing for the various office occupations.

Each semester. Mr. Null. Two semester hours.

101 Filing Principles and Techniques
A study of the indexing and filing rules and all types of filing methods and card systems.

Each semester. Mrs. Schneider. Two semester hours.
METHODS IN BUSINESS EDUCATION

200T Teaching of Business Subjects
  Teaching techniques for social, vocational, and personal use in secondary-
  school business courses. It is recommended that this course either precede
  or accompany directed teaching in this area.
  Second semester. Mr. Lindquist. Two semester hours.

METHODS IN DISTRIBUTIVE EDUCATION

473(E103a) Methods of Teaching Distributive Education Subjects
  This course deals with the methods and techniques of teaching distributive
  education subjects in the high schools and junior colleges. Special emphasis
  will be given to the correlation of classroom activities and on-the-job ex-
 periences.
  First semester. Mr. Trimpe. Two semester hours.

Open to Seniors and Graduates

501(E151) Principles of Business Education
  Principles and philosophies of business education and their implications
  for the classroom teacher of business subjects. A study of objectives, guid-
  ance, occupational research, extra-curricular activities, and the growth and
  status of business education in the United States.
  First semester. Dr. Schneider. Two semester hours.

502(E157) Curriculum in Business Education
  Principles, practices, and problems involved in the evaluation and con-
  struction of business curricula to meet the needs of a democratic society.
  Second semester. Dr. Schneider. Two semester hours.

503(D265a) Improvement of Instruction in Secretarial Business Subjects
  A study of the latest research findings, materials, teaching procedures,
  tests and measurements, and possible future developments in the business
  subject-matter of this field.
  Summer 1951. Dr. Schneider. Two semester hours.

503B(D265b) Improvement of Instruction in Non-Secretarial Business
  Subjects
  A study of the latest research findings, materials, teaching procedures,
  tests and measurements, and possible future developments in the business
  subject-matter of this field.
  Summer 1952. Dr. Schneider. Two semester hours.

504(E154) Organization and Teaching of Office Practice
  A consideration of the aims and content of office-practice courses in the
  secondary school, with plans and techniques for organizing and teaching
  the subject-matter of the course and its laboratory material.
  Summer 1952. Dr. Schneider. Two semester hours.
512(E201a) Seminar in Vocational Education

This course is planned especially for directors and teachers of federally aided programs, who wish to work toward a master's degree. A thesis may be started in this course. Each student selects a problem, presents his plans, and reports his progress to the class for criticism and discussion. Prerequisite: students should have completed at least three courses in vocational education and have met one-half of the general requirements for a master's degree before enrolling in this course.

First semester. Dr. Schneider, Mr. Trimpe. Two semester hours.

HOME ECONOMICS

SOPHIA REED
RACHEL ACREE

OPAL STAMM
BETTY TAYLOR

REVA VOLLE

Western Michigan College of Education prepares students to qualify as teachers of Vocational Home Economics in Michigan under the provisions of the state and federal acts on vocational education.

Courses are planned in the Department of Home Economics for a major or a minor in home economics. Plans are also made for meeting the requirements for a vocational certificate in Michigan.

The major consists of twenty-four or more semester hours in Home Economics. To be eligible for the advanced foods courses it will be necessary for the student to have had Chemistry 105A, B. To be eligible for the advanced courses in clothing it will be necessary for the student to have taken Elementary Design 105, or equivalent. A student who has a major in home economics and meets the requirements of the Department of Education for a certificate may teach home economics only in the non-vocational home-economics departments of Michigan.

A minor consists of fifteen or more semester hours in Home Economics. At least one course in foods and one in clothing and a course in marriage and family relations are required for a minor.

Only persons who meet the requirements for a vocational certificate can teach in the vocational home-economics departments in Michigan. The required courses are Biology 105A, Chemistry 105A, B, Hygiene 112, Household Physics 202; at least one course each in economics and sociology; Elementary Design 105, Costume Design 209, Home Furnishings 221; Clothing and Textiles 103, Foods 111, Clothing 205, Nutrition 211, Home Nursing and Family Health 223, Family Clothing 305, Advanced Foods 311, Quantity Food Management 312, Home Management 322, Home Management Practice 324, Marriage and Family Relationships 325, Problems in Home Economics Education 300, and elective, two or more semester hours; Human Growth and Development 251, and other courses in the Department of Education to fulfill the requirement for a secondary provisional certificate.

The Department of Home Economics offers four-year programs for dietitians, homemakers, and business persons. These programs do not require a student to take education courses which are required for teachers.
A two-year program in Homemaking is also offered. A student in this program is not required to take chemistry.

Note.—The following courses are open to students not majoring or minoring in home economics: Home Economics 103, 120, 209, 218, 219, 222, 223, 321, 325, 339. Students may enter other courses with the consent of the instructor.

CLOTHING AND TEXTILES

103 Clothing and Textiles
A basic course in clothing. One problem gives opportunity for learning elementary techniques of construction. Textiles is taught from the consumer point of view. Some testing of fabrics is required.
Each semester. Miss Stamm. Three semester hours.

105 Elementary Design
A beginning course in art structure, emphasizing principles of design and color theory and their application to the making of original borders, surface patterns, and other school art problems.
Each semester. Mr. Hefner. Two semester hours.

203 Clothing
This course is planned to give experience in using commercial patterns and learning elementary construction techniques. Elective non-majors.
Each semester. Miss Stamm or Miss Volle. Two semester hours.

205 Clothing
Consists of making garments to develop a knowledge of construction techniques. Comparisons of quality, cost and workmanship are made with similar “ready-made” garments. Prerequisite: Home Economics 103.
Each semester. Miss Volle. Three semester hours.

209 Costume Design
This course is intended to develop more discriminating judgment in the selection of appropriate clothes for individuals.
Each semester. Miss Volle. Two semester hours.

304 Tailoring
This course is planned to give experience in tailoring techniques, with emphasis on the making of coats and suits. Prerequisite: Home Economics 205 or consent of instructor.
Second semester. Miss Volle. Three semester hours.

305 Family Clothing
This course is flexible in content to meet the needs of advanced students and those preparing to teach clothing selection and construction. A child's garment is made from either new or old material. Prerequisite: Home Economics 103, 205, 209.
First semester. Miss Volle. Two semester hours.
306 Clothing Modeling

This course is intended to give advanced students an opportunity to design in material on a dress form, thereby developing more skill in fitting. A dress form is made and two garments are modeled and finished. Pre-requisite: Home Economics 103, 205, 209.

Second semester. Miss Volle. Two semester hours.

FOODS AND NUTRITION

111 Principles of Food Preparation

This course is planned to give a knowledge of basic principles underlying preparation of food. Laboratory experience in the preparation of all classes of food. Home Economics majors only.

Each semester. Miss Taylor. Three semester hours.

211 Nutrition

A study of the essential nutrients and their function in the human body. Prerequisite: Chemistry 105A, B, Home Economics 111.

Each semester. Miss Taylor. Three semester hours.

218 Food for the Family

A basic course in cooking. Experience is given in menu planning, buying and serving of family meals. Elective for non-majors.

Each semester. Miss Acree or Miss Taylor. Two semester hours.

219 Nutrition

A study of the principles of good nutrition for the individual, family groups and community. Laboratory experience is given in the basic principles of cooking. For first semester nurses.

First semester. Miss Taylor. Two semester hours.

222 Everyday Nutrition

This course includes problems related to signs of good and poor nutrition, diets for growing children, school lunches to promote good health and growth, and methods and materials in teaching good food habits. This course is open to sophomores, juniors, and seniors not in the department of Home Economics.

Each semester. Miss Acree or Miss Taylor. Two semester hours.

311 Food Preparation and Service

This course is designed to offer greater variety in food preparation. Practice is provided in planning menus, marketing, preparing and serving meals for family groups as well as for special occasions. Some work is done in food preservation. Prerequisite: Home Economics 211.

First semester. Miss Acree or Miss Taylor. Three semester hours.

312 Quantity Food Management

A study of the problems of buying, preparing and serving large amounts of food with special emphasis on management of school lunches. Laboratory time is spent in a college residence hall kitchen and the school lunchroom at
the high school on the campus. Field trips are taken to commercial restaurants, schools and hospitals in the vicinity. Prerequisite: Home Economics 111, 311.
Each semester. Miss Taylor. Two semester hours.

316 Advanced Nutrition
Study of recent developments in nutrition through readings and experiments. Prerequisite: Home Economics 211.
Second semester. Miss Taylor. Three semester hours.

317 Diet and Disease
Study of dietetic treatment of impaired digestive and metabolic conditions. Planning of diets and reports of current research. Prerequisite: Bio-Chemistry 300 and 351, Physiology 211B.
Second semester. Miss Acree, Miss Taylor. Two semester hours.

318 Food Demonstration
Principles and techniques of demonstration as applied to teaching and commercial work in foods. Prerequisite: Home Economics 311.
Each semester. Miss Acree or Miss Taylor. One semester hour.

319 Experimental Food Study
Second semester. Miss Acree or Miss Taylor. Two semester hours.

323 Institutional Management
Study of institutional administration, job analysis, labor policies, personal problems, and cost control in different types of food-service institutions. Prerequisite: Home Economics 311, 312, Accounting 210A.
First semester. Miss Taylor. Three semester hours.

HOME MANAGEMENT, CHILD DEVELOPMENT, AND FAMILY RELATIONSHIPS

120 Personal and Social Problems
The course is planned for those who do not intend to teach home economics. Social usage, personal health and grooming, choice and care of clothing, and personality development are considered. Emphasis is placed upon the above on the basis of needs and interests.
Each semester. Miss Acree, Miss Stamm, Miss Taylor. One semester hour.

221 Home Furnishings
Color, design, room arrangement, historic and modern furniture are studied. Selection of floor coverings, curtains, draperies and other furnishings is given consideration. Models for room arrangements are made.
Each semester. Miss Stamm. Two semester hours.
223 Health Care of the Family

Training in the simple procedures for the prevention and care of illness and accidents in the home. Some consideration is given to the problems related to school health. A study of community resources for the protection and care of health is made.

Each semester. Miss Acree. Two semester hours.

224 Personality Development

This course is designed to help students improve their personality. Consideration will be given to units such as social usage, personal appearance and good grooming, living and working with others, emotional and social maturity, and the effect of good nutrition and health on personality. The course will be adapted to interests and needs of the students.

Second semester. Miss Acree and others. Three semester hours.

321 Housing and House Planning

This course is planned for advanced students, to show the interrelation of social and aesthetic phases of housing. The adaptation of the house to the needs and interests of the young, adolescent, and adult members of a family is studied. An analysis is made of recent developments in rural single and multiple-housing projects. Prerequisite: Elementary Design 105 or consent of instructor. Open to both men and women.

Second semester. Miss Volle. Two semester hours.

322 Home Management

Management is concerned with the use of both human and material resources. These include the knowledge, the abilities, and the interests of family members as well as time, energy, money and materials. Factors affecting the selection, use, and care of equipment, furnishings, and other household goods are considered. Prerequisite: A course in Economics.

First semester. Miss Stamm. Two semester hours.

324 Home Management Practice

Students live together in family-size groups in a house where opportunity is provided for practice in the composite duties of homemaking. The house is managed on two economics levels of income, and students participate in social activities of a family group suited to each status of living. Prerequisite. Home Management 322.

Each semester. Miss Stamm. Three semester hours.

325 Marriage and Family Relationships

This course is a study of the contributions and problems of the family in modern society. It includes a consideration of marital and personality adjustments in family living. It places emphasis on preparation for marriage and gives a perspective of the new tasks in urban and rural living as they affect social relationships and legal problems. Prerequisite: General Psychology 200 or Principles of Sociology 241. Open to both men and women.

Each semester. Miss Reed and others. Two semester hours.
339 Consumer Buying

A study of the consumer-education movement; sources of information for the consumer; laws affecting the consumer; the labeling, grading, and standardization of consumer goods; the theory of buying; and an analysis of factors involved in prices. Open to both men and women.

Second semester. Miss Acree. Two semester hours.

HOME ECONOMICS EDUCATION

300 Problems in Home Economics Education

Major consideration is given to the problems which the student is meeting in teaching. The course also includes a study of vocational legislation and requirements; homemaking for adults and out-of-school youth; evaluation of textbooks, magazines, and illustrative material; how to secure a position; investigation of laboratory equipment; value of state and national associations. Prerequisite: Directed Teaching 371.

Second semester. Miss Reed. Three semester hours.

INDUSTRIAL EDUCATION

Paul M. Amerpohl
Henry J. Beukema
Lawrence J. Brink
Herbert E. Ellinger
Lindsey G. Farnan
John L. Feirer
Joseph W. Giachino
Fred S. Huff
Homer G. Kuiper
Andrew C. Luff

George R. Miller
Robert E. Miller
Charles S. Nichols
John H. Plough
Don O. Pullin
Norman K. Russell
Neil L. Schoenhals
Raymond J. Schofield
Clyde R. Snyder
Elmer C. Weaver

INDUSTRIAL ARTS COURSES

The Industrial Education Department offers shop and professional courses for teachers and supervisors of industrial arts and vocational industrial education.

A student who plans to qualify for an industrial arts teacher in both the general and unit shops should plan to take at least 40 semester hours. All industrial arts students will be required to take the following courses: Woods 100, Metals 130, Printing 140, Drawing 120, Electricity 150, Introduction to Industrial Arts 160, Industrial Design 266, and two professional courses in industrial arts during the junior and senior years.

A student may take a 15-semester-hour minor in any course sequence such as wood, metal, drawing, or printing; or he may take a group minor in wood, drawing, electricity, and metal, totaling 20 semester hours.
Woodwork

100 Woods
A survey course in the field of woodwork. It provides extensive experiences in the care and use of hand tools and techniques, as well as exploring experiences in the use of machines. Related information on materials, production, and consumption of wood production will be covered.
Each semester. Mr. Nichols. Two semester hours.

104 Rural Practical Arts
A special course in general shop with emphasis on woodworking activities designed for prospective rural school teachers. This course is limited to students enrolled in the rural education department.
Each semester. Mr. Farnan. Two semester hours.

106 Advanced Hand Woodworking
This course gives students the practice in advanced hand bench processes and in wood turning. The course will include the care and use of tools, grinding and sharpening, finishing, and turning techniques.
Second semester. Mr. Nichols. Three semester hours.

308 O.T. Special Education Shop
A basic course in shop fundamentals, including the use of hand tools, construction, design, fastening devices, and finishing. This course is limited to students enrolled in occupational therapy.
Each semester. Mr. Nichols. Three semester hours.

205A Machine Woodwork
An introductory course on the use of machine woodworking equipment. The student will receive experiences in setting-up, operating, and caring for the more commonly used machines such as circular saw, jointer, shaper, planer, etc. Parts for selected projects will be machined.
First semester. Mr. Nichols. Three semester hours.

205B General Woodwork
This course provides experiences in several areas of woodwork: namely, wood turning, caning, upholstery, inlaying, wood carving, and pattern making.
Second semester. Mr. Nichols. Three semester hours.

207 Finishing
A course in the plans and methods in modern wood finishing. All types of finishes will be studied. Related information on color theory, mixing, and the application of finishes to various surfaces will be included.
Second semester. Mr. Farnan. Three semester hours.

208 Furniture Construction
A course covering the design and construction of fine furniture. Each student will be required to design and carry to completion a finished piece of furniture.
First semester. Mr. Nichols. Three semester hours.
120 Drawing
A survey course in the field of general drafting. The student will have an opportunity to explore all types of drawing including machine, free hand, architectural, and others.
Each semester. Mr. Beukema. Two semester hours.

121 Drawing
A beginning course in the fundamentals of drafting for students in pre-professional and general degree courses.
Each semester. Dr. Feirer. Two semester hours.

122 Mechanical Drawing
A continuation of the principles emphasized in Mechanical Drawing 120. Lettering, sketching, drawing, tracing, and electric blueprinting of suitable shop projects.
Each semester. Mr. Beukema. Three semester hours.

123 Mechanical Drawing
More advanced problems in mechanical drawing, detailing, design, theory, and application, ranging from simple geometrical problems, through surface development of machine details, cams, gears, and some architectural drawing. Special emphasis on review of the fundamentals of drawing and discussion of problems.
First semester. Mr. Huff. Two semester hours.

221 Mechanical Drawing
Special attention is given to orthographic projection, detailing assemblies, and other fundamentals of drafting. This course is the equivalent of Drawing I of the School of Engineering, University of Michigan, and satisfies the requirements of engineering students.
Each semester. Mr. Beukema, Mr. Huff. Three semester hours.

222 Descriptive Geometry
Instruction and exercises are given in combinations of the point, line, and plane, intersections, developments, tangent planes, and warped surfaces. This course is the equivalent of Drawing II of the School of Engineering, University of Michigan. Not offered in summer.
Each semester. Mr. Beukema, Mr. Huff. Three semester hours.

225A Architecture
Second semester. Mr. Huff. Two semester hours.
225B Architecture

Plans, elevations, details, mechanical perspective, rendering, tracing, and prints of a modern house. Emphasis placed on styles of architecture and architectural appreciation.
Second semester. Mr. Huff. Two semester hours.

Metal Work

130 Metals

A survey course in the field of metal work. Special emphasis will be given to handwork techniques in bench metal, sheetmetal, and art metal. A survey of the use of common machines found in the metal shop will also be covered.
Each semester. Mr. Weaver. Three semester hours.

234A Machine Shop

A course in the fundamentals of machine tool operation, involving turning, milling, shaping, and grinding practices in machining parts of selected projects to be assembled at the bench.
Each semester. Mr. Weaver. Three semester hours.

234B Machine Shop

Advanced practice in the operation of machine tools in finishing machine parts, making of jigs and fixtures for producing duplicate parts, tempering and heat treatment of steel.
Each semester. Mr. Weaver. Three semester hours.

235 Sheetmetal

An introduction to the application of hand and machine processes. Cutting, forming, seaming, burring, crimping, notching, and wiring as applied to the making of sheetmetal projects.
First semester. Mr. Plough. Two semester hours.

236 Metal Fabrication

A course in gas and arc welding for beginners. Safety precaution, care and operation of welding equipment, selection of welding rod, methods of welding will be stressed.
Second semester. Mr. Weaver. Two semester hours.

238 Advanced General Metal

An advanced course in general metal in which all basic experiences in the various areas of metal work will be combined in the making of metal projects. The work will include bench metal, sheetmetal, welding, electro-plating, heat treating, and forging.
Second semester. Mr. Weaver. Three semester hours.
140A Printing
A survey course in the field of graphic arts. Special attention will be
given to hand composition. In addition the student will have an oppor-
tunity to survey the total area of graphic arts.
Each semester. Mr. Pullin. Two semester hours.

140B Printing
This course emphasizes proportion, balance, and the study of type faces.
Practical work is given in the composition of more complicated printed
matter which involves rule work, borders, and ornaments. Practical work
is given in make-ready and presswork.
Second semester. Mr. Pullin. Three semester hours.

141 Presswork
This is a beginning course in presswork, which includes simple lockup,
make-ready, and feeding.
First semester. Mr. Brink. Two semester hours.

144 Occupational Therapy Printing
This course is intended to acquaint students with the various tools and
equipment of the print shop, and to acquaint them with fundamentals of
planning type composition. Limited to students enrolled in the occupational
therapy department.
Each semester. Mr. Pullin. Three semester hours.

240 Printing
Keeping of records and accounts, purchase of materials, planning and
laying out of equipment, and study of school publications. Students will
work out courses of study with job sheets, using original ideas.
Second semester. Mr. Pullin. Two semester hours.

241 Advanced Presswork and Lockup
This course is a continuation of course 141. Practical presswork and
imposition of forms, make-ready of forms for jobbers and cylinder presses.
Practical work on the cutter and folder will also be emphasized.
Second semester. Mr. Brink. Two semester hours.

242 Printing
Advanced work in the complete designing and producing of printed
matter, with a study of plates, papers, and inks. Advanced imposition and
presswork are also included.
First semester. Mr. Pullin. Three semester hours.

243 Layout and Design
Students will undertake the complete layout, design, and composition of
such jobs as tickets, name cards, letterheads, programs, newspaper adver-
tisements, newspaper page layout and cover designs. Principles of balance,
art, color, copy-writing, copy-fitting, etc., as applied to such jobs will be studied.
Second semester. Mr. Brink. Three semester hours.

245A Linotype Composition
This course deals primarily with the operation of the linotype keyboard. Straight composition is emphasized.
First semester. Mr. Brink. Three semester hours.

245B Linotype Composition
This course considers the problems of job, advertisement, and newspaper composition.
First semester. Mr. Brink. Three semester hours.

345A Linotype Mechanism
This course is designed to acquaint the students with the many intricacies of the machine. Simple adjustments are made.
First semester. Mr. Brink. Two semester hours.

345B Linotype Mechanism
This course gives the student practical experience in caring for the machines in operation.
Second semester. Mr. Brink. Two semester hours.

Electrical

150 Introductory Electricity
A survey course in the field of electricity. Special attention will be given to elementary wiring, construction of school shop electrical projects, and a general introduction into the field of electronics and electrical appliances.
Each semester. Mr. Farnan. Two semester hours.

250 Advanced Electricity
Advanced work in electrical construction, house wiring, motor and generator work. A study of light and power applications, maintenance work and repair work will be emphasized.
Each semester. Mr. Luff. Three semester hours.

General Shop

160 Introduction to Industrial Arts
The purpose of this course is to provide initial experiences in the industrial arts area. This course will include individual experiences in laboratory and classroom.
Each semester. Dr. Feiler. One semester hour.

164 Industrial Arts For Elementary Teachers
This course is planned for prospective elementary school teachers and will include a study of Industrial Arts for grades one through six. Construction techniques in the fields of woods, metals, leather, and plastics will be
included. An understanding of our industrial life in our modern society will be emphasized.
   Each semester. Mr. Farnan. Three semester hours.

167 O.T. General Shop
   A course designed exclusively for individuals training for occupational therapy. This course will cover the fundamentals of drawing, sketching, plastics, cold metals, copper work, and elementary electricity.
   Each semester. Mr. Farnan. Three semester hours.

170 General Shop
   A comprehensive course covering a variety of mediums used in the industrial-arts field with introductory laboratory experiences. This course is planned for students who will teach in a general shop organization. The theory and organization of the shop will also be included.
   Each semester. Mr. Plough. Three semester hours.

261A Art Metal
   An introductory course in the study of art metal. Methods of layout, cutting, forming, and assembly will be stressed. Practical application in the form of finished projects of an artistic nature will be emphasized.
   Dr. Feirer. Two semester hours.

262B Jewelry
   A beginning course dealing with the design and construction of items of jewelry and enameling.
   Dr. Feirer. Two semester hours.

263A Related Arts and Crafts
   A general course in arts and crafts including work in thin metal, plastics, leather, elementary wood, and other related craft activities.
   Each semester (Extension only). Mr. Schoenhals, Mr. Farnan, and Mr. Russell. Two semester hours.

263B Related Arts and Crafts
   Advanced work in arts and crafts including advanced art metal, plastics, and other crafts not previously included.
   Each semester (Extension only). Mr. Schoenhals, Mr. Farnan, and Mr. Russell. Two semester hours.

264A Farm Shop
   Experience in cement work, rope work, glazing, farm electrical work, machinery repair, and other activities limited to clock hours required for State certification as a farm shop teacher.
   First semester. Mr. Plough. Two semester hours.

264B Farm Shop
   A continuation of 264A. To complete required hours in needed activities for State certification.
   Second semester. Mr. Plough. Two semester hours.
265A Auto Mechanics
A survey course dealing with the study of the parts of the automobile and the servicing and repair of autos.
Second semester. Mr. Plough. Three semester hours.

265B Auto Mechanics
Advanced work in automobile maintenance and servicing. Special emphasis will be given to the study of testing equipment used in auto mechanics.
First semester. Mr. Plough. Three semester hours.

266 Industrial Design
A study of modern industrial design and its application to industrial arts projects. Development of suitable and well designed articles for school shop practice.
Each semester. Mr. Farnan. Two semester hours.

267 Leather, Plastics, and Archery
A survey course for prospective Industrial Arts Teachers in the major crafts of leather, archery, and plastics. Students will have an opportunity to construct projects and do activities suitable to leisure time work.
Second semester. Mr. Farnan. Two semester hours.

INDUSTRIAL TECHNICAL COURSES

Aviation

102 Aircraft Sheetmetal
A study of the properties and types of aluminum alloys, practice in laying out, fabricating, and riveting sheetmetal parts.
First semester. Dr. Giachino. Two semester hours.

103 Aircraft Structures
This course provides practical experience in repairing wooden and plastic components of aircraft, splicing and swaging cables, covering, patching, and doping fabric surfaces.
First semester. Mr. Russell. Two to three semester hours.

104 Carburetion and Lubrication
Theory and principles of carburetion, disassembly, inspection, adjustment and assembly of carburetors; theory and purpose of lubrication, types, grades, and specifications of various lubricants.
Second semester. Mr. Amerpohl. Two semester hours.

105 Electricity and Ignition
Theory and practical application of basic electricity to aircraft and aircraft engines.
First semester. Mr. Amerpohl. Two to three semester hours.
106 Engine Assembly and Disassembly
Practical experience in disassembling, assembling, and proper handling of different types of aircraft engines.
Second semester. Mr. Amerpohl. Three to five semester hours.

110 Elementary Aviation
An introductory course covering basic principles and terminology of various phases of aviation.
First semester. Dr. Giachino. Three semester hours.

200 Aircraft Hydraulics and Instruments
Nomenclature and identification of hydraulic units, physical laws of fluids, types of fluids, methods of inspection, removal, installation and servicing of hydraulically operated units, mechanical brakes, tires and wheels. A study is also made of all flight and engine instruments and aircraft radio.
First semester. Mr. R. Miller. Two to three semester hours.

201 Inspection Regulations
Civil Aeronautics Regulations pertaining to aircraft and engine repairs and alterations. A study is made of all CAA forms governing the repair and licensing of aircraft.
Second semester. Mr. Amerpohl. Two semester hours.

202 Aircraft Sheetmetal
Theory and practice in making sheetmetal repairs on metal covered aircraft.
First semester. Mr. Amerpohl. Three semester hours.

203 Aircraft Maintenance
Practice in disassembling, assembling, and rigging of various types of aircraft, performing repairs, and alterations conforming to CAA requirements, periodic inspections, weight and balance, and general servicing of aircraft.
Second semester. Mr. Russell. Three to five semester hours.

204 Engine Operation
Installation of engines in aircraft, making all connections; test stand operation, trouble shooting, servicing and inspection of different types of operating aircraft engines.
Second semester. Mr. Ellinger. Three semester hours.

205 Propellers
Theory of propellers, types, repairs, maintenance, removal, disassembly, inspection, assembly and installation of controllable, constant speed, hydraulic, and electric propellers.
First semester. Mr. Ellinger. Two semester hours.

206 Engine Overhaul
Practical work in refacing valves, valve seats, fitting piston rings, valve timing, valve clearance adjustment, magnaflux inspection, overhaul of cylin-
der, crankcase, power section, crankshaft, rods, pins, bushings, bearings, cam mechanism, blower section, oil and fuel pumps.

First semester. Mr. Ellinger. Three to five semester hours.

207 The Airline Hostess

A general orientation course to familiarize students with the duties and working conditions of the airline hostess.

First semester. Mr. R. Miller. Two semester hours.

209 Aviation Education for Teachers

A course dealing with the educational, social, economical, and political implications of aviation in the modern world. A study will be made of basic aviation materials and activities that are appropriate for different grade levels. Consideration will be given to aviation literature and visual aids suitable for youngsters. Opportunities will be provided for participation in a variety of aviation experiences. This course is open to elementary and secondary education students only.

Second semester. Mr. Russell. Two semester hours.

210 Model Airplane Construction

A course planned to prepare prospective teachers to organize and conduct aviation club activities in junior and senior high schools. Actual practice is provided in designing and constructing scale and flying model airplanes.

First semester. Mr. Russell. Three semester hours.

212A General Airplane Mechanics

This course is intended for elementary and secondary school students who are minoring in aviation. Practical experience is provided in units dealing with aircraft fabrics and finishes, aircraft woodwork, cable and metal work, aircraft welding, and sheetmetal.

First semester. Mr. Russell. Three semester hours.

212B General Airplane Mechanics

A continuation of course 212A. Concentration will be centered on units involving work in hydraulics, electricity, instruments, assembly and rigging of aircraft, and general inspection.

Second semester. Mr. Russell. Three semester hours.

213A General Engine Mechanics

This course is intended for elementary and secondary school students who are minoring in aviation. It provides experience in the repair and service of aircraft engines. The following units will be covered: engine theory, engine assembly and disassembly, ignition and accessories, carburetion and lubrication.

First semester. Mr. Amerpohl. Three semester hours.
213B General Engine Mechanics
A continuation of course 213A. The major emphasis of study will be on units dealing with engine overhaul, operation, and propellers.
Second semester. Mr. Ellinger. Three semester hours.

214A Pilot Training and Flight Theory
This unit provides 35 to 40 hours of flight instruction and necessary ground-school theory to qualify a student for a private pilot’s license.
Each semester. Mr. R. Miller. Two semester hours.

214B Pilot Training and Flight Theory
This unit is intended for those who already have their private and commercial pilot’s license, and who wish to secure their instructor’s rating. The maximum number of hours of flight instruction allowed will be 40.
Each semester. Mr. R. Miller. Two semester hours.

214C Pilot Training and Flight Theory
This unit is planned for those who want a refresher course to qualify for a commercial license, or who want additional flight time beyond their private. The maximum number of hours allowed will be 40 for one semester.
Each semester. Mr. R. Miller. Two semester hours.

214D Pilot Training and Flight Theory
This unit is planned for students who wish a few hours of flight experience and are not necessarily interested in obtaining a license.
Each semester. Mr. R. Miller. Two semester hours.

301 Radio Communications
Basic course in radio and ground communications; ground-to-plane and plane-to-ground radio. FCC Rules and Regulations leading to a restricted Radio-telephone Operator’s license.
Second semester. Mr. R. Miller. Two semester hours.

302 Meteorology and Navigation
The first phase deals with a study of the weather elements, such as clouds, cloud formations, pressure systems, fronts, reading, weather maps, teletype, and interpretation of forecasts. In the second phase, a study is made of the various radio and celestial aids used for aerial navigation and flight planning.
Second semester. Mr. R. Miller. Three semester hours.

303 Airport Selection and Management
A detailed study of the selection and layout of airports, including buildings, classification of fields, CAA airport regulations, runways, lighting equipment, maintenance equipment, etc.
Second semester. Mr. R. Miller. Two semester hours.
304 Airline Traffic
Students will be given an opportunity to study the problems connected with air traffic, such as dispatching, loading specifications, cost finding, air-commerce regulations, and air-traffic contracts.
First semester. Mr. R. Miller. Two semester hours.

305 Airline Operation
Administrative problems of the small and large airport, supervision of shop and traffic activities; study of the function of airport departments with emphasis on the various duties and responsibilities of personnel, operating cost, insurance rates, record keeping, etc.
Second semester. Mr. R. Miller. Two semester hours.

307 Control Tower Operation
An introductory course in control tower operation; procedures used in controlling moving aircraft on the ground as well as airborne; keeping tower log, flight reports, etc.
First semester. Mr. R. Miller. Two semester hours.

Air Conditioning and Refrigeration

115A Refrigeration
This course covers refrigeration theory and function, types of refrigerants, and the basic laws applying. Installation techniques.
Each semester. Mr. Snyder. Five semester hours.

115B Refrigeration
This course covers refrigeration units of standard design and construction, installation, service operations, testings and factory-recommended repair procedures.
Each semester. Mr. Snyder. Five semester hours.

215A Air Conditioning
This course offers basic training in all the elements governing conditioning of air for healthful living, air purification, humidity control, temperature control, solar radiation, filtration, and the other factors involved.
Each semester. Mr. Snyder. Five semester hours.

215B Air Conditioning
A continuation of course 215A.
Each semester. Mr. Snyder. Five semester hours.

Drafting

124A Drafting
A general course in drafting fundamentals, involving sketching, lettering, blueprint reading, instrument drawing, and conventional practices through job assignments of representative drafting-room problems.
Each semester. Mr. Beukema. Five semester hours.
124B Drafting
A course in the principles of machine design, detail and assembly drawing of simple machine parts and assemblies. Special emphasis is given to modern drafting-room practice.
Each semester. Mr. Beukema. Five semester hours.

224A Drafting
Design of jigs, fixtures, and production tools with attention to production methods and manufacturing costs.
Each semester. Mr. Beukema. Five semester hours.

224B Drafting
A study of presswork through die design, together with some product design and industrial production illustration.
Each semester. Mr. Beukema. Five semester hours.

Printing

125 Printing
This is a general course in printing and is intended to acquaint the student with the tools and terms of the trade. Work is given in the simpler hand-set jobs and in platen presswork.
Each semester. Mr. Brink. Five semester hours.

127 Printing
In this course the student undertakes the layout, design, composition, and presswork of more complicated printed matter. Work is also begun on the linotype machine.
Each semester. Mr. Brink. Five semester hours.

225 Printing
Further work is given on the linotype machine. Imposition, lockup, and folding of multiple page forms is studied, and cylinder presswork is begun.
Each semester. Mr. Brink. Five semester hours.

227 Printing
Practical work in planning and printing of production jobs. Attention will be given to record keeping and estimating cost of printed material.
Each semester. Mr. Brink. Five semester hours.

Machine Shop

130A Industrial Machine Shop
A course in basic machine shop practice involving practical work on the following machines: lathe, milling machines, grinders, shapers, and drill presses.
Each semester. Mr. G. Miller. Five semester hours.
130B Industrial Machine Shop
A course in advanced machine shop practice, including the inspection, assembly, heat treating, and tool grinding of tools and parts which are made to meet prevailing industrial standards.
Each semester. Mr. G. Miller. Five semester hours.

230 Tool Fabrication
A course in the making of tools and fixtures. Special attention is given to precision layout and inspection.
Each semester. Mr. G. Miller. Five semester hours.

250 Die Making
A course in the making of dies for blanking, shaving, bending, forming, and embossing.
Each semester. Mr. G. Miller. Five semester hours.

Radio

135A Introductory Radio
A course dealing with the operation of transmitting and receiving equipment and radio test procedures.
Each semester. Mr. Kuiper. Five semester hours.

135B Radio Transmission
A course treating the basic principles and operation of radio transmitters as well as the methods of proper transmitter maintenance.
Each semester. Mr. Kuiper. Five semester hours.

235A Principles of Television
A course in the basic principles of television reception and the service techniques used to obtain the most satisfactory television operation.
Each semester. Mr. Kuiper. Five semester hours.

235B Commercial Radio and Television Techniques
In this course practical experience is provided through the construction and operation of various types of radio receiving and transmitting apparatus, as well as television equipment. Students are expected to pass the Federal Communications Commission examination before completing the course. Opportunity will be given to gain practical engineering experience in connection with the FM broadcast station operated by the college.
Each semester. Mr. Kuiper. Five semester hours.

Automotive Maintenance

155A Automotive Engines and Accessories
A study of the modern automobile engine and its operation. An analysis of design and functioning of the various types of engines.
Each semester. Mr. Plough. Five semester hours.
155B Automotive Body and Running Gear
A study of the frame, body, wheels, springs, axles, brakes and power trains of various makes of automobiles.
Each semester. Mr. Plough. Five semester hours.

255A Automotive Electricity and Ignition
A study of the automotive electrical and ignition system and other related accessories. Modern testing equipment is used for complete diagnosis.
Each semester. Mr. Plough. Five semester hours.

255B Automotive Analysis
In this course the student is given the opportunity of coordinating his technical knowledge with its practical applications. Methods of procedure and common practices are studied to enable him to service and repair all of the units in a modern automobile.
Each semester. Mr. Plough. Five semester hours.

Electricity

145 Electricity
This course deals with elementary principles of direct and alternating current electricity. Practical laboratory experience is provided in electrical connections, bell and annunciator wiring, switches and switch connections, house wiring layout, estimating, preparing contract and wiring permits.
Each semester. Mr. Luff. Five semester hours.

146 Electricity
In this course practical experience is provided in the construction, operation, repair and servicing of direct current machinery and control devices such as series, shunt, and compound motors.
Each semester. Mr. Luff. Five semester hours.

245 Electricity
This course offers basic theory and practical experience in the construction, operation, repair, and servicing of alternating current machinery and control devices such as single and polyphase motors, generators and transformers.
Each semester. Mr. Luff. Five semester hours.

246 Electricity
In this course electronics and electronic controls are presented from the standpoint of industrial applications. Practical experience is provided in the construction, operation, and repair of various electronic controls and devices such as timers, photo tubes, and motor speed controls.
Each semester. Mr. Luff. Five semester hours.
330 DESCRIPTION OF COURSES

Related Subjects

170A Drawing
A basic course in drawing involving blue-print reading, schematic drawing, and sketching.
Each semester. Mr. Amerpohl and others. Two semester hours.

170B Drawing
A continuation of Drawing 170A with emphasis on instrument drawing involving lettering, dimensioning, orthographic projection, and sectional views.
Each semester. Mr. Amerpohl and others. Two semester hours.

173 Applied Physics
An introductory course dealing with heat, simple mechanics, forces, time, rate, motion, thermal expansion, properties of solids, liquids, and gases.
Each semester. Mr. Schofield. Three semester hours.

174 Electricity
A basic course in electricity intended to familiarize students with electrical terminology, circuits, motors and various testing equipment.
Each semester. Mr. Luff. Two semester hours.

175 Basic Metal Work
A beginning machine-shop course involving correct usage of tools, layout, bench work, and simple lathe work.
Each semester. Mr. G. Miller. Two semester hours.

176 Machine Shop
A continuation of 175 with emphasis on work involving the shaper, milling machine, grinder and drill press.
Second semester. Mr. G. Miller. Two semester hours.

178 Materials of Industry
An analysis is made of the properties of ferrous and non-ferrous materials, their methods of manufacture and their use in the fabrication of products.
Each semester. Mr. Schofield. Three semester hours.

231 Heat Treating
This course offers practice in heat treating and testing all standard materials used in machine, tool, and die work.
Each semester. Mr. R. Miller. Two semester hours.

270 Tool and Die Designing
Layout and design of jigs, fixtures, dies and production tools, related to the machinist and tool and die-maker trades.
Each semester. Mr. Beukema. Two semester hours.
DIVISION OF VOCATIONAL EDUCATION

272 Industrial Mathematics and Science
A study of the practical application of mathematics and science specifically dealing with the student's field of specialization.
Second semester. Mr. Schofield. Three semester hours.

273 Technical Physics
A study of magnetism, electricity, sound, and light.
Each semester. Mr. Schofield. Three semester hours.

274A Welding
A course involving the safe use of oxy-acetylene and arc-welding equipment and acquisition of essential welding skills and technical knowledge.
Each semester. Mr. R. Miller. Two semester hours.

274B Welding
A continuation of 274A.
Each semester. Mr. R. Miller. Two semester hours.

275 Sheetmetal
Basic sheetmetal layout, application of hand and machine processes in cutting, forming, seaming, crimping, soldering, and other operations used in the fabrication of sheetmetal products.
First semester. Mr. Plough. Two semester hours.

277 Electricity
An advance course in electrical theory and practice.
First semester. Mr. Luff. Two semester hours.

278 Shop English
This course is intended for all students enrolled in terminal curricula and is designed to provide training in the use of functional English, speech, letter writing, and preparation of technical reports.
Each semester. Mr. Schofield. Three semester hours.

279 Personnel Relations
A basic course dealing with the principles of employee-employer relations, trade unions, workmen's compensation, social security, and psychology of human relations.
Each semester. Mr. Schofield. Three semester hours.

311 Metal Processing
An introductory study of the principles and practices relating to the properties, processing and application of ferrous and non-ferrous metals, woods, cements, and plastics. The micro-structure and physical properties of materials are analyzed. The effects of heat-treating, welding and working of materials are tested and their suitability for fabricating purposes studied.
Each semester. Mr. R. Miller. Two semester hours.
INDUSTRIAL SUPERVISION COURSES

353 Foremanship Training
A basic course in the study of the foreman’s duties, responsibilities, and employer-employee relationships in modern industrial practice.
First semester. Mr. Luff. Two semester hours.

354 Time Study and Job Analysis
Principles and methods of job analysis and cost control through time and motion study.
First semester. Mr. Schofield. Three semester hours.

355 Plant Maintenance
A study of modern industrial maintenance methods, machine repair and their relationship to production and production costs.
Second semester. Mr. Kuiper. Two semester hours.

356 Production Control
A study of methods of controlling and coordinating the factors of production, including materials, time and labor.
Second semester. Mr. G. Miller. Three semester hours.

PROFESSIONAL COURSES IN INDUSTRIAL EDUCATION

200 Introduction to Vocational Education
A course designed to familiarize prospective industrial education teachers with the basic philosophy of vocational education and its function in an educational program.
First semester. Dr. Giachino. Two semester hours.

347 Plan and Organization of a School Shop
This is a course to help teachers plan and organize the school shop. Topics concerned include physical needs of the subject, selection of activities, shop layout, purchasing equipment, establishing a supply routine, planning personnel organization, and shop management.
Each semester. Dr. Feirer. Two semester hours.

348 Teaching of Industrial Arts
This course deals with the problems in teaching industrial-arts subjects, the techniques employed in the analysis of instructional units, construction of tests and rating scales, and problems dealing with administration and work. The principal methods of instruction used in industrial-arts subjects will be emphasized.
Each semester. Dr. Feirer. Three semester hours.

351 Course Making in Industrial Education
Deals with a study of the techniques used in selecting and analyzing teaching activities for various grade levels. Opportunities will be provided
to work out a detailed course of study for some specific industrial education subject.

Second semester. Dr. Giachino. Two semester hours.

352 Teaching of Vocational Industrial Education

This course deals with specific techniques used in teaching trade and industrial subjects. Attention will be given to various teaching problems associated with this type of education.

First semester. Dr. Giachino. Two semester hours.

PROFESSIONAL COURSES IN VOCATIONAL EDUCATION

Open to Seniors and Graduates

470(E100) Principles of Vocational Education

A general course intended to aid teachers, supervisors, and administrators to see the field of vocational education (business, home economics, trade, and industrial) in its entirety. Among the factors considered will be the philosophy, organization, and administration of vocational education, types of schools, kinds of shops, teachers, teaching situations, and students. This course offers a basis for understanding the place of vocational education in education as a whole.

First semester. Mr. Kohrman. Two semester hours.

Open to Graduates

571(E101) Guidance for Vocational Adjustment

Deals with vocational guidance as a form of conservation of the native capacities of youth and the education provided for them. Considers the relations of vocational guidance to other forms of guidance and to a liberal education.

Not offered in 1951-1952. First semester. Two semester hours.

572(E102) Legal and Industrial Relations Aspects of Vocational Education

A study of the basic vocational education laws; legislation—its interpretation and effect in the fields of apprenticeship, child labor, compulsory education, workmen's compensation, veterans' education, fair labor standards, national labor relations, and social security.

Not offered in 1951-1952. Two semester hours.

573(E103b) Instructional Aids in Vocational Education

Planned for those preparing for, or now engaged in, teaching in the field of vocational education. Prerequisite: Principles of Vocational Education 570(E100).

Not offered in 1951-1952. Second semester. Dr. Giachino. Two semester hours.
574(E105) Special Problems in Vocational Education
Provides for the study and organization of specific problems in vocational education.
Not offered in 1951-1952. Two semester hours.

575(E106) Coordination in Vocational Education
Seeks to aid teachers and other workers in the field of business and industrial education in bringing into their proper relationship school, employment, and home factors affecting students engaged in a part-time cooperative-education program. Especially adopted to prospective coordinators.
Second semester. Mr. Kohrman. Two semester hours.

576(E109) Techniques of Making Occupational and Job Analyses
The aim of this course is to study the different types of activities and their analysis for use in a structural curricular pattern in the field of vocational education. It is intended that each student will develop a technique applicable to a special field of interest.
Not offered in 1951-1952. Dr. Giachino. Two semester hours.

578(E113) Administration and Supervision of Vocational Education
Seeks to familiarize one with the administration and supervisory problems in vocational education. Intended for teachers, supervisors, and directors of vocational education. Emphasizes federal, state, and local community relationships in the fields of business and distributive education, homemaking education, and industrial education.
Second semester. Dr. Giachino. Two semester hours.

579(E114) Curriculum Construction in Vocational Education
Deals with the study of bases for determining subject matter to be taught and its content and scope for varying grade levels. Devotes special attention to vocational subjects, their relations with other subjects, and their arrangement into curricular form.
First semester. Dr. Giachino. Two semester hours.
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