1947

Bulletin: Catalog and Announcements Western Michigan College
1947-1948

Western Michigan University

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FORTY-THIRD CATALOG
1946-1947

WITH

ANNOUNCEMENTS
FOR 1947-1948

WESTERN MICHIGAN COLLEGE OF EDUCATION
KALAMAZOO, MICHIGAN

This college is a member of the American Association of Teachers Colleges. It is fully accredited by the North Central Association of Colleges and Secondary Schools and is on the approved list of the Association of American Universities.
DIRECTIONS FOR CORRESPONDENCE WITH WESTERN MICHIGAN COLLEGE OF EDUCATION

Correspondence with Western Michigan College of Education should be addressed as indicated below:

a) Requests for catalogs, bulletins, blanks for recording high-school credits, and other literature—The Registrar.
b) Concerning the adjustment of credits—The Registrar.
c) Concerning board, rooms, and remunerative work for men—The Dean of Men.
d) Concerning board, rooms, and remunerative work for women—The Dean of Women.
e) Concerning rural life and education—The Director of the Department of Rural Life and Education.
f) Concerning extension work and in-service education—The Director of the Extension Division.
g) Concerning educational research—The Director of the Bureau of Educational Measurements and Research.
h) Concerning graduate work—The Director of the Graduate Division.
i) Concerning the summer session—The Director of the Summer Session.
j) Concerning personnel and guidance matters—The Director of Personnel and Guidance.
k) Concerning veterans' matters—The Veterans' Counselor.
l) Concerning vocational education—The Director of Vocational Education.
m) Other general inquiries—The Registrar.

INFORMATION FOR NEW STUDENTS

A student applying for admission should

a) Have a certified copy of his high-school credits mailed to the registrar by the high school from which he graduated.
b) If entering with advanced standing from any county normal, college, or university, have mailed to the registrar complete official statements regarding the work for which credit is sought.
c) If entering the graduate division, secure application-for-admission blank from the director of the graduate division.
d) Have credits sent in at as early a date as possible.
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COLLEGE CALENDAR
1947 - 1948

I. 1947 Summer Session (6 weeks)

June 23, Monday ........................................... Begins
July 4, Friday ........................................... Holiday
August 1, Friday ........................................... Ends

II. Semester I (18 weeks)

September 15, Monday, to September 17, Wednesday... Freshman Days
September 16, Tuesday... Registration and Enrollment of Freshmen
September 17, Wednesday... Registration and Enrollment of Upper-
classmen
September 18, Thursday ....................... Recitations Begin
November 26, Wednesday (12:00 noon) to Monday, December 1,
Thanksgiving Recess
December 19, Friday (4:00 p.m.) to Monday, January 5...... Holiday
Vacation
January 31, Saturday ....................... Semester I Ends

III. Semester II (18 weeks)

February 9 and 10, Monday and Tuesday... Registration and Enroll-
ment
February 11, Wednesday ....................... Recitations Begin
March 26, Friday (noon) to April 5, Monday...... Spring Vacation
(March 28 is Easter Sunday)
May 31, Monday ....................... Memorial Day Holiday
June 13, Sunday ....................... Baccalaureate Services
June 19, Saturday ....................... Commencement Exercises
June 19, Saturday ....................... Semester II Ends

IV. 1948 Summer Session (6 weeks)

June 28, Monday ........................................... Begins
August 6, Friday ........................................... Ends
ADMINISTRATION

STATE BOARD OF EDUCATION

Stephen S. Nisbet, President
Charles G. Burns, Secretary
Louisa I. Durham
Eugene B. Elliott

STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

Eugene B. Elliott

EXECUTIVE COUNCIL OF PRESIDENTS

Paul V. Sangren, President
Western Michigan College of Education
Henry A. Tape
Northern Michigan College of Education
John M. Munson
Michigan State Normal College
Charles L. Anspach
Central Michigan College of Education
Earl E. Mosier, Assistant Superintendent of Public Instruction

OFFICERS OF ADMINISTRATION

Paul V. Sangren, Ph.D., President
Wynand Wichers, L.L.D., Vice-President
John C. Hoekje, Ed.M., Dean of Administration-Registrar
Lofton V. Burge, Ph. D., Director of Teacher Education
Bertha S. Davis
George H. Hilliard, Ph.D., Dean of Women
Leonard Gernant, A.M., Assistant Registrar
Loy Norrix, Ph.D., Director of Student Personnel and Guidance
Ray C. Pellett, A.M., Assistant Director of Teacher Education
Elmer H. Wilds, Ed.D., Dean of Men
Director of Summer Session and Graduate Division
FACULTY

1947-1948

EMERITUS

Grover C. Bartoo, A.M.  Professor Emeritus of Mathematics
A.B., A.M., University of Michigan; Geneseo Normal School

Ernest Burnham, Ph.D.  Professor Emeritus of Rural Life and
Education, Ph.B., A.M., Albion College; Ph.D., Columbia Uni-
versity; University of Wisconsin; Harvard University.

Smith Burnham, L.L.D.  Professor Emeritus of History
Ph.B., A.M., L.L.D., Albion College; Harvard University; The
University of Chicago; University of Pennsylvania.

Anna L. Evans, A.M.  Assistant Professor Emeritus of Rural Life
and Education
A.B., University of Michigan; A.M., The University of Chi-
icago; Battle Creek College; Michigan State Normal College;
Columbia University.

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.

John E. Fox, A.M.  Professor Emeritus of Physics
B.S., The University of Chicago; A.M., University of Pennsy-
lvania; University of Michigan.

Anna L. French  Librarian Emeritus
Michigan State Normal College; Drexel Institute School of
Library Science; The University of Chicago.

Theodosia H. Hadley, S. M.  Assistant Professor Emeritus of Biology
B.S., Packer Collegiate Institute; A.B., Vassar College; S.M.,
The University of Chicago; Cornell University; Teachers
College, Columbia University; Sorbonne, Paris; Ecole Ori-
entales, Paris.

M. Amelia Hockenberry, A. B.  Associate Professor Emeritus of
Languages
A.B., Wellesley College; University of Bordeaux; French Sum-
er School, Middlebury, Vermont; Radcliffe College; Univers-
ity of California.

Harper C. Maybee, M. Ed.  Professor Emeritus of Music
A.B., Western Michigan College of Education; M. Mus., Un-
iversity of Michigan; M. Ed., Michigan State Normal College;
Teachers College, Columbia University.

Grace E. Moore  Assistant Professor Emeritus of Home Economics
G. Edith Seekell, A.M., Associate Professor Emeritus of History
A.B., A.M., University of Michigan; Teachers College, Columbia University; University of Colorado.

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
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Heads of Departments

William J. Berry, Ph.D., Geography and Geology
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*Deceased, February 8, 1947.
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*H. THOMPSON STRAW, PH.D.  
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JULIUS STULBERG, A.M.  
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ROY J. WIETZ, A.M.  
**Physical Education for Men**  
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CRYSTAL WORNER, A.M.  
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**ASSISTANT PROFESSORS**

RACHEL ACREE, A.M.  
**Home Economics**  
B.S., University of Kentucky; A.M., Teachers College, Columbia University; Eastern Kentucky State Teachers College; University of Tennessee; The University of Chicago.

SAM B. ADAMS, A.M.  
**Music**  
A.B., University of Kentucky; A.M., Teachers College, Columbia University; Cincinnati Conservatory of Music, Student of Dan Beddoe, Rudolf Thomas, Alex Van Kreisler, and Maria Kursanova.

PAUL M. AMERPOHL, B.S.  
**Trade and Industrial Education**  
B.S., Parks Air College; University of Wisconsin.

AGNES E. ANDERSON, M.S.  
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B.S., Ferris Institute; M.S., University of Tennessee; Northern Michigan College of Education; State Teachers College, Whitewater, Wisconsin; Columbia University.

THELMA E. ANTON, A.M.  
**English**  
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LAVERNE ARGABRIGHT, A.M.  
**Biology**  
Ph.B., The University of Chicago; A.M., Columbia University; University of California.

*Resigned, January 1, 1947.*
ASSISTANT PROFESSORS

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

Albert B. Becker, A.M. — Speech
A.B., Western Michigan College of Education; A.M., University of Michigan; Northwestern University.

Elmer R. Beloof, A.M. — Music
B.S., University of Illinois; A.M., Teachers College, Columbia University; Friends University.

Margaret Felts Beloof, B.S.M. — Music
B.S.M., Oberlin College; Graduate Study, Teachers College, Columbia University; Juilliard School of Music.

Henry J. Beukema, B.S. — Industrial Arts Education
B.S., Western Michigan College of Education.

Jane A. Blackburn, A.M. — Education
B.Ed., Illinois State Normal University; B.S., A.M., Teachers College, Columbia University; University of Illinois.

Mary Bottje, A.M. — Physical Education for Women
A.B., Western Michigan College of Education; A.M., University of Wisconsin.

Robert S. Bowers, A.M. — Economics
A.B., Kansas Wesleyan University; A.M., American University; Northwestern University; University of Southern California; The University of Chicago; University of Wisconsin.

Lawrence J. Brink, A.B. — Industrial Arts Education
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Leoti C. Britton, M.S. — Music
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LELA M. McDOWELL, A.M.
Ph.B., The University of Chicago; A.M., Teachers College, Columbia University; Western Michigan College of Education.

ANN S. PEARSON, M. Ed.
Ph.B., The University of Chicago; M. Ed., Duke University; Michigan State Normal College; Teachers College, Columbia University.

LORENA M. PURDY, A.M.
A.B., Western Michigan College of Education; A.M., Ohio State University; University of Michigan.

LENA REXINGER, A.M.
B.S., George Peabody College for Teachers; A.M., Teachers College, Columbia University; Arkansas State Teachers College; The University of Chicago.

EMMA I. RICHARDS, A.M.
B.S., University of Minnesota; A.M., University of Michigan; Northern State Teachers College; Valley City Teachers College, North Dakota; Milwaukee Teachers College; Teachers College, Columbia University; Ohio State University.

M. ELIZABETH SMUTZ, A.M.
A.B., Oberlin College; A.M., Teachers College, Columbia University; Syracuse University.

HURD ONE-TEACHER RURAL TRAINING SCHOOL

GRACE L. BUTLER, A.M.
B.S., Western Michigan College of Education; A.M., Teachers College, Columbia University.

RICHLAND RURAL AGRICULTURAL SCHOOL

FLORENCE C. BAILEY, A.M.
A.B., Western Michigan College of Education; A.M., University of Michigan.

LYDIA COX, A.M.
A.S.E., State University of Arkansas; A.M., George Peabody College for Teachers; University of Iowa.

MAE T. HAAS, A.M.
A.B., Western Michigan College of Education; A.M., University of Michigan.
MILDRED HUTCHENS, A.B.
A.B., Western Michigan College of Education.

GEORGE HYRY, B.S., M.A.
B.S., Western Michigan College of Education; M.A., University of Michigan.

GRACE RYNBERG, A.M.
B.S., A.M., Teachers College, Columbia University; The University of Chicago.

MARION A. SPALDING, A.M.
A.B., Western Michigan College of Education; A.M., Teachers College Columbia University.

CLEAR LAKE CAMP

WILBUR D. WEST, Ph.D., Director
B.P.E., M.P.E., International Y.M.C.A. College at Springfield; Ph.D., University of Michigan.

ISABEL CRANE, A.M.
B.S., Battle Creek College; A.M., Teachers College, Columbia University; Eau Claire State Teachers College; University of Wisconsin.

LOUISE E. DIETSCH, A.M.
B.S., Western Michigan College of Education; A.M., University of Michigan.

LANSING M. GILBERT, B.S.
B.S., Michigan State Normal College; Michigan State College.

MEREDITH KARNEMAAT, B.S.
B.S., Western Michigan College of Education.

JOHN W. VANCOTT, B.S.
B.S., Cornell University.

MICHIGAN VETERANS VOCATIONAL SCHOOL
(PINE LAKE)

COMDR. HARRY W. LAWSON, B.S., Director
B.S., Massachusetts Institute of Technology; Boston University; Western Michigan College of Education.

WILLIAM A. ALBER
Western Michigan College of Education.

LLOYD G. CHAPMAN, A.M.
B.S., Hope College; A.M., University of Michigan.

ANN W. DOBBYN, R.N.
University of Michigan; Wayne University.
BERNARD H. GILLILAND
Western Michigan College of Education.

G. AUBREY HANSEN, B.S.
B.S., Central State Teachers College; The University of Chi-
cago; Western Michigan College of Education.

CLAUDE A. HARRINGTON
Grand Rapids Union and Davis Tech.; Western Michigan
College of Education.

ROBERT C. HEYDENBERK, B.S.
B.S., Western Michigan College of Education.

WILLIAM J. McILQUHAM
Western Michigan College of Education.

R. J. SELKIRK
Cass Technical School; Western Michigan College of Educa-
tion.

DOROTHY SONQUIST
New York University; Penland School, North Carolina
Women's College.

HENRY A. SONSMITH, M.S.
B.S., Western Michigan College of Education; M.S., Univer-
sity of Michigan.

ALBERT R. WALCOTT, B.S.
B.S., Michigan State College; Western Michigan College of
Education.

THE OFFICES, ETC.

Grey C. Austin ........................... Asst. Manager, Campus Store
Katherine L. Belden .............................. Clerk Health Service
Virginia Bishop .............................. Clerk, Student Personnel
Irene M. Boers .................................. Clerk, Records Office
Margaret Bonjour ................................ Clerk, Records Office
Ruth Brown ........................................... Clerk, Library
Virginia Brown ................................ Clerk, Business Office
Edith H. Conway ......................... Secretary, Student Personnel
Jacqueline Anderson Davis ................. Postmistress
Mildred R. DeBoer ................................ Clerk, Records Office
Clarence Demann ....................... Account Clerk, Pine Lake
Blanche Draper .................................. Publicity
Homer Dunham .................................. Publicity
Doris V. Eddy ................................. Clerk, Registrar’s Office
Eva Falk .................................. Secretary, Dean of Women
Margaret E. Feather .............................. Secretary, Dean of Men
Barbara Gladys Hall .............................. Clerk, Records Office
Jane Marburger Hershon ......................... Clerk, Business Office
Bernice G. Hesselink .............................. Financial Secretary
Evelyn L. Hickmott .................. Secretary, Adult Education Office
Edna L. Hirsch .......................... Clerk, Business Office
Doris A. Hoyt .......................... Secretary, Union Building
Virginia Jarman .......................... Secretary, State High School
Lloyd E. Jesson .......................... Secretary to the President
Meredith Karnemaat ....................... Camp Secretary, Clear Lake
Ola Killefer .......................... Secretary, Paw Paw
Betty N. Knapp .......................... Bookkeeper
Ethel Luella Kurtz .......................... Clerk, Records Office
Eleanore Linden .......................... Secretary, Training School
Mary Louise Ann Luth .......................... Clerk, Student Personnel
Cornelius B. MacDonald ....................... Manager, Union Building
Louise Marfia .......................... Secretary, Vice President
Helen A. McKinley .......................... Secretary, Graduate Division and Summer Session
Nelda Louise Mills .......................... Clerk, Records Office
LeRoy W. Myers .......................... Stockkeeper
Lois M. Nelson .......................... Bookkeeper, Union Building
Winifred A. Otto .......................... Secretary, Pine Lake
Maude E. Payne .......................... Mimeograph Operator
Hester M. Pellegron ....................... Secretary, Dean of Administration
Mildred Peterson .......................... Clerk, Education Office
H. Duane Plough .......................... Asst. Manager, Union Building
Jeanne Primeau .......................... Clerk, Student Personnel
Gertrude Rau .......................... Clerk, Speech and Psycho-Ed. Clinic
Mary Roe .......................... Clerk, Psycho-Ed. Clinic
Kathleen Safford .......................... Assistant Bookkeeper
Eleanor Sagers .......................... Clerk, Physics and Chemistry
Lucille E. Sanders .......................... Secretary, Dept. of Rural Life and Education
Joyce E. Skedgell .......................... Secretary, Div. of Vocational and Practical Arts
Alice Smith .......................... Placement Secretary
Leah M. Smith .......................... Secretary, Extension Division
Joan Snyder .......................... Clerk, Records Office
Sally North Stilson .......................... Clerk, Records Office
Pauline Teed .......................... Stenographer-Clerk, Pine Lake
John M. Thompson .......................... Manager, Campus Store
Glenadine B. Vanderberg ....................... Secretary, Physical Education for Men
Carolyn F. Vittur .......................... Clerk, Records Office
Edith D. Wallace .......................... Clerk, Records Office
Ruth M. Webster .......................... Clerk, Records Office
Lois E. Wicks .......................... Clerk, Records Office
Amy Wiskocil .......................... Dietitian, Walwood Cafeteria
In each case the name of the chairman appears first.

**ADULT EDUCATION AND LEISURE-TIME ACTIVITIES**—Hoekje, Feirer, D. Fox, Gernant, Hefner, Loutzenhiser, Manske.

**ASSEMBLIES**—Seibert, Bottje, Garneau, L. Gary, Hanna, MacFee, Meretta, Wichers, three students named by the Student Council.

**ALUMNI RELATIONS**—Wichers, Burge, Cooper, Dunham, MacDonald, MacFee, Nobbs, Weber.

**ATHLETIC BOARD**—Hoekje, Berry, C. Smith, Hyames, MacDonald, two students ex-officio.

**BULLETINS**—Wilds, Brink, Cleveland, Hoekje, Kemper, Wichers.

**CLEAR LAKE CAMP**—West, Beirge, Burge, Crane, Hilliard, Hyames, MacDonald, Reed, Wilds, Worner.

**COMMENCEMENT**—Brown, Acree, E. Carter, Davis, Hoekje, McRoberts, Pellett, Siedschlag, Wichers.

**CONSULTATIVE AND FIELD SERVICE**—Hoekje, Blyton, H. Carter, Ellis, Joyce, Van Riper, Wilds.

**CURRICULA**—Wichers, Burge, Ellis, D. Fox, M. Gary, Gernant, Osborn, Shilling, Steele, Wilds.


**FINAL EXAMINATIONS**—Hoekje, Blackburn, Huff, Steckelberg.

**FRIENDSHIP**—Cooper, Boynton, Butler, Master, Purdy, Rix, Rynberg, Stinson, Stulberg.

**GRADUATE COUNCIL**—Wilds, Baumann, Berry, Kercher, Osborn, Rood, Sanggren, Steckelberg.

**HEALTH EDUCATION**—Joyce, Buerger, Crane, Hyames, Maher, Pond, Steele, Volle.

**HONORARY DEGREE**—Hoekje, Brown, Wichers.


**PINE LAKE CAMP**—Wichers, D. Fox, Lawson, Weaver.

**PUBLIC RELATIONS**—Wichers, Anderson, Cooper, Dunham, D. Fox, Garneau, Hyames, MacDonald, Seibert, Shilling.

**SOCIAL LIFE (FACULTY FUNCTIONS)**—Davis, Greenwall, Hoekje, Hoyt, MacDonald, MacFee, M. Moore, Pellett, York.

STUDENT LOAN FUNDS—Hoekje, Davis, Pellett.

STUDENT ACTIVITIES AND WELFARE—Hoekje, Baumann, Davis, Matthews, MacDonald, Osborn, Pellett, and seven students chosen by the Student Council by ballot.

SUMMER SESSION—Wilds, Crane, D. Fox, Hoekje, Kraft, Meretta, Robinson, Wichers.

THE FACULTY COUNCIL

I. Members Elected
   Terms expire 1950
   Floyd W. Moore
   Gerald Osborn
   Russell H. Seibert
   Terms expire 1949
   Leonard Gernant
   Frank C. Householder
   Roxana A. Steele
   Terms expire 1948
   Charles H. Butler
   Frank J. Hinds
   Otto Yntema

II. Members Appointed
   Terms expire 1948
   Leonard V. Meretta
   Esther D. Nyland
   Lawrence S. Thompson

III. Members ExOfficio
   President, Paul V. Sangren
   Vice-President, Wynand Wichers
GENERAL INFORMATION

PURPOSE

The original primary purpose of Western Michigan College of Education, as stated in the act establishing it in 1903, was to prepare teachers for the public schools. Western Michigan College of Education 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, at the same time, giving as thorough knowledge of the various branches of study as possible in the time devoted to the work. 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-curricula 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 $270,000 Library in 1924, and the $260,000 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.

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 1944-1945 there were 2,873 different undergraduate students enrolled and 246 graduate students. 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 Richland Township 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.

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. There is an annual lecture course, which has presented many outstanding persons. 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, 1945—JUNE 30, 1946

Students Enrolled for Undergraduate Work:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>438</td>
</tr>
<tr>
<td>Trimester I</td>
<td>145</td>
</tr>
<tr>
<td>Fall</td>
<td>2074</td>
</tr>
<tr>
<td>Spring</td>
<td>2750</td>
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</tbody>
</table>

Students Enrolled for Graduate Work:

<table>
<thead>
<tr>
<th>Semester</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Summer</td>
<td>110</td>
</tr>
<tr>
<td>Fall</td>
<td>82</td>
</tr>
<tr>
<td>Spring</td>
<td>107</td>
</tr>
</tbody>
</table>

Number of Different Students .............. 5,125
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 class room 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 fifty acres is freely used by classes and student groups for instructional and recreational purposes. Camps at Clear Lake and Pine Lake have been leased from the W. K. Kellogg Foundation and are used throughout the year for educational purposes.

THE ADMINISTRATION BUILDING—This contains the administrative offices, the campus store, the Extension and the Graduate Divisions, the Departments of Music and of Rural Education, and Western State High School.

THE LIBRARY BUILDING—The main reading room is two stories high and accommodates 290 readers. In the building are several class rooms and the Laboratory of the Department of Librarianship. The Library Collection consists of 70,000 volumes classified according to the conventional system used by most libraries. Over 230 periodicals are currently bound, and the Library receives more than 450 periodicals regularly.

THE SCIENCE BUILDING—This houses the departments of Agriculture, Biology, Chemistry, Geography and Geology, and Physics. 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 recently constructed 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, 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 and the Radio Broadcasting Studio.
The Theatre—This building contains an auditorium with a seating capacity of 350, two class rooms, 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.

The Dormitories

In recent years, the College has constructed a Union Building and three 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 design 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 Union is one unit of dual-purpose Walwood Hall, the unit which 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.

Walwood Hall Residence for Women is the other unit. It 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.

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 two-fold 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:

1. Hyames Baseball Field—The concrete stands seat 2500 spectators.
2. The Men’s Gymnasium has adequate facilities for all indoor sports and for the programs in Physical Education. About 4,000 can be seated around the basketball court.
3. The Women’s Gymnasium—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 bath, and a swimming pool.
4. Ten tennis courts are available.
5. Track—Around the football field runs an eight lane quarter mile cinder track. The straightaway is 220 yards.
6. Waldo Stadium—There are two concrete stands each capable of seating 7,500 people and reaching from goal line to goal line. There is a modern pressbox, locker rooms, officials’ rooms and concession stands.

NEW BUILDINGS

The College is now engaged in a large building program. Under construction are the following:

An office unit connecting the Administration and Training School Buildings.
A substantial two story addition to the Industrial Arts Building.
A class room building to house the departments of Chemistry, Physics, Art, Home Economics, and Occupational Therapy. The State of Michigan has appropriated $1,000,000 for this purpose.
Thirty-two modern Faculty apartments to cost $300,000.
Plans are also complete for the erection of a dormitory to house 450 residents.

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 seventeen-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.

Clear Lake Camp has been leased from the W. K. Kellogg Foundation for the purpose of conducting a five-year experiment to determine the feasibility and worthwhileness of school camping and outdoor education as an extension of the public school curriculum and for the training of teachers. The Kellogg Foundation is assisting in the financial support of the project.

Senior students, as a part of their Directed Teaching, spend one or two weeks in the School Camping program living with and supervising the activities of campers. Students enrolled in Education 251: Human Growth and Development are participant observers in the program for two full days. A two weeks' two-semester hour credit course in Camping and Outdoor Education has been introduced for Majors and Minors in Physical Education. The camp provides an ideal situation for summer workshops in school camping and outdoor education, intercultural relations, nature study and conservation, and the various applied studies in the field of psychology and sociology, such as: group work methods, individual guidance, case study techniques, and observation of children. The facilities are available through the year for conferences and institutes sponsored by college departments.

Schools in Allegan, Barry, and Kalamazoo Counties have the privilege of requesting school camping periods. Two classroom groups, accompanied by their teachers are enrolled for two-week periods. A nominal fee, sufficient to cover the cost of food, is paid by each camper. A Laboratory Camp is operated during the Summer Workshops to give students actual experience in living twenty-four hours a day with children.

Clear Lake Camp is located on M-37, sixteen miles north of Battle Creek and ten miles south of Hastings. It comprises an area of twenty-nine acres of wooded land with a shore line of about one-third of a mile on the east side of the lake. The Kellogg Foundation has recently purchased a strip of land on the west side of the lake with a shore line of about four-fifths of a mile and including twenty-four acres of pasture land. This acquisition will protect the lake from becoming a summer resort and provide space for conservation projects and sites for outpost camping. The lodge, director's residence, and house for the maintenance man are equipped for all-year living. There are twenty-three cabins and two washhouses for summer use. The ultimate acquisition of this camp, which represents an outlay of $250,000.00 in buildings and equipment, will add materially to the physical assets of Western Michigan College of Education.
MICHIGAN VETERANS VOCATIONAL SCHOOL
PINE LAKE

Many returning veterans need assistance to prepare them to return to the employment which will make the best use of their abilities, interests, and resources. Some of these men need to find and prepare for a type of work in which due consideration may be given to a disability. Preparation for suitable employment includes guidance, examination services, rest, diet, recreation, medical care, training, and selection placement.

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 November 1, 1945.

Instruction is available in machine shop, watch and clock repair, machine and architectural drafting, radio service and electronics, office practice including business administration, typing, shorthand, office machines, bookkeeping and accounting, typewriter servicing, printing and appliance servicing. Recent completion of a new shop building makes possible classes in woodworking, pattern making, welding and inspection, etc. Other vocational training courses will be added as needed.

The staff includes a director, approved teachers, nurses, rehabilitation counselor, recreational director, occupational therapist, and general service personnel. Psychiatric assistance when needed is available through specialists located in Kalamazoo and Ann Arbor. All of the services of the Office of Veterans' Affairs and the Western Michigan College of Education are available. Just before the veteran has completed his preparation for a job the school, in cooperation with the United States Employment Service, makes a concerted effort to find the best opening for the veteran's vocational skills. Follow-up on the job secured is a regular practice and thus the veteran is insured a maximum opportunity to succeed in his new field of work.

The physical facilities of the school consists of 500 lake acres and 31 land acres. The waterfront is equipped with a wooden dock, a diving raft, and a sandy beach. There are boats, canoes, and game equipment such as archery, ping pong, and pool. Athletic teams represent the school in softball, basketball, and ice hockey. The library consists of a wide variety of books and periodicals. Veterans live in cabins near the administration building and shop. There are twenty-six log cabins, each oil-heated, well lighted and ventilated. The maximum sleeping capacity, exclusive of staff, is approximately 200. The administration building houses the dining room, kitchen, lounge, library, recreation room, facilities for arts, crafts, and occupational therapy, first aid, and a counseling center. On the second floor, sleeping accommodations for members of the staff are located.
The rules of eligibility are:

1. Only World War II veterans who may benefit by the vocational program may attend.

2. Enrollment is restricted to male veterans because of the nature of the facilities.

3. Citizens of the United States who have served in the military forces of other allied countries are eligible.

4. Veterans may be enrolled under Federal Public Laws 113, 16, or 346 if approved by the proper authorities.

5. A veteran may have his program sponsored by private or other sources.

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 community Veterans' 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 both freshmen and upperclassmen are assigned to counselors for advice and counsel in planning their academic schedules. Such services are also available for students of the summer session upon application to the Director of Student Personnel and Guidance.

Departmental advisers give careful assistance to students on content of majors and minors; on proper sequences of courses; and on other matters relating to the subjects taught in the various departments. Students are urged to avail themselves of the services of these departmental advisers whose names, locations, and office hours will be found listed in the Schedule of Classes.

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 CLINIC

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 specific vocational plans are urged to contact the Clinic early in their college careers. Trained counselors are available for helping students find themselves occupationally.

Those interested should contact Division of Student Personnel and Guidance, Room 118, Health and Personnel Building. Services are free to W.M.C. students.

HOUSING FOR MEN

Men students are required to live in residences approved by the Office of the Dean of Men. A list of approved rooms is available in that office and will be furnished upon request.

HENRY B. VANDERCOOK HALL FOR MEN

Request for reservation should be addressed to Mr. Ray C. Pellett, Dean of Men. Application must be accompanied by a five-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, provided he has no outstanding account with the college. The last day for requesting deposit refunds, if application to live in the dormitory is canceled, is September 1 for the first semester or January 15 for the second semester.

Students live three in a room. The rate per student in Vandercook Hall is $3.00 per week. Room rent must be paid in advance but may be paid in half-semester installments. A 5% collection fee will be added to bills not paid within one week of payment date, and an additional 5% will be added on payments more than three weeks late.

Note—Due to the unsettled conditions of dormitory costs, the College reserves the right to increase the charge during the year if, in its opinion, such increase is necessary.

HOUSING FOR WOMEN

All women students are required to live in residences approved by the office of the Dean of Women. A list of such rooms is available in that office and will be mailed upon request.
WALWOOD HALL RESIDENCE  
and  
LAVINA SPINDLER HALL FOR WOMEN

Request for reservation should be addressed to Mrs. Bertha S. Davis, Dean of Women. Application must be accompanied by a five-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 she leaves, provided she has not outstanding account with the college. The last day for requesting deposit refunds, if application to live in the dormitory is canceled, is September 1 for the first semester or January 15 for the second semester.

Students live three in a room. The rates for room and board in Walwood Hall Residence and Lavina Spindler Hall are $11.50 per week. Room and board payments must be made in advance, but may be paid in quarter-semester installments. A 5% collection fee will be added to bills not paid within one week of payment date, and an additional 5% will be added on 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.

THE COLLEGE CAFETERIA

Walwood Hall Cafeteria is maintained for student and faculty use. Wholesome food is provided here at low cost.

The Cafeteria hours are:

**Breakfast—**
- Monday through Saturday ..................... 7:15 A.M. to 8:30 A.M.

**Lunch—**
- Monday through Friday ....................... 11:00 A.M. to 1:15 P.M.
- Saturday ...................................... 11:15 A.M. to 1:15 P.M.

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

CAMPUS STORE

Western’s Campus Store exerts every effort to keep adequate stocks of all supplies need by students for class work, as well as many other items for their convenience.

SERVICE TO FOREIGN STUDENTS

Students from many countries give a cosmopolitan atmosphere to Western’s campus. Twenty-five citizens from France, Luxembourg, Norway, China, Bolivia, Haiti, Colombia, Puerto Rico, Guatemala, Nicaragua, and Canada were enrolled in 1946-47 and the number of foreign students will steadily increase.
Many of these students live in the dormitories with American roommates. They participate actively in the life of the college and of the Kalamazoo community.

The Committee on Education for International Understanding serves as counselor for the group.

**STUDENT HEALTH SERVICE**

Health is fundamental to the enjoyment of a student's college life and indispensable to his success as a teacher, or in other professional and business careers. Health signifies the adjustment to living which comes from mental, emotional and physical well-being.

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 a knowledge of when to ask for expert advice.

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 Saturdays. The college physician is in the office for consultation from 9:00 until 11:00, Monday through Friday. The dentist is in the office on Tuesday and Thursday mornings each week.

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.

**SERVICES OF THE GENERAL LIBRARY**

The General Library's collections consist of around 70,000 volumes, fully catalogued and available. Over 450 periodicals are currently received, and of these more than 230 are bound for permanent retention. It must be noted, however, that a library should be judged not so much by the volume of its holdings as by the quality and usefulness of the material it houses. In this respect the Western Michigan College Library may be said to hold a high rank according to the customary standards of evaluation.

Three of the seven professional librarians on the Library's staff devote their time exclusively to public service. The reference librarian's desk is
occupied at all times from 8:00 A.M. to 5:00 P.M. and from 7:00 P.M. to 10:00 P.M. During the day a professional librarian is also on duty at the other two service points in the Library, the Circulation Desk and the Periodical Desk, and at other times these desks are in the hands of competent assistants.

The bookstacks (except the Closed Reserve) are open to all faculty members and graduate students and to any undergraduate student who has a real need for going into the bookstacks and states that need to one of the librarians. Current numbers of periodicals, some bound periodicals, and a representative collection of reference books are on the shelves of the Reading Room where they are available to all patrons of the Library. Also in the Reading Room are special shelves containing selected religious books of current interest and recreational reading.

The Library staff frequently prepares bibliographies on matters of general interest and distributes them to students and faculty members. A mimeographed list of selected current accessions is distributed to all faculty members and to those students who may be interested. These lists are also sent to other libraries in Kalamazoo as a part of a general program of cooperation.

The Library serves not only resident students but also extension students (who enjoy the special privilege of a month-long period of loan). In addition, an attempt is made to extend the services of the Library to all areas of Southwestern Michigan, both rural and urban. The Library has encouraged such groups as ministerial alliances to use the collections intensively, and an aggressive interest is taken by the librarians in making these groups aware of the available services. Inter-library loans are made to all libraries.

EDUCATIONAL SERVICE LIBRARY

The Educational Service Library, formerly the Text-book Library and Curriculum Bureau, Rooms 103 and 105, Health and Personnel Building, 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. In-service use is extended to conferences, visiting teachers, and correspondents.

LIBRARIANSHIP LABORATORY

In addition to the general college library and other campus libraries, a departmental laboratory is maintained for the Department of Librarianship.
The collection consists of an extensive professional library of books and periodicals in library science, bibliography, and related fields; a representative collection of books for children, young people, and adults for use in the reading guidance courses; and selected audio-visual materials including records, pamphlets, pictures, and slides illustrative of materials to be found in a library serving a modern school. This library serves the faculty and students of the Department of Librarianship and also serves as a reference library for others who are interested in the selection, organization, and use of books and other teaching aids of value in work with children and youth.

CARNegie GIFT OF BOOKS AND PICTURES

A gift from the Carnegie Corporation of New York of books, photographic prints, color facsimilies, 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 the Library.

ART COLLECTION

Through the courtesy of the family of the late Hon. Albert M. Todd, an interesting collection of pictures and fine porcelains gathered by Mr. Todd through many years is on exhibition in the Library Building. Many of the ceramics in the Todd collection have been used in the furnishing of the dormitories.

BUREAU OF EDUCATIONAL MEASUREMENT AND RESEARCH

The Bureau of Educational Measurement and Research of Western Michigan College of Education has been established for a three-fold purpose: (1) to direct and coordinate the measurement and research activities of the training schools and the college; (2) to aid in the more adequate preparation of teachers for participation in measurement work; (3) to aid schools and school systems of the state in carrying forward testing programs and experimental work. The Bureau has on hand a large number of intelligence and educational tests to serve as sample and informational material. It answers questions relative to measurement and research activities; it carries on statistical work necessary to answer questions relative to educational problems; it edits bulletins of information concerning educational problems; it conducts the intelligence examinations of students of the college; it sends representatives to visit schools and school systems that wish to begin testing work to instruct the teachers, to demonstrate the methods of testing, and actually to conduct mental-educational surveys.

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 director, and three assistants, members of the Health Service, members of the Speech Clinic, and local psychiatrists, pediatricians, and ophthalmologists. The average case load each month has consisted of approximately fifty-two clinical, advisory, and vocational problems. Approximately 34 per cent of these cases are referred by social and relief agencies in Michigan, 35 per cent by school authorities, 18 per cent by parents and relatives, 10 per cent by other persons and organizations, and 3 per cent by private physicians.

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-five basic assignments have been prepared, and each student is expected to proceed from assignment to assignment as his ability permits. 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.

VOCATIONAL PLACEMENT SERVICE

The Vocational Placement Service is an integral part of the Division of Vocational Education.

Its purpose is to aid those non-teaching or terminal students who upon completion of their college work are interested in obtaining positions in their field of specialization. The Service includes occupational counseling, placement, and follow up.

Public relations and employer contacts are maintained to help the prospective employee.

The Vocational Placement Service cooperates with all departments of the College, e.g., the Bureau of Educational Measurement and Research, the Health Service, the Placement Bureau for teachers, Personnel and Guidance, and instructional departments.

PLACEMENT BUREAU

The Placement Bureau is an institutional service maintained, primarily, to aid graduating students and alumni of Western Michigan College of Education in securing suitable teaching positions. Assisting in the work of the bureau is the Placement Committee, which consists of the Director of Teacher Education and members of the faculty who are in a position to know intimately the records of students in class work, directed teaching, and general school activities.
Each semester graduating students enroll with the Placement Bureau, filling out appropriate blanks and receiving information and instructions relative to securing positions. Full records are kept on file in the Placement office. These data consists of (1) the student's academic record, (2) the recommendation of at least three faculty members who are familiar with the student's work, (3) a departmental recommendation, (4) the report from the supervisor of the student's directed teaching, (5) a record of his previous teaching experience, if any, and (6) the general rating of the Placement Committee. The records also include ability and personality ratings, and photographs.

The Bureau aims not only to place its new graduates, but also to afford equally satisfactory replacement service to former graduates qualified for better positions. For superintendents who desire to fill positions requiring a greater degree of maturity and experience, a complete file of alumni is kept, including records of current teaching experience and advanced study in other institutions. Copies of these records are available to superintendents at the time they decide to interview prospective candidates. These credentials are also sent to school administrators upon their request.

In addition to serving the teaching graduates of Western Michigan College of Education, the service is also extended to the General Degree people who prefer positions other than teaching. Each year presents a greater demand on the Bureau for well-trained people who desire nonteaching positions.

All undergraduates are urged to enroll with the Placement Bureau before graduation even though they do not desire help in securing a position at that time. In many cases students who have been out for two or more years find that they desire help in securing a position.

**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 consolidated 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 buses.

**ALUMNI ASSOCIATION**

The Western Michigan College of Education Alumni Association was organized June 19, 1906, by the graduates of the first two classes of the college. Forty-three classes are now associated in the organization with a total membership of more than 18,000. The Alumni Secretary's office is in the Administration Building. In this office information regarding any alumnus or alumna may be obtained. The Kardex filing system is used; it affords an accurate method of referring to the alumni directory.

Each year headquarters are maintained at the Michigan Education Asso-
ciation meetings. Alumni of Western Michigan College of Education are urged to register and make use of the rooms reserved for this purpose. An annual invitation goes to graduates of Western Michigan College of Education to return to the campus for Homecoming Day. A reception for the alumni is held annually at Commencement time.

Graduates of Western Michigan College of Education receive frequent mail from the campus informing them of various matters of interest. Letters of inquiry concerning graduates, who are placed in all parts of the United States and in foreign countries, are given prompt attention. Once each year the members of the alumni are asked to return a postal-card which is prepared and sent to them, to verify the records and secure additional facts in regard to schooling, degrees, marriage, children, books and magazine articles published, business records, etc. The returned cards are filed with the Kardex entry and replaced annually, when the most recent card arrives. Alumni giving annually to the Alumni Loyalty Fund are entitled to the Western Michigan College News Magazine, which is published four times a year.

Although the number of Western's graduates has become very large, ways and means of cultivating closer and more friendly relations among them are being developed rapidly. Unit organizations are encouraged in localities where there are enough members of the alumni to warrant such organizations. The alumni secretary is glad to assist in any plans of this kind.

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.

All instruction is given by members of the regular faculty in classes which meet at frequent intervals at centers within range of the college, or by means of carefully organized courses offered by correspondence. Courses are equivalent to corresponding residence courses. The facilities of the College Library are available to all extension students. Residents of Kalamazoo will be supplied with books upon application at the Library. Non-residents should mail requests to the Extension Division. The period of loan for all extension students is one month.

Residence and extension work are not to be carried simultaneously.

A person is not to enroll for extension work with Western Michigan College of Education if he is carrying work with any other educational institution.

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.
The educational, social, and economic aspects of rural life—life in the open country and centers of less than 2,500 in population—are the primary concerns of the Department of Rural Life and Education.

To those who enjoy teaching in a community small enough that they may know intimately the family and community influences bearing upon their pupils; to those who prefer positions in which they are left to their own initiative with a minimum of restriction from administration, supervision, and tradition; to those who enjoy working cooperatively in a potentially flexible organization, rather than as cogs in the impersonal set-up which a large system necessitates; and to those who would capitalize upon their rural home and community backgrounds, rural education is a challenge. All too many are aware of the handicaps under which rural schools work, but these conditions are not unchangeable. All too few are aware of the progress rural schools have made and of the natural advantages, both physical and social which rural schools enjoy.

A service, essential in times of war and in times of peace, is in jeopardy. For the one-half of the nation's children—over one-third of Michigan's—residing in rural communities, there is an acute shortage of teachers with adequate professional preparation. Not only is the present school generation suffering, but rural schools bid fair to lose much of the gain made slowly and against great odds since World War I. The more critical the conditions, the less can the rural schools afford to serve as the proving ground of the profession. Professionally prepared superintendents, principals, county school commissioners, supervisors, and helping teachers, as well as teachers, are in demand.

The state has shown its concern by offering scholarships covering tuition for the two-year rural curricula of the state teachers colleges. In keeping with its charter, from the beginning Western Michigan College of Education has offered specialized professional education for rural teachers. A two-year elementary curriculum leads to a three-year certificate which permits the holder to teach "in schools not having grades above the eighth." By means of correspondence courses, extension courses, on-campus Saturday classes, and summer sessions, the two-year graduate is given every opportunity and encouragement to complete his degree at the earliest possible time, the more adequately to prepare himself for an exacting and challenging profession. The two-year curriculum may be completed without penalty for the student wishing later to complete one of the other curricula. Either the four-year elementary or the four-year secondary curricula may be followed, under the guidance of the Director of the Department of Rural Life and Education, with major attention given to preparation for work in rural communities.

The better to acquaint the student professionally with actual school conditions and the relation of school and community, selected rural students are permitted to do practice teaching while in residence for six weeks in one-teacher school districts in the several counties in the service area of the college. Other rural students do their practice teaching in the Hurd one-teacher or the Portage consolidated school—both of which are affiliated with
the college as training schools. For advanced students, either as members of a seminar or the Country Life Club, frequent opportunities arise to do field work in rural education or community programs. The Country Life Club affords students social life and experiences in organized activities related to college and community life.

Those looking forward to service in rural communities as ministers, doctors, public health workers, veterinarians, librarians, social workers, editors, county extension agents, managers of co-operatives, recreational and cultural leaders in music, art, and the drama, as well as in the several other governmental and service occupations, will find helpful courses and guidance offered in the Department of Rural Life and Education.

OPPORTUNITIES IN AGRICULTURAL HIGH SCHOOLS

To meet the growing demand for teachers of the combination of agriculture, shop, and science in rural-agricultural and other small rural schools, related courses have been organized which will fulfill the requirements for these positions. Courses in agriculture have been supplemented by related courses in other departments.

Special attention is being given to the content of other courses so that they will meet the requirements of rural and small-town high-school teachers. Selections are possible so that credits earned in Western Michigan College of Education may be transferred to Michigan State College and still give a maximum amount of training to teachers in the subjects they may be asked to teach.

For the most able prospective teachers, there is a certain demand and opportunity for unlimited service and leadership in the rural schools of Michigan.

SPECIAL EDUCATION

There are curricula at Western Michigan College of Education in four areas of Special Education. These curricula are for the preparation of teachers of (1) mentally retarded and backward children, (2) occupational therapy, (3) speech correction, and (4) deaf and hard of hearing. 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.
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 curricular 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

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.

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.

COLLEGIUM LEGUS

Collegium Legus is an organization of students primarily interested in the functions and objects of law and lawyers.

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 biweekly, 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.

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.

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 UNION

The Industrial Arts Union 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.
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. Good scholarship, the recommendation of the faculty of the Division of Social Sciences, and the approving vote of the society are prerequisite to membership. The semi-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.

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 two-fold 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.
PRE-MEDICAL CLUB

Membership 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.

PSYCHOLOGY FORUM

The Psychology Forum was organized in the fall of 1938. 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.

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.

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.

WOMEN'S PHYSICAL EDUCATION ASSOCIATION

All women of the college who are interested in physical education or allied activities are eligible to membership in the Women's Physical Education Association. Semi-monthly meetings are held, some of which are professional, others social. The club has parties, hikes, roasts, and other activities throughout the year.

WRITERS' CLUB

All students who are interested in writing as a profession and who are students of journalism are eligible for this organization. Criticisms and discussions of materials presented form the major activities of the group.

III. SPECIAL INTEREST GROUPS

CHARLES VAN EEUWEN COMMAND

This organization is intended to encourage comradeship among veterans of World War II enrolled in the college, and to assist them in their problems and adjustments. The program combines social and informational activities.

5-12 CLUB

This group of men, consisting of former Western Michigan College Naval trainees, is organized to maintain a spirit of comradeship and to promote worthy college activities.

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.

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.
HONORARY SOCIETIES

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.

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.

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.

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. SOCIAL FRATERNITIES

ACADEMY

The Academy is one of the oldest women's organizations on the campus. 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.

OMEGA DELTA PHI

Omega Delta Phi is a men's social fraternity. The aim of the organization is to promote sustained interest and active participation in worthwhile college activities. Membership is based upon scholarship, personality, and leadership. The fraternity seeks to instill in its members a sense of comradeship and school spirit.

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.

SENATE

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 TAU GAMMA

Sigma Tau Gamma, a men's organization, is the oldest of the college fraternities. Although it developed originally from a debating society, it is now the only national social fraternity on the campus. The fraternity is interested chiefly in promoting fellowship and leadership among students.

THETA CHI DELTA

Theta Chi Delta is a men's social fraternity, the purposes of which are to develop character, encourage high scholastic achievement, and maintain a spirit of fellowship, organized loyalty, and school spirit.
Theta Pi Alpha is a social sorority of women regularly enrolled at Western Michigan College of Education. Its primary purpose is the cultivation of friendship and spirit of cooperation among its members and with the members of other campus organizations; its secondary purpose is the study of contemporary literature and an appreciation of all the fine arts. Candidates for membership must possess scholarship, leadership, and individuality.

Zeta Delta Epsilon is a men's social fraternity. It aims mainly to promote fellowship and leadership among men students.

VI. RELIGIOUS ORGANIZATIONS

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 Foundation

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.

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.

Student Fellowship

The 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 Congregationalist church. Programs are educational, social, and include worship services on Sunday evenings during the supper hours. Meetings are held in the parish houses of the sponsoring churches.

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 stu-
STUDENT ORGANIZATIONS AND ACTIVITIES

dents 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, squad teams are chosen to represent the college in contests with teams of other colleges in Michigan and neighboring states. On several occasions Western's teams have debated visiting teams from foreign countries.

There is also a special program for freshmen, including inter-collegiate competition.

A series of spirited inter-society debates is held each fall for the possession of a loving cup presented by the Kalamazoo Bar Association.

ATHLETICS

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 or 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 participate in three class hours of physical education weekly during the first six semesters of residence unless excused officially from participation. Veterans of military service are granted four semesters of credit in general physical education 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, horse shoe 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.

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 Michigan 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 during the second semester. It contains the addresses and telephone numbers of all students and faculty members, and includes information concerning the various student 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.

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.

**III. Procedure for Checking Eligibility for Participation**

A. The co-chairmen 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 committee 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 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 and fellowships 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 be confined to the field of education alone, 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 $450. 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; 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.

UNDERGRADUATE SCHOLARSHIPS

The Alpha Beta Epsilon Scholarship. Since 1938 the Alpha Beta Epsilon alumnae sorority of Western Michigan College of Education has given 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 Alumnus Scholarship. An alumnus, who prefers to remain anonymous will provide $75.00 annually for the scholarship purposes. The initial award, granted on the basis of competitive examinations, is renewable annually for three consecutive years, provided the holder maintains a satisfactory record.

The Amelia Biscomb Memorial Loan Fund was established in 1939 through the will of Mrs. Biscomb, for over thirty years a teacher of English in Western Michigan College of Education, who provided the sum of $500 for this purpose. This fund is administered by the Student Loan Fund Committee.

The Debate Scholarship and Loan Fund. In the fall of 1920, the four debating organizations on the campus, the Senate, the Academy, the Forum, and the Tribunal, combined to start a fund which should be avail-
able for loans to worthy debaters and which should eventually be used to award scholarships to debaters. The fund has now passed the two-thousand-dollar mark and has been instrumental in making it possible for many debaters to remain in college. The money is administered as a trust fund and is under the management of the Forensic Board of Control.

The Dwight B. Waldo Memorial Fund, which was initiated by a group of faculty members at the time of Dr. Waldo's death in 1939, is growing steadily through the contributions of faculty, alumni, student organizations, and friends. Loans from the fund are available to any worthy student, under the direction of the Student Loan Fund Committee.

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 Fannie Ballou Memorial Fund, founded in 1921, in honor of Fannie Ballou, who was for seven years supervisor of the second grade of the Training School, is administered as a loan fund. Loans are awarded to persons of superior ability in the field of elementary education. Preference is given to students in early-elementary education who have completed at least one year of resident work in this college. The administration of this fund is in charge of the Student Loan Fund Committee.

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. A substantial sum has already been contributed in the form of war bonds.

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 Helen Statler Fund. This fund was established in 1944 by Mrs. Frederick C. Fisher and Frederick C. Statler in honor of their mother, and is available to any worthy student. The administration of this fund is in charge of the Student Loan Fund Committee.

The Kalamazoo Kiwanis Educational Aid Fund was established in 1925. The fund provides loans for students in the junior and senior and graduate years of college. Information regarding applications for loans may be secured from the office of the Registrar.

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 Kellogg Foundation Scholarship Funds. The Kellogg Foundation has provided funds of $4000 each, to be used in granting scholarships and loans to worthy and needy students who are preparing to become medical technologists and occupational therapists. The fund for occupational therapy is available to students only after their formal admission to the School of Occupational Therapy.

Inquiries concerning the medical technology fund should be addressed to Dr. D. C. Shilling, Department of Political Science.

Inquiries concerning the occupational therapy fund should be addressed to Miss Marion R. Spear, O.T.R., Department of Occupational Therapy.

The LeRoy H. Harvey Memorial Loan Fund was established in 1925 by the student Science Club to honor the memory of Dr. LeRoy H. Harvey, who was, until his death, the active and inspiring head of the Department of Biology. The fund is administered by the Student Loan Fund Committee. Loans are made to students whose major interest is in the field of science.

The Matie Lee Jones Memorial Loan Fund, founded in 1929 in honor of Matie Lee Jones, who organized the Department of Physical Education for Women, is available to women students. The fund is administered through a committee consisting of the officers and the faculty advisers of the Women's League.

The Librarianship Scholarships. Ten special scholarships are being offered to qualified graduates in the June 1947 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, 1947. A personal interview will be required. Appointments for interviews should be arranged with the Director of the Department before May 20, 1947. 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 Michigan State Board of Education Scholarships. Ten scholarships are awarded annually by the Michigan State Board of Education. These scholarships cover tuition charges and a specified portion of fees. Applications for these scholarships should be addressed to the Dean of Administration.

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 strings, 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.

The Neary's Honorary Scholarship. Neary's Store offers one scholarship of $100 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 a Michigan high school and not the recipient of another scholarship. The fund is administered by the registrar and the head of the Department of Business Education.

The Paul H. Todd Scholarship. Through the generosity of Paul H. Todd there becomes available annually $300 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 Rural Elementary Scholarships. Scholarships covering tuition charges are available only for students who enroll in the Rural Elementary Curriculum. Applications for these scholarships should be addressed to the
The State D. A. R. Scholarship Loan Fund, founded in 1934, has grown to a fund of $500 through gifts made by the State Committee of the Daughters of the American Revolution. The administration of this fund is in charge of the Student Loan Fund Committee.

The Stone D. A. R. Student Loan Fund was established in 1932 through gifts from the Lucinda Hinsdale Stone Chapter of the Daughters of the American Revolution. The fund is administered by the Student Loan Fund Committee.

The Student Health Loan Fund was established in the spring of 1933 with contributions from the senior class of that year and the Student Association, amounting to approximately $450. Short term loans for medical and dental services are made from this fund, which is administered by the Health Service.

The Upjohn Foundation Fund. The Upjohn Foundation has provided a fund of $5,000 to be used for scholarships and loans to occupational therapy students. This fund is available to students only after their formal admission to the School of Occupational Therapy. Inquiries concerning this fund should be addressed to Miss Marion R. Spear, O.T.R., Department of Occupational Therapy.

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 will be administered by a committee under the chairmanship of the Dean of Men.

The William McCracken Loan Fund in Chemistry was established in 1945 through a gift of $1,000 made by Mrs. William McCracken to honor the memory of her husband, who organized the Department of Chemistry and served as its head for thirty-two years (1907-1939). Loans are awarded to worthy and needy students majoring in chemistry. Preference will be given students who have proven their ability through courses taken in chemistry at Western Michigan College of Education. The application for a loan should be made to the head of the Department of Chemistry.

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 $150 is made; to the one scoring second highest, an award of $100; to the one scoring third highest, an award of $75. Each award is renewed automatically annually during a period of three years, provided the student’s record proves satisfactory.

The W. M. C. E. Student Loan Fund. In September, 1912, the nucleus of a student loan fund was established by the gift of $200 from Miss Blanche
Hull. This fund has been increased to a total of several thousand dollars. Money is loaned to deserving students on the recommendation of a faculty committee. An interest rate of five per cent is charged and notes, not to exceed one year, are accepted. Applications for loans should be made to the Student Loan Fund Committee, of which the registrar is chairman.
Students may be admitted at the opening of any semester or summer session.

GENERAL QUALIFICATIONS

The college expects that those who enter will have shown intellectual capacity, and will be able to apply themselves to their studies 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 possible.

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

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 filed a copy of his high school credits in advance should present it at the time of registration.

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

ENTRANCE FROM HIGH SCHOOLS

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

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. General

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

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, and Spanish.

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 unit or 1 unit, Solid Geometry ½ unit,
   - Trigonometry ½ unit, Physics 1 unit.

D. Science Group
   Any two units selected from the following constitute a minor sequence and any three or more units constitute a major sequence.
   - Physics 1 unit
   - Chemistry 1 unit
   - Botany 1 unit
   - Zoology 1 unit

   If biology is counted in these sequences neither botany nor zoology can be counted.

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
   - European History 1, 1½ units, or 2 units
   - American History, ½ or 1 unit
   - American Government ½ unit
   - Economics ½ unit

1 Physics may not be counted in both Groups C and D.
2 English History may be included under European History.
3 Half units in the social studies are acceptable as part of a sequence only if taken in the 11th or 12th grade.
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

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 in-
clusive.

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

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
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.

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.

TRANSFERRED 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 educa-
tion should be addressed to Mr. John 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 transferring 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 in 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.

**TRANSSCRIPTS**

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. The charge for the three is twenty-five cents.
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 upper classmen 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. Credits will be withheld from students for whom there is no record of such entrance tests taken at this institution.

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.

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.

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

Students are expected to carry the equivalent of fifteen semester hours of college work a week. For all students the maximum number of hours a week that may be elected without special permission is sixteen; the minimum, twelve.

The Committee on Scholarship regulates the maximum load for a given student on the basis of his apparent ability and other factors.

Requests for permission to carry a sub-minimum load (less than 12 semester hours) must be addressed to the registrar.

EXTRA HOURS

No student may enroll for more than sixteen semester hours of work without the permission of the Committee on Scholarship.

Students may make application for extra hours by securing an application blank from the chairman of the Committee on Scholarship, filling out the same, and filing the application with the chairman of the committee. Only in exceptional cases is permission granted to carry extra studies during.
the first semester in residence. The Dean of Administration is chairman of this committee. It is deemed more desirable for a student to do work of a high grade of excellence with a normal class load than to take extra subjects with mediocre success.

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

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

The mark \(W\) will be given only when the registrar issues an Official Drop Slip. If a student withdraws from a class without the registrar's written permission, a mark of \(E\) (failure) will be given.

Permission to drop courses will not be given upper classmen after the end of the third complete week of a semester. Freshmen will not be allowed to drop courses after the end of the fourth complete week of a semester.

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 the 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 150 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 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 Committee on Scholarship.

3. Students are in no case 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 during examination week may be arranged by the instructor with the consent of the registrar.

4. A student desiring to take a second examination in a given subject must make formal application to the Chairman of the Scholarship Committee 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.
Honor Points

<table>
<thead>
<tr>
<th>Grade</th>
<th>Significance</th>
<th>Honor Points (Per hour of credit)</th>
</tr>
</thead>
<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>

The mark I means that the student has not finished the work of the course, because of illness, unsatisfactory work, or for some other cause, and that he may be given opportunity to complete it. I's must be removed during the next succeeding semester (except when the student does not return, and then within one year) or they automatically become E's.

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 in June 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 of 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. Grades for non-credit courses (library methods, physical education, etc.) are not considered. The minimum number of hours to be taken must be fourteen semester hours.

*For Directed Teaching only.*
SIGNIFICANCE OF COURSE NUMBERS

LOW SCHOLARSHIP LIST

The name of a student whose point-hour ratio during any semester is less than .6 will be placed on the Low Scholarship List. Such a student is liable to disciplinary action by the Committee on Scholarship. He may be "Warned", "Probated", or "Dismissed".

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. In such cases participation in the Band for one semester is substituted for two and one-half class hours in physical education. (A class hour is to be interpreted to mean one hour of class work each week for one 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.

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.

Note.—The courses under d and e above give, within parentheses, the University of Michigan numbers.
b. The number 101 is reserved for fundamental courses having as prerequisites one year (or fraction thereof) of high-school work.
c. The number 102 is reserved for fundamental courses having as prerequisites 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 “Details of Departmental 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. A course offered only in the summer session has an S added to the number.

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 of 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.

Six semester hours is the standard class load for a summer session.

No credit will be given for a course (even if pursued successfully) for which the student is not officially registered.
EXPENSES

FEES FOR UNDERGRADUATES

Tuition Fees


<table>
<thead>
<tr>
<th>Hours</th>
<th>Resident*</th>
<th>Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>$7.50</td>
<td>$15.00</td>
</tr>
<tr>
<td>4-6</td>
<td>15.00</td>
<td>30.00</td>
</tr>
<tr>
<td>7-9</td>
<td>22.50</td>
<td>45.00</td>
</tr>
<tr>
<td>10 or more</td>
<td>37.50</td>
<td>75.00</td>
</tr>
</tbody>
</table>

*RESIDENCE REQUIREMENTS

Residence in Michigan for the purpose of registration shall be determined according to the state constitutional 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 guardians.

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.

Local Fees


<table>
<thead>
<tr>
<th>Hours</th>
<th>$10.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>15.00</td>
</tr>
<tr>
<td>10 or more</td>
<td>26.00</td>
</tr>
</tbody>
</table>

These local fees are collected each semester for the support of student activities, health service, student union, library purposes, class dues, Brown and Gold, and subscription to the Western Michigan Herald.

A student for whom no identification photograph is on file pays an additional 35 cents, when such photograph is taken.

Graduation Fees

<table>
<thead>
<tr>
<th>Curriculum</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Limited Certificate curriculum</td>
<td>$2.00</td>
</tr>
<tr>
<td>Provisional Certificate curricula</td>
<td>3.00</td>
</tr>
<tr>
<td>Degree curricula</td>
<td>3.00</td>
</tr>
<tr>
<td>Alumni fee (paid by all graduates)</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Late Enrollment Fee

By action of the State Board of Education, all students who enroll after the opening day of a session 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 one week after registration will be entitled to a refund of the entire fee.
3. A student who withdraws more than a week and less than two weeks after the beginning of the session shall be entitled to a refund of one-half the fee.
4. A student who withdraws more than two weeks and not later than three weeks after the beginning of the session will be entitled to a refund of forty per cent of the fee.
5. No refunds will be made for withdrawal after the third week of a summer session.

Estimate of Expenses

An estimate of the expenses for one semester may be formed from the following table:

<table>
<thead>
<tr>
<th>Item</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Room</td>
<td>$55.00 to $63.00</td>
</tr>
<tr>
<td>Board</td>
<td>90.00 to 144.00</td>
</tr>
<tr>
<td>Laundry</td>
<td>0.00 to 15.00</td>
</tr>
<tr>
<td>Textbooks and supplies</td>
<td>15.00 to 25.00</td>
</tr>
<tr>
<td>Incendentals</td>
<td>15.00 to 25.00</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 (approximately) $230.00 to $357.00
REGULATIONS RELATING TO CURRICULA

OBJECTIVES AND GENERAL SCOPE OF CURRICULA

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 lit-
erature, modern language and literature, certain courses
as indicated in the Departments of Librarianship and
Speech

Group II. Science
Anatomy, astronomy, biology, botany, chemistry, geogra-
phy, geology, hygiene, mathematics, nature study, physics,
physiology, psychology, zoology, certain courses as indi-
cated in the Department of Agriculture

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

Group IV. Education
Education (includes methods courses and directed teach-
ing), 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 oc-
cupational therapy

Group VII. Physical Education and Health
Health, physical education

DEGREES DEFINED

BACHELOR OF ARTS (AND TEACHING CERTIFICATE)

The student who regularly completes a curriculum conforming to the de-
gree requirements and embracing at least 90 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 (AND TEACHING CERTIFICATE)

1. The student who regularly completes a curriculum conforming to the degree requirements and embracing more than 30 semester hours from Groups IV, V, VI, and VII 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 128 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 examinations certain levels of proficiency will be accepted as majors in the various fields of Applied Music or Composition. A total of 128 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 degree requirements stated on pages 92 to 94 except the professional requirements in Group IV, 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 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 120 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

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 three-fourths 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. No candidate is eligible for the Bachelor's degree who has not done at least 30 semester hours of work in residence and who has not been in residence during the semester or summer session immediately 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

REQUIREMENTS

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. The maximum permitted in Groups IV-VII is 60 hours.

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 chairmen 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.
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 120 semester hours.
2. Thirty semester hours of satisfactory work in residence 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. TEACHING CERTIFICATES

The following types of teaching certificates are granted:

1. State Elementary Provisional Certificate
2. State Secondary Provisional 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 in the State of Michigan.
      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 certificate 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 in the state of Michigan.
      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. (See “Important Directions to Holders of Limited Certificates based on the Michigan Teachers’ Certification Code”, below.)
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 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, 25 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.
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 106 A, B.

2. At the end of the sophomore year all students except those enrolled in the two year curricula must have had at least 12 class 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. Not more than a total of 60 semester hours of credit from Groups IV, V, VI, and VII may be accepted for either the Bachelor of Arts or the Bachelor of Science degree. A total of 60 hours must be earned in Groups I, II, and III.

6. 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.

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

8. 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.

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

10. All students must take the equivalent of six hour lectures in political science. This is a legal requirement.
LIST OF THE CURRICULA

The following curricula have been set up and are described in the following pages as indicated.

I. General Degree Curriculum .............................................. 100
II. Curricula for Teachers .................................................. 101–114
   Elementary Curriculum .................................................. 101
   Secondary Curriculum .................................................... 102
   Special Education Curricula ............................................ 103
      Deaf and Hard of Hearing ............................................ 103
      Mentally Retarded .................................................... 104
      Occupational Therapy ............................................... 105
      Speech Correction ................................................... 106
   Music Curricula ......................................................... 108
   Librarianship Curriculum ............................................... 110
   Vocational Business Curriculum ..................................... 112
   Rural Elementary Curriculum ........................................ 113
III. Pre-Professional, Non-Teaching Professional, and Combined Curricula ............ 115–130
   Agriculture .................................................................. 115
   Business Administration ............................................... 116
   Dentistry .................................................................... 117
   Engineering .................................................................. 117
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   Journalism .................................................................... 119
   Law ............................................................................. 120
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   Nursing ........................................................................ 123
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IV. Vocational and Practical Arts Education Curricula ........................................... 131–142
   Business Administration ................................................. 132
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   Tool and Die Making ....................................................... 141
   Trade Drafting; Welding .................................................... 142
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.

1. 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

Group I. Language and Literature .................... 12 semester hours
Ancient language and literature, English language and literature, modern language and literature, certain courses as indicated in the Department of Speech.

Rhetoric (in addition) .............................. 6 semester hours

Group II. Science .................................. 12 semester hours
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 ......................... 12 semester hours
Economics, history, philosophy, political science, sociology. Must include two semester hours of political science.

Group VII. Physical Education and Health
Physical education: Women are required to take ten class hours, including Physical Education 100 and one individual sport. (A class hour is to be interpreted to mean one hour of class work each week for one semester.) Men must participate for three class hours weekly during the first six semesters of residence.

Elective ....................................... 78 semester hours
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)

Group Requirements
(See page — for Subject Groupings)

Group I. Language and Literature .................. 12 semester hours
Rhetoric (in addition) ........................................ 6 semester hours

Group II. Science ........................................... 12 semester hours

Group III. Social Science ................................. 12 semester hours
Including two semester hours of political science

Group IV. Education
Human Growth and Development 251 .................. 3 semester hours
Psychology of Reading 212 ................................. 3 semester hours
Introduction to Directed Teaching 351 ............... 3 semester hours
Directed Teaching, Laboratory in Education, and General Educational Problems 370 A, B, C ........ 15 semester hours

Group V. Fine Arts (Art, Music) ....................... 6 semester hours

Group VI. Practical Arts

Group VII. Physical Education and Health
Physical education: Women are required to take ten class hours, including Physical Education 100, one individual sport, and Physical Education 233, 330, or 331. (A class hour is to be interpreted to mean one hour of class work each week for one semester). Men must participate for three class hours weekly during the first six semesters of residence.

Elective ..................................................... 48 semester hours

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:
102 UNDERGRADUATE DIVISION—CURRICULA

*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.

3. Students majoring in art, music, 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. A course in library methods is required.

6. 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 I. Language and Literature | 12 semester hours |
| Rhetoric (in addition)         | 6 semester hours |
| Group II. Science              | 12 semester hours |
| Group III. Social Science      | 12 semester hours |
| Including two semester hours of political science |
| Group IV. Education            |                   |
| Human Growth and Development 251 | 3 semester hours |
| Introduction to Special Education 351 | 3 semester hours |
| Directed Teaching, Laboratory in Education, and General Educational Problems 370 A, B, C | 15 semester hours |
| Group VII. Physical Education and Health |
| Physical education: Women are required to take ten class hours, including Physical Education 100, one individual sport, and Physical Education 332. (A class hour is to be interpreted to mean one hour of class work each week for one semester.) Men must participate for three class hours weekly during the first six semesters of residence. |
| Elective                        | 57 semester hours |

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.

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.

3. Students majoring in art, music, 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. A course in library methods is required.

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

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SPECIAL EDUCATION CURRICULUM—DEAF AND HARD OF HEARING

B.S. Degree

State Elementary Provisional Certificate

(For the preparation of teachers of the deaf and hard of hearing)

Group I. Language and Literature ............................. 8 semester hours
Rhetoric (in addition) ........................................ 6 semester hours
Fundamentals of Speech 105 A, B .......................... 6 semester hours
Principles of Speech Correction 231 ........................ 3 semester hours
Phonetics 318 ................................................. 3 semester hours
Basic Voice and Speech Science 319 ....................... 3 semester hours

Group II. Science
General Biology 101, A, B .................................... 8 semester hours
General Psychology 200 ....................................... 3 semester hours
Abnormal Psychology 305 ..................................... 3 semester hours
Mental Testing 307 ............................................. 2 semester hours

Group III. Social Science
Principles of Sociology 241 ................................... 3 semester hours
Modern Social Problems 242 .................................. 3 semester hours
Political Science ................................................. 2 semester hours
Elective ............................................................ 4 semester hours

Group IV. Education
Problems of the Deaf and Hard of Hearing 234 ............ 3 semester hours
Introduction to Lip Reading 235 .............................. 3 semester hours
Advanced Lipreading 236 ...................................... 3 semester hours
Audiometry and Hearing Aids 237 ............................. 2 semester hours
Human Growth and Development 251 ....................... 3 semester hours
Applied Speech Correction 300 T ............................ 3 semester hours
Introduction to Special Education 331 ..................... 2 semester hours
Mental Hygiene 335 ............................................. 2 semester hours
Introduction to Directed Teaching 351 ..................... 3 semester hours
Directed Teaching, Laboratory in Education, and
General Educational Problems 370 A, B, C ................. 15 semester hours

Group VII Physical Education and Health
Physical education: Women are required to take ten
class hours, including Physical Education 100, one
individual sport. (A class hour is to be interpreted to
mean one hour of class work each week for one semester. Men must participate for three class hours weekly during the first six semesters of residence.

Elective ................................................................. 26 semester hours


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SPECIAL EDUCATION CURRICULUM—MENTALLY RETARDED

B.S. Degree

State Elementary Provisional Certificate

(For the preparation of teachers of mentally retarded and backward children)

Group I. Language and Literature ......................................... 12 semester hours
Rhetoric (in addition) ......................................................... 6 semester hours

Group II. Science
General Biology 101A, B ..................................................... 8 semester hours
Hygiene 112 (or Health Education 285) ................................... 2 semester hours
General Psychology 200 ....................................................... 3 semester hours
Abnormal Psychology 305 ..................................................... 3 semester hours
Mental Testing 307 ............................................................... 2 semester hours

Group III. Social Science
Principles of Sociology 241 .................................................. 3 semester hours
Modern Social Problems 242 ............................................... 3 semester hours
Political Science ................................................................. 2 semester hours
Elective ................................................................. 4 semester hours

Group IV. Education
Human Growth and Development 251 ....................................... 3 semester hours
Introduction to Special Education 331 ..................................... 2 semester hours
Mental Deficiency 332 ............................................................ 2 semester hours
Introduction to Mental Hygiene 335 ....................................... 3 semester hours
Methods of Teaching Subnormal Children 337 ......................... 2 semester hours
Introduction to Directed Teaching 351 ................................... 3 semester hours
Directed Teaching, Laboratory in Education, and
General Educational Problems 370 A, B, C ......................... 15 semester hours

Group V. Fine Arts
Illustrative Handwork 107 .................................................... 3 semester hours

Group VI. Practical Arts
Special Education Shop 208 .................................................. 2 semester hours

Group VII. Physical Education and Health
Physical education: Women are required to take ten class hours, including Physical Education 100 and one
individual sport. (A class hour is to be interpreted to mean one hour of class work each week for one semester.) Men must participate for three class hours weekly during the first six semesters of residence.

Elective ................................................................. 39 semester hours

Note.—1. The academic training shall include a major (this may be a group major) and two minors, or four 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.
2. A course in library methods is required.

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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</th>
<th>Subject</th>
<th>Credits</th>
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<tbody>
<tr>
<td>I</td>
<td>Language and Literature</td>
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<tr>
<td></td>
<td>Rhetoric 106A, B</td>
<td>6 semester hours</td>
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<td></td>
<td>Fundamentals of Speech 105A</td>
<td>3 semester hours</td>
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<td></td>
<td>Elective</td>
<td>9 semester hours</td>
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<tr>
<td>II</td>
<td>Science</td>
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<td></td>
<td>General Biology 100A, B</td>
<td>8 semester hours</td>
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<td></td>
<td>Anatomy and Physiology (for Occupational Therapists) 215</td>
<td>4 semester hours</td>
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<td>Kinesiology 216A, B</td>
<td>4 semester hours</td>
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<td></td>
<td>General Psychology 200</td>
<td>3 semester hours</td>
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<td></td>
<td>*Neurology and Psychiatry 330</td>
<td>3 semester hours</td>
</tr>
<tr>
<td></td>
<td>*Clinical Subjects 332</td>
<td>4 semester hours</td>
</tr>
<tr>
<td></td>
<td>*Clinical Observations 334</td>
<td>4 semester hours</td>
</tr>
<tr>
<td>III</td>
<td>Social Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Political Science</td>
<td>2-3 semester hours</td>
</tr>
<tr>
<td></td>
<td>Sociology 241</td>
<td>3 semester hours</td>
</tr>
<tr>
<td></td>
<td>*Social Service in Hospitals 351</td>
<td>3 semester hours</td>
</tr>
<tr>
<td></td>
<td>*Hospital Case Studies 352</td>
<td>3-4 semester hours</td>
</tr>
<tr>
<td>IV</td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Theory of Occupational Therapy 210A, B and 310</td>
<td>6 semester hours</td>
</tr>
<tr>
<td></td>
<td>Human Growth and Development 251</td>
<td>3 semester hours</td>
</tr>
<tr>
<td></td>
<td>Introduction to Directed Teaching 351</td>
<td>3 semester hours</td>
</tr>
<tr>
<td></td>
<td>General Educational Problems 370C</td>
<td>3 semester hours</td>
</tr>
<tr>
<td></td>
<td>Directed Teaching 374</td>
<td>5 semester hours</td>
</tr>
<tr>
<td>V</td>
<td>Fine Arts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elementary Design 215</td>
<td>3 semester hours</td>
</tr>
<tr>
<td></td>
<td>Ceramics and Jewelry 225</td>
<td>3 semester hours</td>
</tr>
<tr>
<td></td>
<td>Weaving 328</td>
<td>4 semester hours</td>
</tr>
<tr>
<td></td>
<td>Bookbinding 329</td>
<td>2 semester hours</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>5 semester hours</td>
</tr>
</tbody>
</table>
Group VI. Practical Arts
Printing 140A .................................. 3 semester hours
Special Education Shop 208 ...................... 3 semester hours
Therapeutic Crafts 220 or 221 or 222 .......... 2 semester hours
Stitchery 223 .................................. 4 semester hours
Rug Making 224 .................................. 1 semester hour
Basketry 225 .................................. 1 semester hour
Leatherwork 227 .................................. 1 semester hour

Group VII. Physical Education
All students are required to take four class hours of physical education, including Physical Education 100. (A class hour is to be interpreted to mean one hour of class work each week for one semester.)

Clinical Training**
Nine calendar months at affiliating hospitals. This includes courses starred above and undifferentiated credit totaling 9 semester hours

Note.—1. Thirty semester hours of college credit (as listed in First Year, Occupational Therapy Curriculum for Diploma, page —) must be earned before the student is admitted to the School of Occupational Therapy. This admittance is based on the approval of the applicant by the Coordinating Committee of the school, 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.

*These courses are taught at the Kalamazoo State Hospital.

**Students “absent on affiliation” will pay $2.00 per semester hour for each of the 27 hours of credit involved. An additional payment of $25.00 is made at the time of the first assignment for affiliation. The balance must be paid the last semester of affiliation.

SPECIAL EDUCATION CURRICULUM—SPEECH CORRECTION

B.S. Degree

State Elementary Provisional Certificate

(For the preparation of teachers of speech correction)

Group I. Language and Literature .................. 8 semester hours
Rhetoric (in addition) .................................. 6 semester hours
Fundamentals of Speech 105A, B .................. 6 semester hours
Introduction to Speech Correction 230 .......... 3 semester hours
Principles of Speech Correction 231 .............. 3 semester hours
Phonetics 318 .................................. 3 semester hours
Basic Voice and Speech Science 319 .......... 3 semester hours
Stuttering and Allied Disorders 331 .............. 3 semester hours
Group II. Science
General Biology 101A, B .................................. 8 semester hours
or
Hygiene 112 ........................................... 2 semester hours
and
Physical Science 100A, B ............................. 6 semester hours
General Psychology 200 ................................. 3 semester hours
Abnormal Psychology 305 ............................. 3 semester hours
Mental Testing 307 ..................................... 2 semester hours

Group III. Social Science
Principles of Sociology 241 ............................. 3 semester hours
Modern Social Problems 242 .......................... 3 semester hours
Political Science ........................................ 2 semester hours
Elective .................................................. 4 semester hours

Group IV. Education
Psychology of Reading 212 ............................. 3 semester hours
Human Growth and Development 251 ................. 3 semester hours
Applied Speech Correction 300T ....................... 3 semester hours
Introduction to Speech Education 331 ................ 2 semester hours
Mental Hygiene 335 .................................... 2 semester hours
Introduction to Directed Teaching 351 ................. 3 semester hours
Directed Teaching, Laboratory in Education, and General Educational Problems 370A, B, C ........... 15 semester hours

Group VII. Physical Education and Health
Physical education: Women are required to take ten class hours, including Physical Education 100 and one individual sport. (A class hour is to be interpreted to mean one hour of class work each week for one semester.) Men must participate for three class hours weekly during the first six semesters of residence.
Elective ............................................... 26 semester hours

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. A course in library methods is required.
5. For further information regarding details of specialization in a department or field, see introductory paragraphs for each department.
### 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 106 A, B</td>
<td>6</td>
</tr>
<tr>
<td>Major Performance</td>
<td>4</td>
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<tr>
<td>English Diction and Song Literature 122 A, 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>
</tr>
<tr>
<td>Elementary Acoustics 110</td>
<td>2</td>
</tr>
<tr>
<td>String Class 118 A, B</td>
<td>2</td>
</tr>
<tr>
<td>Elective (non-music)</td>
<td>8</td>
</tr>
<tr>
<td>Library Methods</td>
<td></td>
</tr>
<tr>
<td>Physical Education or Band</td>
<td></td>
</tr>
</tbody>
</table>

#### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Performance</td>
<td>4</td>
</tr>
<tr>
<td>Italian Diction and Song Literature 222A, B</td>
<td>0</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>Elementary School Methods and Materials 208A, BT</td>
<td>6</td>
</tr>
<tr>
<td>Woodwind Class 219A, B</td>
<td>2</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Elective (non-music)</td>
<td>7</td>
</tr>
<tr>
<td>Physical Education or Band</td>
<td></td>
</tr>
</tbody>
</table>

#### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Performance</td>
<td>6</td>
</tr>
<tr>
<td>Major Performance Literature 323*</td>
<td>0</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>French Diction and Song Literature 322A, B</td>
<td>0</td>
</tr>
<tr>
<td>Junior and Senior High School Methods and Materials</td>
<td></td>
</tr>
<tr>
<td>301A, BT</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>or</td>
<td></td>
</tr>
<tr>
<td>Music Literature 207B</td>
<td>3</td>
</tr>
<tr>
<td>Instrumental Conducting 311A</td>
<td>1</td>
</tr>
<tr>
<td>Choral Conducting 311B</td>
<td>1</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>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
</tbody>
</table>
American National Government 230 ................. 3 semester hours
or
American State and Local Government 231 .......... 3 semester hours
or
Survey of American Government 234 ................ 2 semester hours
Elective (non-music) .................................. 3 semester hours
Physical Education or Band

Fourth Year
Major Performance .................................... 6 semester hours
Major Performance Literature 323* ................... 0 semester hours
or
German Diction and Song Literature 324A, B ........ 0 semester hours
History of Music 357A, B .............................. 6 semester hours
Integrated Professional Education 370A, B, C ........ 15 semester hours
Elective (non-music)* .................................. 5 semester hours

*Courses not required for students who will become vocal supervisors.

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

First Year
Rhetoric 106A, B ..................................... 6 semester hours
Major Performance* ................................... 4 semester hours
Freshman Theory 106A, B ............................. 6 semester hours
Music Appreciation 107A, B .......................... 4 semester hours
Elementary Acoustics 110 ............................. 2 semester hours
String Class 118A, B .................................. 2 semester hours
English Diction and Song Literature 122A, B** ....... 0 semester hours
Elective (non-music)*** ................................. 8 semester hours
Library Methods
Physical Education or Band

Second Year
Major Performance ..................................... 4 semester hours
Advanced Sight-Singing and Ear-Training 205A, B .... 4 semester hours
Advanced Harmony 206A, B ............................ 6 semester hours
Elementary School Methods and Materials 208A, BT .... 6 semester hours
Woodwind Class 219A, B .............................. 2 semester hours
Italian Diction and Song Literature 222A, B** ....... 0 semester hours
Human Growth and Development 251 .................. 3 semester hours
Elective (non-music) ................................... 7 semester hours
Physical Education or Band
UNDERGRADUATE DIVISION—CURRICULA

Third Year

Major Performance ........................................... 6 semester hours
Major Performance Literature 323 ......................... 0 semester hours
or
French Diction and Song Literature 322A, B** .............. 0 semester hours
Junior and Senior High School Methods and Materials
301A, BT ....................................................... 6 semester hours
Style and Structure 310A ..................................... 3 semester hours
Instrumental Conducting 311A ............................... 1 semester hour
Choral Conducting 311B ...................................... 1 semester hour
Brass Class 320A, B .......................................... 2 semester hours
Percussion Class 321 ......................................... 1 semester hour
Introduction to Directed Teaching 351 .................... 3 semester hours
American National Government 230 ......................... 3 semester hours
or
American State and Local Government 231 .................. 3 semester hours
or
Survey of American Government 234 .......................... 2 semester hours
Elective (non-music) ........................................... 9 semester hours
Physical Education or Band

Fourth Year

Major Performance ........................................... 6 semester hours
Major Performance Literature 323 ......................... 0 semester hours
or
German Diction and Song Literature 324A, B** .............. 0 semester hours
History of Music 357A, B ..................................... 6 semester hours
Methods in Major Performance Medium ..................... 3 semester hours
Integrated Professional Education 370A, B, C .................. 15 semester hours
Elective (non-music) ........................................... 2 semester hours

Note.—1. • General supervisors are required to study voice two years and a single instrument two years. If the student's major performance medium is an instrument, it is suggested that he meet the voice requirements by enrolling in voice courses 116A, B and 216A, B.
2. ** The student is required to enroll for this course only if his performance medium is voice.
3. *** The non-music electives should be used to complete the non-music minor.

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 semester hours
General Biology 100A, B
or
General Chemistry 100A, B .................................... 8 semester hours
History ......................................................... 6 semester hours
Modern Language .................................................. 8 semester hours
Electives .............................................................. 2 semester hours

Library Methods
Physical Education
(Suggested electives, Fundamentals of Speech, Music or Art Appreciation.)

**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>State and Local Government 231</td>
<td>3</td>
</tr>
<tr>
<td>History</td>
<td>3</td>
</tr>
<tr>
<td>Psychology of Reading 212</td>
<td>3</td>
</tr>
<tr>
<td>English Electives</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
</tbody>
</table>

(Literature for Children 203 recommended)

(Students may begin their major during this year with Reading Interest of Children 202)

It is strongly recommended that students continue a second year of their modern language and some of the above courses may then be postponed to third year.

Physical Education

**Third Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Interests of Children 202</td>
<td>3</td>
</tr>
<tr>
<td>or Reading Interests of Youth 302</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>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
<tr>
<td>Electives—English</td>
<td>6</td>
</tr>
<tr>
<td>History or Economics</td>
<td>3-6</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

**Fourth Year**

**First Semester**

Directed Teaching, Laboratory in Education and General Educational Problems 370A, B, C ............................. 15 semester hours
Teaching in minor subject and supervised practice in school library.

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Library in the Modern Community 362</td>
<td>2</td>
</tr>
<tr>
<td>Administration of School Libraries 361</td>
<td>2</td>
</tr>
<tr>
<td>Curriculum Enrichment 305</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>8</td>
</tr>
</tbody>
</table>
VOCATIONAL BUSINESS CURRICULUM

B.S. Degree

State Temporary Vocational Coordinators Certificate

State Secondary Provisional Certificate

(For preparation of teachers and coordinators of vocational business)

The prerequisites to admission to this curriculum are:

1. Junior year standing and completion of certain group requirements.
2. Completion of a minimum of 15 semester hours in Secretarial Training or Retail Training.
3. Satisfactory evidence of having had one year of work experience in a store or office.

Note.—Work experience gained prior to matriculation in this curriculum must be evidenced by signed reports from the store or office in which the experience was gained.

A minimum of two years of approved work experience in the occupational field in which the student is majoring is required for graduation. Graduates meeting the specified requirements will be eligible for a temporary Vocational Coordinator’s Certificate. This certificate is granted by the State Board of Control for Vocational Education.

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Administration 321</td>
<td>3</td>
</tr>
<tr>
<td>Labor Problems 325A, B</td>
<td>4</td>
</tr>
<tr>
<td>Survey of American Government 234</td>
<td>2</td>
</tr>
<tr>
<td>Secretarial or Retailing (Groups A or B)²</td>
<td>9</td>
</tr>
<tr>
<td>Elective (Group II)</td>
<td>8</td>
</tr>
<tr>
<td>Elective (Group I)</td>
<td>2</td>
</tr>
</tbody>
</table>

Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directed Teaching 370A</td>
<td>8</td>
</tr>
<tr>
<td>Laboratory in Education 370B</td>
<td>4</td>
</tr>
<tr>
<td>Business Problems 339</td>
<td>3</td>
</tr>
<tr>
<td>*Principles of Vocational Education 570 (E100)</td>
<td>2</td>
</tr>
<tr>
<td>Secretarial or Retailing (Groups C or D)²</td>
<td>7</td>
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<tr>
<td>Elective (Group III)</td>
<td>7</td>
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Post Graduate—Summer Session

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Analysis and Preparation of Industrial Materials 502 (E152)</td>
<td>2</td>
</tr>
<tr>
<td>*Methods of Teaching Vocational Education 503 (E153)</td>
<td>2</td>
</tr>
<tr>
<td>*Coordination in Vocational Education 575 (E106)</td>
<td>2</td>
</tr>
</tbody>
</table>

Note.—1. *Starred courses carry graduate credit toward a Master’s Degree.

2. Group A (Secretarial) includes Secretarial Science 130A, Secretarial Practice 230 A, B, and Filing Principles 236; Group B (Retailing) includes Fundamentals of Retailing 140, Merchandise and Job Analysis 161A, and Retail Salesmanship 159; Group C (Secretarial) includes Secretarial Accounting 211A, B or Accounting Principles 210A, B; and Group D (Retailing) includes Retail Publicity 240 or Retail Credits and Collections 241 and Store Organization 251A, B.
Two-year—60 semester hour—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."*

Group I. English1 ........................................ 6 semester hours
   Rhetoric 106A (in addition) ....................... 3 semester hours

Group II. Science2 ........................................ 8 semester hours

Group III. Social Science3
   Rural Economics 240 .................................. 3 semester hours
   Rural Sociology 240 .................................. 3 semester hours
   Elective ............................................. 3 semester hours

Group IV. Education4
   Curriculum 145 .................................... 3 semester hours
   Introduction to Directed Teaching 240 .......... 3 semester hours
   Directed Teaching 271 ............................. 4 semester hours
   Rural Education 340 ............................... 2 semester hours
   Elective ............................................. 3 semester hours

Groups V. and VI. Fine and Practical Arts5
   Personal and Social Problems 120 or equivalent .... 1 semester hour
   Elective ............................................. 5 semester hours

GROUP VII. Physical Education and Health6 ................... 5 class hours6
Men must participate for three class hours weekly during four semesters of residence.
Women: Physical Education 100, Rural School Physical Education 233, and an elective

Library Methods .......................................... Non-credit

Electives7 .............................................. 13 semester hours

Note.—1 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; Chief American Poets 121; American Prose 122; Literature for Children 203.
2. Rural School Agriculture 105 or Nature Study 231 A or Nature Study 231 B; Introductory Geography 105 A; Health Education 285 or Hygiene 112.
3. United States History 201 B 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 T; Psychology of Reading 212; Human Growth and Development 251. Those selected students permitted to do Directed Teaching 271 in the field while in residence there for six weeks receive 5 instead of 4 semester hours credit.
5. Woodshop (Rural Ed) 100; Art Structure 106; Rural School Music 109; Industrial Art 110; Auxiliary Choir 134; Home Nursing 220; Clothes and Personality 203; Nutrition 219; Consumer Buying 239.
6. A class hour is to be interpreted to mean one hour of class work each week for
ACCELERATED RURAL ELEMENTARY CURRICULUM

(Fifty Semester Hours)

Because of the present shortage of rural teachers, an accelerated rural elementary curriculum is being offered. Special teaching permits are granted upon the completion of not less than fifty of the sixty semester hours in the two-year Rural Elementary Curriculum. Directed Teaching 271 and certain other subjects selected under the guidance of the departmental counselor must have been included.

The accelerated curriculum may be completed in three semesters or, possibly, in two semesters and two summer sessions. The special certificate is valid for one year only and is not subject to renewal. Following its expiration, the requirements for the State Limited or some other certificate must be met.

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 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, county commissioners, supervisors, or 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.

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

Most of the professional schools of the country have prescribed more or less definitely the nature of the college work prerequisite to professional training. The amount of college training required by leading universities in preparation for the various professions has in late years been materially increased. A number of professions are now entirely 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 specially arranged with the various professional schools of certain colleges and universities. In these curricula, the student, after successfully 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 for certain reasons. 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, Forestry, and Law of the University of Michigan. There are also combined curricula with the College of Medicine, Wayne University; the Detroit College of Law; the College of Law, University of Illinois; the Schools of Commerce and Journalism of Northwestern University; the Divisions of Agriculture, Business Administration, and Engineering of Michigan State College; Nursing with Bronson Hospital; and Medical Technology with the Michigan Department of Health and Bronson Hospital.

A course in library methods and certain class hours of physical education are required.

AGRICULTURE

The successful 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.
116 UNDERGRADUATE DIVISION—CURRICULA

First Year

Rhetoric 106A, B ........................................... 6 semester hours
General Biology, 100A, B .................................. 8 semester hours
Animal Husbandry, 106, 107, 108 .......................... 8 semester hours
Elective (to be selected from United States History 201A, B; Trigonometry and College Algebra 103A; or Trigonometry 100C.) ........................................ 9-10 semester hours

Second Year

General Chemistry 100A, B, or 101A, B .................. 8 semester hours
Farm Crops 202 ........................................... 3 semester hours
Soils 201 .................................................. 3 semester hours
Fundamentals of Speech 105A ............................. 3 semester hours
General Psychology 200 ................................... 3 semester hours
Horticulture 203 ......................................... 2 semester hours
Elective (to be selected from Principles of Economics 220A, B, Bacteriology 212A; Surveying 210; or United States History 210A, B.) ......................... 8-10 semester hours

BUSINESS ADMINISTRATION

The department of Business Education offers a differentiated program for students interested in preparing for a business career. While the department does not prescribe a definite curriculum leading to the professional degree of B.B.A., it does offer a major sequence of courses in accounting, business law, and related subjects in the General Degree curriculum.

Students interested in pursuing, during their freshman and sophomore years, the pre-professional curriculum given below and transferring their credits to the professional schools at the University of Michigan or Northwestern University should exercise care to see that specific requirements for admission have been met.

First Year

Rhetoric 106A, B ........................................... 6 semester hours
Trigonometry and College Algebra 103A, College Algebra and Analytic Geometry 103B .......................... 10 semester hours
or
College Algebra and Analytic Geometry 104A, B ........ 8 semester hours
Language or Literature .................................... 6-8 semester hours
Ancient and Medieval Civilization 105A, B .................. 6 semester hours
or
Modern Europe, 108A, B .................................. 6 semester hours
or
English History 109A, B .................................. 6 semester hours
Elective ................................................... 4-0 semester hours
DENTISTRY

Second Year

Accounting 210A, B ...................................................... 6 semester hours
Principles of Economics 220A, B ........................................ 6 semester hours
Introduction to Statistics 211 ........................................ 2 semester hours
Language or Literature ................................................... 6 semester hours
Secretarial Practice 230A .............................................. 2 semester hours
Elective ................................................................. 8 semester hours

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DENTISTRY

(Combined Curriculum in Letters and Dentistry)

First Year

Rhetoric 106A, B .......................................................... 6 semester hours
General Biology 100A, B .................................................. 8 semester hours
Elective* ................................................................. 2 semester hours

Second Year

General Chemistry 100A, B, or 101A, B .............................. 8 semester hours
Mechanics, Heat, and Sound 203A, Electricity and Light
203B ................................................................. 8 semester hours
Elective ................................................................. 14 semester hours

Third Year

Organic Chemistry 306A, B .............................................. 8 semester hours
Elective ................................................................. 22 semester hours

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

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ENGINEERING

(Combined Curriculum in Letters and Engineering)

University of Michigan

First Year

Rhetoric 106A, B .......................................................... 6 semester hours
Trigonometry and College Algebra 103A, College Algebra
and Analytic Geometry 103B ........................................ 10 semester hours

or

College Algebra and Analytic Geometry 104A, B ................. 8 semester hours
General Chemistry 100A, B, or 101A, B .............................. 8 semester hours
Mechanical and Machine Drawing 221 ................................ 2 semester hours
Descriptive Geometry 222 ............................................. 3 semester hours
Elective ................................................................. 2-4 semester hours
Second Year
Chemical and Metallurgical

Calculus 205A, B  .................................. 8 semester hours
Mechanics, Heat, and Sound 203A, Electricity and Light
  203B .................................. 8 semester hours
Problems 204A, B ................................ 2 semester hours
Engineering Materials 210 ................................ 3 semester hours
Qualitative Analysis 201, Quantitative Analysis 202  ................................ 8 semester hours
Metal Processing 211 ................................ 2 semester hours

Third Year
Chemical and Metallurgical

Principles of Economics 220A, B .................................. 6 semester hours
Organic Chemistry 306A, B .................................. 8 semester hours
or
Language (German preferred) .................................. 8 semester hours
Statics 320 .................................. 3 semester hours
Fundamentals of Speech 105A .................................. 3 semester hours
Social science electives .................................. 6 semester hours
Elective .................................. 6-8 semester hours

Second Year
Aeronautical, Civil, Electrical, Marine, and Mechanical

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

Third Year
Aeronautical, Civil, Electrical, Marine, and Mechanical

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

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), including two hours of political science.
FORESTRY
(Combined Curriculum in Letters and Forestry)
University of Michigan

First Year
Rhetoric 106A, B ........................................ 6 semester hours
General Biology 100A, B ................................. 8 semester hours
Trigonometry and College Algebra 103A, B, or College
Algebra and Analytic Geometry 104A, B ........... 8-10 semester hours
General Mechanical Drawing 120 ..................... 2 semester hours
Elective (to be selected from literature or language) .. 4-6 semester hours

Second Year
General Chemistry 100A, B, or 101A, B ............. 8 semester hours
Botany 221A, B ..................................... 8 semester hours
Principles of Economics 220A, B ..................... 6 semester hours
Elective (to be selected from physics; Botany 222; Speech
105A, B; Sociology 241, 242; literature or language) .. 8 semester hours

Third Year
General Geology 230 ..................................... 3 semester hours
Surveying 210 .......................................... 3 semester hours
Elective (to be selected from American Government 230,
American State and Local Government 231; Geology
230A, B; Oranic Chemistry 306A, B; Zoology 242;
Botany 335; Geography 312 or 325) ................. 24 semester hours

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 semester hours
General Biology 100A, B ................................. 8 semester hours
or
General Chemistry 100 A, B, or 101A, B ............. 8 semester hours
United States History 201A, B ........................ 6 semester hours
French, German, or Spanish 100A, B ............... 8 semester hours
Elective ................................................... 2-3 semester hours

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

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)

University of Michigan Law School
College of Law, University of Illinois.
Detroit College of Law

First Year

Rhetoric 106A, B ........................................ 6 semester hours
Trigonometry and College Algebra 103A, College Algebra
and Analytic Geometry 103B ............................ 10 semester hours
or
College Algebra and Analytic Geometry 104A, B .......... 8 semester hours
General Chemistry 100A, B, or 101A, B ................ 8 semester hours
or
Introduction to Physical Science 105A, B ............... 6 semester hours
or
General Biology 100A, B ................................ 8 semester hours
English History 109A, B .................................. 6 semester hours
Latin, French, German, or Spanish 100A, B (Latin pre-
ferred) ...................................................... 8 semester hours

Second Year

English Literature 107A, B ................................ 6 semester hours
or
Shakespeare 214A, B ..................................... 6 semester hours
United States History 201A, B ............................ 6 semester hours
Principles of Economics 220A, B ......................... 6 semester hours
Accounting 210A, B ...................................... 6 semester hours
General Psychology 200 (University of Michigan) ...... 3 semester hours

Third Year

American National Government 230 ...................... 3 semester hours
American State and Local Government 231 ............ 3 semester hours
Principles of Sociology 241 ............................... 3 semester hours
Modern Social Problems 242 ............................. 3 semester hours
Public Finance 320 ............................................. 3 semester hours
Elective (to be selected from Speech 105A, B; Money and
Credit 221A, B; language or literature, or laboratory
science) .................................................. 1-5 semester hours

Note.—1. An average scholarship of two honor points is required by the University of
Michigan 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 in-
clude the following:

English ............................................. 6 semester hours
Chemistry ......................................... 14 semester hours
Physics ............................................. 8 semester hours
Biology ............................................. 8 semester hours
French, German, or Spanish ....................... 12-16 semester hours
Elective to total .................................... 90 semester hours

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
Rhetoric 106A, B ........................................... 6 semester hours
General Biology 100A, B .............................. 8 semester hours
General Chemistry 100A, B, or 101A, B .............. 8 semester hours
French or German ...................................... 8 semester hours

Second Year
English Literature 107A ................................. 3 semester hours
Mechanics, Sound, and Heat 203A, Electricity and Light
203B ...................................................... 8 semester hours
Qualitative Analysis 201, Quantitative Analysis 202 .... 8 semester hours
French or German ...................................... 8 semester hours
Elective ............................................... 2 semester hours

Third Year
English Literature 107B ................................... 3 semester hours
Organic Chemistry 306A, B ............................. 8 semester hours
Principles of Economics 220A, B ......................... 6 semester hours
Principles of Sociology 241 ............................ 3 semester hours
General Psychology 200 ................................ 3 semester hours
Anatomy 211A .......................................... 4 semester hours
Note.—1. Application for admission to a College of Medicine should be made by the middle of the school year preceding the year in which 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.
3. *For the present, Wayne University will accept 60 semester hours for entrance. For details, see Wayne University catalog.

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.

**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>Intermediate Algebra 100A, Solid Euclidean Geometry 100B</td>
<td>5</td>
</tr>
<tr>
<td>Trigonometry and College Algebra 103A, College Algebra and Analytic Geometry 103B</td>
<td>10</td>
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</table>

**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qualitative Analysis 201, Quantitative Analysis 202</td>
<td>8</td>
</tr>
<tr>
<td>Bacteriology 212, Zoology 242B</td>
<td>8</td>
</tr>
<tr>
<td>Group I elective</td>
<td>6-8</td>
</tr>
<tr>
<td>Group III elective</td>
<td>6</td>
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</table>

**Third Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Mechanics Sound and Heat 203A, Electricity and Light 203B</td>
<td>8</td>
</tr>
<tr>
<td>Organic Chemistry 306A</td>
<td>4</td>
</tr>
<tr>
<td>Bio-Chemistry 350, 351</td>
<td>3</td>
</tr>
<tr>
<td>Physiology 211</td>
<td>4</td>
</tr>
<tr>
<td>Group I elective</td>
<td>3-4</td>
</tr>
<tr>
<td>Group III elective</td>
<td>6</td>
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<tr>
<td>Elective</td>
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</table>

**Fourth Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Technology 335 (400)</td>
<td>30</td>
</tr>
</tbody>
</table>

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.

**NURSING**

(Combined curriculum in Letters and Nursing)

Bronson Hospital, Kalamazoo

A five-year curriculum leading to the B.S. degree and the R.N. diploma. The first and fifth years are spent entirely in work at Western Michigan College of Education. The work of the third and fourth years is in the hospital. During the second year two-thirds of the work is at the college.

**First Year**

Rhetoric 106A, B ........................................ 6 semester hours
General Biology 100A, B .............................. 8 semester hours
Modern European History 108A, B .................. 6 semester hours
Elective* ............................................. 10 semester hours

**Second Year**

Anatomy and Physiology (for Nurses) 213 ............ 4 semester hours
Chemistry (for Nurses) 106 ............................ 3 semester hours
Bacteriology (for Nurses) 214 ......................... 3 semester hours
Sociology (for Nurses) 244 ............................ 2 semester hours
Nutrition 219 ........................................ 2 semester hours
General Psychology (for Nurses) 202 ................... 2 semester hours

**Third and Fourth Years at Bronson Hospital**

**Fifth Year**

English or foreign language ........................... 12 semester hours
Survey of American Government 234 .................. 2 semester hours
Modern Social Problems 242 .......................... 3 semester hours
Elective .............................................. 13 semester hours

Note.—1. *General Chemistry 100A, B is required unless high-school chemistry was presented for entrance.

2. In addition to the 76 semester hours of work outlined above, the student is credited with 40 semester hours for the work done in the hospital. This credit may be used only in the Nursing curriculum. Nursing may constitute a major in this curriculum.

3. Four class hours of physical education are required to be taken some time in the first and/or fifth years.

4. A course in library methods is required.

**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

Rhetoric 106A, B ........................................... 6 semester hours
Fundamentals of Speech 105A .......................... 3 semester hours
General Biology 100A, B .................................... 8 semester hours
Elementary Design 215 .................................... 3 semester hours
Ceramics and Jewelry 225 ................................ 3 semester hours
Printing 140A .................................................. 3 semester hours
Electives from Group I .................................... 4 or 7 semester hours

Second Year

Anatomy and Physiology (for Occupational Therapists) 215 ...................... 4 semester hours
Kinesiology 216A ............................................ 2 semester hours
Theory of Occupational Therapy 210A, B .................. 4 semester hours
General Psychology 200 .................................... 3 semester hours
Special Education Shop 208 ................................ 3 semester hours
Therapeutic Crafts 220, 221 or 222 ......................... 4 semester hours
Stitchery 223 .................................................. 4 semester hours
Rug Making 224 ............................................. 1 semester hour
Basketry 226 .................................................. 1 semester hour
Leatherwork 227 ............................................. 1 semester hour
Elective ....................................................... 3 semester hours

Third and Fourth Year

Kinesiology 216B ............................................ 2 semester hours
Political Science ............................................. 2-3 semester hours
Weaving 228 ................................................... 4 semester hours
Clinical Training (at affiliating hospitals)
  Neurology and Psychiatry 330 ............................ 3 semester hours
  Clinical Subjects 332 ..................................... 4 semester hours
  Clinical Observations 334 ................................ 4 semester hours
  Social Service in Hospitals 351 .......................... 3 semester hours
  Hospital Case Studies 352 ................................ 3-4 semester hours
  Undifferentiated Credit .................................. 9 semester hours
Theory of Occupational Therapy 310 ......................... 2 semester hours
Bookbinding 229 ............................................. 2 semester hours
Elective from Group I ...................................... 5 semester hours
Elective ....................................................... 9 semester hours

Note.—1. Thirty semester hours of college credit (as listed in first year above) must be earned before the student is admitted to the School of Occupational Therapy. This admittance is based on the approval of the applicant by the Coordinating Committee of the school, on the basis of general aptitude for the work and the scholastic record submitted with the special application blank.
2. A portion of the 9 months of clinical training may be taken between the second and third years.
3. Four class hours of physical education are required.
4. 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

**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>Fundamentals of Speech 105A</td>
<td>3</td>
</tr>
<tr>
<td>General Biology 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Modern Europe 108A, B or Foundations of Western Civilization 100A, B</td>
<td>6</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>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Psychology of Personality 209 or Introduction to Mental Hygiene 234</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>Social Psychology 243</td>
<td>2</td>
</tr>
<tr>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
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</table>

**Third Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Field of Social Work 255</td>
<td>2</td>
</tr>
<tr>
<td>Any 3 of the following sociology courses:</td>
<td></td>
</tr>
<tr>
<td>Rural Sociology 245</td>
<td>3</td>
</tr>
<tr>
<td>Problems of Family Life 247</td>
<td>3</td>
</tr>
<tr>
<td>Cultural Anthropology 248</td>
<td>3</td>
</tr>
<tr>
<td>Urban Community 340</td>
<td>2</td>
</tr>
<tr>
<td>Social Control 341</td>
<td>2</td>
</tr>
<tr>
<td>Criminology 342</td>
<td>3</td>
</tr>
<tr>
<td>Population 343</td>
<td>3</td>
</tr>
<tr>
<td>Race and Inter-cultural Relations 347</td>
<td>2</td>
</tr>
<tr>
<td>Contemporary Social Movements 349</td>
<td>2</td>
</tr>
<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>Electives</td>
<td>13-14</td>
</tr>
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</table>

**Fourth Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Social Research 348</td>
<td>3</td>
</tr>
<tr>
<td>Family and Child Welfare 351</td>
<td>2</td>
</tr>
<tr>
<td>Social Legislation and Public Welfare 353</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Social Work 355</td>
<td>3</td>
</tr>
<tr>
<td>Orientation to Field Work 358A</td>
<td>2</td>
</tr>
<tr>
<td>Supervised Field Work 358B</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>14</td>
</tr>
</tbody>
</table>

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 44 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 tool subjects as the following may well be considered. Elementary Typewriting 101A, Home and Its Management 222, Economics of Consumption 223, Community Recreations, 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.

3. A course in library methods is required.

4. Ten class hours of physical education are required.

MUSIC

B.M. Degree with a major in Voice*

First Year

Rhetoric 106A, B ........................................ 6 semester hours
Voice 45A, B ........................................ 4 semester hours
Freshman Theory 106A, B .......................... 6 semester hours
Elementary Acoustics 110 ............................ 2 semester hours
Piano Class 117A, B .................................. 2 semester hours
English Diction and Song Literature 122A, B .... 0 semester hour
Elective ............................................ 12 semester hours
Library Methods

Second Year

Voice 46A, B ........................................ 4 semester hours
Advanced Sight-Singing and Ear-Training 205A, B .... 4 semester hours
Advanced Harmony 206A, B .......................... 6 semester hours
Music Literature 207A, B ............................ 6 semester hours
Italian Diction and Song Literature 222A, B ........ 0 semester hour
English Literature 107A, B ........................... 6 semester hours
or
General Literature 124A, B ........................... 6 semester hours
or
Nineteenth Century Prose 205A, B .................... 4 semester hours
Elective ............................................ 6 semester hours

Third Year

Voice 47A, B ........................................ 6 semester hours
Counterpoint 305A, B .................................. 6 semester hours
Composition 306A, B .................................. 6 semester hours
Style and Structure 310A ............................. 3 semester hours
Contemporary Music 310B .............................. 3 semester hours
Choral Conducting 311B ............................... 1 semester hour
French Diction and Song Literature 322A, B .... 0 semester hour
Elective ............................................ 7 semester hours
### MUSIC

#### Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</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>Elective</td>
<td>12</td>
</tr>
</tbody>
</table>

Note. — 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.

#### 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>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>Elective</td>
<td>14</td>
</tr>
</tbody>
</table>

Library Methods

### 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>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>Elective</td>
<td>12</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>Instrumental Conducting 311A</td>
<td>1</td>
</tr>
<tr>
<td>Choral Conducting 311B</td>
<td>1</td>
</tr>
<tr>
<td>Elective</td>
<td>6</td>
</tr>
</tbody>
</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>2</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>Elective</td>
<td>12</td>
</tr>
</tbody>
</table>
Note.—*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. See page 165 for specific number of courses indicating the various levels.

**MUSIC**

B.M. Degree with a major in Composition*

<table>
<thead>
<tr>
<th>First Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Applied Music**</td>
<td>4</td>
</tr>
<tr>
<td>Freshman Theory 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>String Class 118A, B</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>14</td>
</tr>
</tbody>
</table>

| Library Methods                                |       |

| Second Year                                    |       |
| Applied Music                                  | 4     |
| Advanced Sight-Singing and Ear-Training 205A, B| 4     |
| Advanced Harmony 206A, B                       | 6     |
| Music Literature 207A, B                       | 6     |
| Woodwind Class 219A, B                         | 2     |
| Style and Structure 310A                       | 3     |
| Contemporary Music 310B                        | 3     |
| Elective                                       | 4     |

| Third Year                                     |       |
| Applied Music                                  | 6     |
| Counterpoint 305A, B                           | 6     |
| Composition 306A, B                            | 6     |
| Instrumental Conducting 311A                   | 1     |
| Choral Conducting 311B                         | 1     |
| Brass Class 320A, B                            | 2     |
| Elective                                       | 10    |

| Fourth Year                                    |       |
| Applied Music                                  | 6     |
| Orchestration 355A, B                          | 6     |
| Advanced Composition 356A, B                   | 6     |
| Elective                                       | 14    |

Note.—1.*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.

2.**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 CURRICULUM

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</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>General Chemistry 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>History</td>
<td>6</td>
</tr>
<tr>
<td>Modern Language</td>
<td>8</td>
</tr>
<tr>
<td>Electives</td>
<td>2-3</td>
</tr>
<tr>
<td>Library Methods</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td></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 of 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>Electives</td>
<td>3</td>
</tr>
<tr>
<td>(Students may elect Reading Interest of Children 202 3 semester hours)</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
</tbody>
</table>

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>or</td>
<td></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>Rural Economics 241</td>
<td>3</td>
</tr>
<tr>
<td>Rural Sociology 242</td>
<td>3</td>
</tr>
<tr>
<td>American Rural Government 332</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>5 or 8</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 Libraries 363</td>
<td>3</td>
</tr>
<tr>
<td>Public Speaking 206</td>
<td>2</td>
</tr>
<tr>
<td>Curriculum Enrichment 305</td>
<td>3</td>
</tr>
<tr>
<td>Reading Interest of Adults 304</td>
<td>2</td>
</tr>
<tr>
<td>Library Observation and Practice 330</td>
<td>2-3</td>
</tr>
</tbody>
</table>
Electives (English or History) .......................... 6 semester hours
Electives ..................................................... 3 semester hours

(A period of block practice in a county library preceding the opening of college in the fourth year).
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 Training, Home Economics and Industrial Education. The primary objective of these curricula is 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.

Employees in offices, stores, and industries may be admitted as special students in the in-service vocational courses without reference to previous school experience, provided they are recommended for such training by a responsible official of the employing firm.

BUSINESS TRAINING

In the field of business, there are at present three programs available to the student interested in qualifying for selling, secretarial, or junior administrative positions. The two-year terminal curricula in retail selling and secretarial practice accommodate students who wish to secure comprehensive occupational training on a standard college basis but who do not choose to remain in college for the full four-year course. Both of these programs are on a cooperative work-and-study basis, thus assuring the student of every available opportunity to meet, on a practicable paid basis, the requirements of the full-time job for which he is preparing. For students interested in preparing for a career in business on a junior administrator level, the Department of Business Education makes available a four-year vocational training program in secretarial science and office management.

HOME ECONOMICS

A two-year terminal course is offered to students who do not intend to graduate. This course is planned to help young women who wish to make homemaking a career.

The Department of Home Economics is working toward a four-year curriculum for training dietitians. It is planned to offer more courses in this curriculum each year.

INDUSTRIAL ARTS EDUCATION

This department offers a wide variety of opportunities for vocational training. The areas of instruction cover woodwork, drawing, printing, and metal shop. All the elementary courses are open to women.

INDUSTRIAL EDUCATION

Courses are offered for aviation mechanics, air transportation, draftsmen, machine tool operators, machinists, tool and die makers, sheet metal work-
ers, arc and oxy-acetylene welders, radio service and communications specialists. There are courses in air conditioning, refrigeration, radio, printing, shop maintenance, cabinet making, pattern making, shop mathematics, blueprint reading, trade science, and drafting. Courses are set up in units and vary in length.

Note.—Students can begin courses on the first day of any calendar week following proper enrollment and payment of tuition and fees.

BUSINESS ADMINISTRATION

B.S. Degree

The following business administration curriculum is designed for students interested in business training as preparation for employment in business or for ownership of a small business establishment. While the program is eight semesters in length, an effort has been made to incorporate a broad business training in the first four semesters so that students may terminate their training at that time, if need be, with a feeling of definite vocational preparation. The program permits degree candidates to concentrate in one of the following fields of business specialization: accounting, retailing, or general business.

Any high school graduate is eligible for admission to the first four semesters of the program. To be eligible to continue beyond the fourth semester as a degree candidate, regular college entrance requirements must be met.

First and Second Years

Rhetoric 106A, B .................................. 6 semester hours
Statistical and Financial Ratios 212 .................................. 3 semester hours
Description of Industry 120A, B .................................. 4 semester hours
Accounting Principles 210A, B .................................. 6 semester hours
Principles of Economics 220A, B .................................. 6 semester hours
Business Insurance and Taxes 222 .................................. 3 semester hours
Business Correspondence 232 .................................. 3 semester hours
Business Problems 239* .................................. 3 semester hours
Electives* .................................................. 29 semester hours

Third and Fourth Years

Introduction to Commercial Geography 218 .................................. 3 semester hours
or
Advanced Commercial Geography 318 .................................. 3 semester hours
General Psychology 200 .................................. 3 semester hours
Introduction to Statistics 211 .................................. 2 semester hours
Mathematics of Finance 227 .................................. 3 semester hours
Mathematics of Insurance 228 .................................. 3 semester hours
American National Government 230 .................................. 3 semester hours
American State and Local Government 231 .................................. 3 semester hours
Economic History of the United States 312 .................................. 3 semester hours
Business Law 320A, B .................................. 6 semester hours
In addition to the preceding requirements all degree candidates are required to specialize in one of three fields: (1) accounting, (2) retailing, or (3) general business. For specialization in these fields the following courses are required:

**For specialization in accounting:**
- Accounting Principles 210A, B ........................... 6 semester hours
- Advanced Accounting 310A, B .......................... 6 semester hours
- Cost Accounting 311 ................................ 3 semester hours
- Tax Accounting 312 .................................. 3 semester hours

**For specialization in retailing**—a minimum of 12 semester hours from the following:
- Fundamentals of Retailing 140A, B ..................... 6 semester hours
- Retail Publicity 240 .................................. 3 semester hours
- Retail Credit and Collections 241 ..................... 3 semester hours
- Store Organization 251A, B ............................ 4 semester hours

**For specialization in general business**—a minimum of 12 semester hours from the following:
- Money and Credit 221A, B ............................. 4 semester hours
- Business Administration 321 .......................... 3 semester hours
- Corporations 322 .................................... 3 semester hours
- Marketing 323 ........................................ 3 semester hours
- Transportation 324 ................................... 3 semester hours
- Labor Problems 325A, B ................................ 4 semester hours
- Business and Government 326 ........................ 3 semester hours

1. *As prerequisite for continuing training in the third and fourth years, the following courses are required and are to be taken as elective courses:
   - Trigonometry and College Algebra 103A, B
   - College Algebra and Analytic Geometry 104A, B
   - Fundamentals of Speech 105A, B
   - Language or literature (minimum of 6 semester hours)

2. Physical education: Women are requested to take ten class hours, including Physical Education 160 and one individual sport. (A class hour is to be interpreted to mean one hour of class work each week for one semester.) *Men must participate for three class hours weekly during the first six semesters of residence.

3. A course in library methods is required.
## Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting Principles 211A, B</td>
<td>6</td>
</tr>
<tr>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Secretarial Practice 230A, B</td>
<td>4</td>
</tr>
<tr>
<td>Language or literature</td>
<td>6-8</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A, B</td>
<td>6</td>
</tr>
<tr>
<td>Elective</td>
<td>2-0</td>
</tr>
</tbody>
</table>

## Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Correspondence 232</td>
<td>3</td>
</tr>
<tr>
<td>Office Organization and Management 239</td>
<td>3</td>
</tr>
<tr>
<td>Business Law 320A</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Statistics 211</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>16</td>
</tr>
</tbody>
</table>

## Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Administration 336</td>
<td>3</td>
</tr>
<tr>
<td>Business Problems 339</td>
<td>3</td>
</tr>
<tr>
<td>Psychology of Personality 207</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>22</td>
</tr>
</tbody>
</table>

Note.—1. *Courses required for a major sequence in this curriculum are starred.

2. Physical education: Women are required to take ten class hours, including Physical Education 100 and one individual sport. (A class hour is to be interpreted to mean one hour of class work each week for one semester.) Men must participate for three class hours weekly during the first four semesters of residence.

3. A course in library methods is required.

---

### COOPERATIVE PROGRAM IN RETAILING (Two Years)

A two-year curriculum designed to prepare students for work in the field of retailing. This work is organized on the cooperative plan 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.

**Entrance requirements:** high-school graduation, recommendation of the high-school principal, aptitude for store work, and approval of the Department of Business Education.

Successful completion of the course leads to a diploma in retailing. If, at a later date, such students desire to secure a degree, credit obtained for work taken in the two-year program may be applied toward degree requirements, (see degree requirements, pages 92 to 94) provided regular college entrance requirements are met.

Students enrolled in this course 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 their schedules, abilities, and work programs will permit. Students should consult their faculty adviser before making a selection of electives.
COOPERATIVE PROGRAM IN SECRETARIAL TRAINING

First Year
Retail Records 111 ........................................ 3 semester hours
Fundamentals of Retailing 140A, B ....................... 6 semester hours
Retail Salesmanship 150 .................................. 3 semester hours
Merchandise and Job Analysis 151A, B ................. 6 semester hours
Personal and Social Problems 120 ....................... 1 semester hour
Elective ...................................................... 11 semester hours

Second Year
Interior and Window Display 224 ....................... 2 semester hours
Retail Credit and Collections 241 ....................... 3 semester hours
Store Organization 251A, B ............................... 4 semester hours
Retail Publicity 240 ........................................ 3 semester hours
Coordinated Business Experience 200A, B ............ 2 semester hours
Elective ...................................................... 16 semester hours

Note.—1. Physical education: Women are required to take four class hours, including Physical Education 100 and one individual sport. (A class hour is to be interpreted to mean one hour of class work each week for one semester.) Men must participate for three class hours weekly during the first four semesters of residence.
2. A course in library methods is required.

COOPERATIVE PROGRAM IN SECRETARIAL TRAINING (Two Years)

This curriculum is intended primarily for those students who wish to qualify for various types of clerical and stenographic positions while enjoying the advantages of social and cultural contacts available to regular college students. The courses are so organized that the student may get basic training in fields other than vocational.

Entrance requirements: high-school graduation, recommendation of high school principal, and approval of Department of Business Education.

An important feature of this course is the requirement that the student accept part-time employment during the second year. The work experience is a definite part of the instructional plan of the program and is under the direction of a co-ordinator.

Graduates of this course receive the Secretarial Diploma and are assisted by the college and departmental placement offices in securing suitable full-time positions.

High-school graduates who are admitted to this curriculum without having the regular college entrance sequences may qualify for a degree by removing the deficiencies.

Enrollment in this curriculum is definitely limited. Therefore, students desiring to pursue this curriculum should make application at least thirty days before the date of actual matriculation.
First Year

Rhetoric 106A, B ................................................. 6 semester hours
Description of Industry 120A, B ......................... 4 semester hours
Business Mathematics 120 ................................. 2 semester hours
*Secretarial Science 130A, B ........................... 10 semester hours
Personal and Social Problems 120 ..................... 1 semester hour
Elective ......................................................... 7 semester hours
Physical Education

Second Year

Secretarial Accounting 211A, B .......................... 6 semester hours
Principles of Economics 220A, B .......................... 6 semester hours
Secretarial Practice 230A, B .............................. 4 semester hours
Filing Principles and Techniques 236 ................. 2 semester hours
Coordinated Business Experience 200A, B ........ 2 semester hours
Elective .......................................................... 10 semester hours
Physical Education

Note.—1. *Students who have not had shorthand or typewriting in high school should register for Shorthand and Typewriting 100A.
2. Students should consult their faculty adviser before making their selections for electives.
3. Physical education: Women are required to take four class hours, including Physical Education 100 and one individual sport. Men are required to take 6 class hours. (A class hour is to be interpreted to mean one hour of class work each week for one semester.)
4. A course in library methods is required.

HOMEMAKING (Two Years)*

(For students who do not plan to get a degree)

First Year

First Semester

Problems in Home Living 100 ............................. 1 semester hour
Clothing Clinic and Textiles 103 .......................... 3 semester hours
and
Elementary Design 105 .................................... 2 semester hours
or
Foods 111 ...................................................... 3 semester hours
and
Hygiene 112 .................................................. 2 semester hours
Rhetoric 106A ................................................. 3 semester hours
General Biology 100A ...................................... 4 semester hours
Elective (to be selected from history, English, or speech) 3 semester hours
Library Methods
Second Semester

Clothing Clinic and Textiles 103 ......................... 3 semester hours
Elementary Design 105 ................................... 2 semester hours
or
Foods 111 .................................................. 3 semester hours
and
Hygiene 112 ................................................ 2 semester hours
Rhetoric 106B ............................................. 3 semester hours
Elective (to be selected from history, English, or speech) ........... 7 semester hours
Physical Education

Second Year

First Semester

Clothing 205 ................................................. 3 semester hours
or
Nutrition 211 .............................................. 3 semester hours
Costume Design 209 ..................................... 2 semester hours
or
Home Furnishings 221 .................................... 2 semester hours
Home Nursing 223 ........................................ 2 semester hours
American State and Local Government 231 ................. 3 semester hours
Elective (to be selected from economics or sociology) .......... 3 semester hours
Elective (to be selected from English, speech, history, or science) ........ 5 semester hours
Physical Education

Second Semester

Clothing 205 ................................................. 3 semester hours
or
Nutrition 211 .............................................. 3 semester hours
Costume Design 209 ..................................... 2 semester hours
or
Home Furnishings 221 .................................... 2 semester hours
Human Growth and Development 251 ....................... 3 semester hours
Household Physics 202 .................................. 2 semester hours
Elective (to be selected from economics or sociology) .......... 3 semester hours
Elective (to be selected from English, speech, history, or science) ........ 3 semester hours
Physical Education

Note.—For information concerning the four-year course in Home Economics see pages 101-102.
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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>2</td>
</tr>
<tr>
<td>Speech 105A</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics of Buying and Investment 200</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Structures 152</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Welding 156</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Electricity 150</td>
<td>2</td>
</tr>
<tr>
<td>Engine Assembly and Disassembly 153</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>11</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></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>Accounting 210</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Psychology of Personality 207</td>
<td>3</td>
</tr>
<tr>
<td>Survey of American Government 234</td>
<td>2</td>
</tr>
<tr>
<td>Statistical and Financial Ratio 212</td>
<td>3</td>
</tr>
<tr>
<td>Pilot Training and Flight Theory 294</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Sheetmetal 254</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Maintenance 257</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Hydraulics and Brakes 252</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

**Third Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</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 325</td>
<td>3</td>
</tr>
<tr>
<td>Business Correspondence and Report Writing 330</td>
<td>3</td>
</tr>
<tr>
<td>Tax Accounting 312</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>
AIR TRANSPORTATION CURRICULUM

Radio Communications 387 .................................. 2 semester hours
Meteorology and Navigation 336 .............................. 2 semester hours
Carburetion and Lubrication 261 ................................. 2 semester hours
Engine Overhaul 253 ........................................ 2 semester hours
Ignition and Accessories 255 .................................. 2 semester hours
Elective .......................................................... 7 semester hours

32 semester hours

Fourth Year

Personnel Administration 336 .................................. 3 semester hours
Business Administration 321 .................................. 3 semester hours
Business Law ...................................................... 3 semester hours
Airport Selection and Layout 351 .............................. 2 semester hours
Air Traffic and Cargo 352 ...................................... 2 semester hours
Airport Management 353 ......................................... 2 semester hours
Air Transportation Economics 356 ............................. 2 semester hours
Control Tower Operation 357 .................................... 2 semester hours
Engine Operation 255 ........................................... 2 semester hours
Link Operation 355 ................................................ 2 semester hours
Elective ............................................................ 9 semester hours

32 semester hours

Note.—Minimum of 128 semester hours. Major of at least 40 semester hours in aviation.
Two minors of 15 semester hours each 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 60 semester hours in these groups; and at least 60 semester hours in
groups IV, V, VI, and VII. Group requirements must be met.

AIRCRAFT MECHANICS (Two Years)

For those students who wish to work for airplane and for engine mechanics licenses issued by the Civil Aeronautics Administration. Upon completion of the course, a certificate is granted.

First Year

Aircraft Electricity 150 .......................................... 2 semester hours
Aircraft Structures 152 .......................................... 6 semester hours
CAR and Theory of Flight 154 .................................. 2 semester hours
Aircraft Drawing 158 ............................................ 2 semester hours
Aircraft Instruments and Radio 250 ............................ 2 semester hours
Aircraft Welding 156 ............................................. 3 semester hours
Aircraft Hydraulics and Brakes 252 ............................ 2 semester hours
Aircraft Sheetmetal 254 ........................................ 3 semester hours
Aircraft Maintenance 257 ........................................ 6 semester hours
Second Year

Engine Assembly and Disassembly 153 .................. 6 semester hours
Carburetion and Lubrication 251 ...................... 2 semester hours
Ignition and Accessories 253 ......................... 4 semester hours
Engine Overhaul 255 .................................. 4 semester hours
Engine Operation 256 .................................. 6 semester hours
Propellers 261 ........................................... 2 semester hours

AVIATION MECHANICS CURRICULUM (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.

An accurate log book is kept by each student, listing repairs and service work completed. This log is retained by the student as evidence of practical experience. 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.

Specialist ratings can be acquired in machine shop, sheet metal, welding, hydraulics, propellers, instruments, and aircraft radio. These ratings are of interest to those preparing as ground mechanics.

Ground School courses are offered in preparation for the private and commercial pilot certificate of aeronautical knowledge. These courses are adapted to teachers preparing to offer pre-flight aeronautic courses sponsored in many high schools. Flight training can be included for those actively interested as flight instruction is to be made available at nominal cost.

VOCATIONAL LINO TYPE CURRICULUM (Two Years)

A two-year course for specific training in linotype operation.

First Year

Elementary Linotype Composition 146A .................. 5 semester hours
Elementary Hand Composition 142A ..................... 4 semester hours
English for Printers 179A and B .......................... 6 semester hours
Mathematics for Printers 178A and B .................... 6 semester hours
Linotype Newspaper Composition 146B .................. 5 semester hours
Advanced Hand Composition 142B ....................... 4 semester hours
Second Year

Linotype Job Composition 246A ...................... 5 semester hours
Linotype Maintenance 247A and B .................. 8 semester hours
Layout and Design 248A and B .................... 6 semester hours
Proofreading 249A ................................ 3 semester hours
Linotype Book Composition 246B ................... 5 semester hours
History of Printing 244 ............................ 3 semester hours

AIR CONDITIONING AND REFRIGERATION (Two Years)

This curriculum offers basic training in all the elements governing conditioning of air, the theory and function of refrigeration, basic physical laws involved, and installation techniques. The work prepares specifically for the fields of installation and servicing.

MACHINE SHOP CURRICULUM (Two Years)

This two-year curriculum is offered to students who wish to enter the machinist's trade. The curriculum consists of a number of unit courses which are based upon the training needs of machine tool operators and tradesmen. With this arrangement, the special training needs of each individual can be met. The machinist elects machine shop and related subjects courses to complete two years of training as a machinist.

RADIO CURRICULUM (Two Years)

Basic training for the radio service mechanic, with related subjects that lead to Federal Communications Commission operators' permits and examinations, and knowledge and skill necessary to service and operate all forms of radio and electronics equipment.

SHEET METAL CURRICULUM (One Year)

The curriculum covers most phases of sheet metal layout and construction of small production parts, blowpipe fabrication, and cabinet sheet metal fabrication accompanied by a comprehensive course in sheet metal drafting.

TOOL AND DIE MAKING CURRICULUM (Three Years)

This course leads to the development of superior skills in the precision operation of machine tools. Special tools, jigs, fixtures, and dies to blank, bend, form, or mold duplicate parts, designed, fabricated, and tested on production runs in the machine shop. The two-year machine shop curriculum or its equivalent is a prerequisite.
TRADE DRAFTING CURRICULUM (Two Years)

Practical work assignments are given at the start, involving sketching of machine parts. Blueprints are examined and explained to acquaint the student rapidly with the conventions and symbols used in machine drafting. The machinery handbook is used for reference to familiarize the student with materials, specifications and tolerances, limits and standards common to production work. Detail design from assembly sketches of small machines, giving a consideration of production costs in overhead, labor, and materials.

WELDING CURRICULUM (One Year)

A combination course to train gas welding operators and arc welding operators leads to qualifying tests for certified welders.
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
HELEN A. MCKINLEY, Secretary of the Graduate Division

ADVISORY COUNCIL

ELDA O. BAUMANN  GERALD OSBORN
WILLIAM J. BERRY  PAUL ROOD
DEYO B. FOX  MATHILDE STECKELBERG
LEONARD C. KERCHER

ELMER H. WILDS, Chairman
HELEN A. MCKINLEY, Secretary
PAUL V. SANGREN, Ex officio

FACULTY

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VIOLET BEIRGE, Ed.D., Professor of Education
WILLIAM J. BERRY, Ph.D., Professor of Geography
HOWARD F. BIGELOW, A.M., Professor of Economics
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LOFTON V. BURGE, Ph.D., Professor of Education
CHARLES H. BUTLER, Ph.D., Professor of Mathematics
HOMER L. J. CARTER, A.M., Professor of Psychology
MANLEY M. ELLIS, Ph.D., Professor of Education
JOHN L. FEIRER, Ed.D., Professor of Industrial Arts Education
DEYO B. FOX, Ph.D., Professor of Vocational and Practical Arts Education
ORIE I. FREDDERICK, Ph.D., Professor of Education
WALLACE A. GARNEAU, A.M., Professor of Speech
JOSEPH W. GIACHINO, A.M., Professor of Trade and Industrial Education
CHARLES C. GIBBONS, Ph.D., Professor of Psychology
J MARSHALL HANNA, Ed.D., Professor of Business Education
GEORGE H. HILLIARD, Ph.D., Professor of Education
FRANK J. HINDS, A.M., Professor of Biology
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LEONARD C. KERCHER, Ph.D., Professor of Sociology
JAMES O. KNAUSS, Ph.D., Professor of History
LAWRENCE G. KNOWLTON, Ph.D., Professor of Chemistry
EDWIN M. LEMERT, PH.D., Professor of Sociology
MARGARET E. MACMILLAN, PH.D., Professor of History
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RALPH N. MILLER, PH.D., Professor of English
FLOYD W. MOORE, PH.D., Professor of Economics
LUCILLE A. NOBBS, A.M., Professor of English
LOY NORRIX, PH.D., Professor of Educational Administration
GERALD OSBORN, PH.D., Professor of Chemistry
PAUL ROOD, PH.D., Professor of Physics
ROBERT R. RUSSEL, PH.D., Professor of History
NANCY E. SCOTT, PH.D., Professor of History
RUSSELL H. SEIBERT, PH.D., Professor of History
D. C. SHILLING, P.D., Professor of Political Science
MARION TAMIN, A.M., Professor of Romance Languages
ALFRED THEA, A.M., Professor of Education
W. VALDO WEBER, PH.D., Professor of Political Science
WILBUR D. WEST, PH.D., Professor of Physical Education
ELMER H. WILDS, ED.D., Professor of Education
EDWIN M. WILLIAMSON, M.D., Professor of Psychiatry

INFORMATION

GENERAL STATEMENT

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.

ORGANIZATION

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. Students who fail to make previous arrangements for admission may submit their credentials to the Director of the Graduate Division and be given tentative admission, pending review by the Dean of the Graduate School. 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 these application blanks.

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 requirements 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 minimum credit requirement for the master's degree (Master of Arts or Master of Science) 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. In satisfying the twenty-four-hour requirement for the master's
degree the following conditions must be met: (1) at least twelve hours must be earned while the student is carrying a full-time program of work during a term or during two summer sessions, with attendance during one of the summer sessions or its equivalent being on the campus at the University of Michigan; (2) at least twelve hours must be earned in courses in which enrollment is restricted to graduate students. A student must complete his master's work within six consecutive years after the first enrollment in the Graduate School.

SUBSTITUTION OF COURSE WORK FOR THESIS

After a student has completed twelve hours of his graduate work, he may exercise the option of taking six hours of work in lieu of the thesis, thus making the credit requirement thirty hours without a thesis. If a student desires to substitute six hours work in lieu of the thesis, he will obtain a petition blank from the office of the director.

The substitution of six hours of course work for the thesis does not remove the requirement of two seminars (or B192 or C192 and one seminar). An individual intending to go on for the doctorate must prepare a master's thesis or its equivalent. Usually the courses to be substituted consist of two courses in Education and one cognate course.

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 and one seminar; 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 undoubted 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 20, 1947, from 9 to 12 A.M. and from 1 to 4 P.M. Registration for the second semester will be on Saturday, February 7, 1948, 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 27, and will continue through Saturday, February 1. All Saturday classes for the second semester will begin on Saturday, February 14, and continue through Saturday, June 5. 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, $70; Nonresidents, $150.

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>$25</td>
<td>$50</td>
</tr>
<tr>
<td>2 Four hours</td>
<td>35</td>
<td>70</td>
</tr>
<tr>
<td>3 Five hours</td>
<td>40</td>
<td>80</td>
</tr>
<tr>
<td>4 Six hours</td>
<td>45</td>
<td>90</td>
</tr>
<tr>
<td>5 Seven hours</td>
<td>50</td>
<td>100</td>
</tr>
<tr>
<td>6 Eight hours</td>
<td>55</td>
<td>110</td>
</tr>
<tr>
<td>7 Nine hours</td>
<td>60</td>
<td>120</td>
</tr>
</tbody>
</table>

In case of complete voluntary withdrawals after the beginning of any one semester, refunds 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 Di-
vision 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 ten or more hours in the Graduate Division shall pay the announced fee of $70.00 for Michigan students and $150.00 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 ten 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
1947 - 1948

First Semester

Chemistry 183* Physical Chemistry ..................... Knowlton
Economics 225 History of Economic Thought ............... Moore
Education B122 Modern High School Curriculum .......... Frederick
B192 Methods of Research in Education ........... Wilds
B250 Principles of School Administration ... Norrix
B251 Supervision of Elementary Instruction .... Beirge
C107b Psychology of Elementary-School Subjects ....................... Hilliard
C119 Educational Guidance and Adjustment ... Manske
C175 Psychology of Child Development .......... Ellis
E101 Vocational Guidance ......................... Fox
E151 Principles and Problems of Business Education ..................... Hanna
<table>
<thead>
<tr>
<th>COURSES OFFERED</th>
<th>151</th>
</tr>
</thead>
</table>

**English**
- 182* American Literature .......... Nobbs
- 183* The English Novel .......... Brown
- 103* Anglo-Saxon .......... Brown

**Health**
- 171* Public Health Practice .......... Hinds

**History**
- 147* Diplomatic History of World War II .......... Scott
- 162* Era of the American Revolution .......... Russel

**Political Science**
- 141* Municipal Government .......... Shilling
- 165* Contemporary Problems .......... Weber

**Physics**
- 105* Modern Physics—Atomic .......... Rood

**Sociology**
- 162* Cooperative Social Organization .......... Kercher
- 243* Child Psychiatry .......... Williamson

**Second Semester**

**Chemistry**
- 184* Physical Chemistry .......... Knowlton

**Economics**
- 121* Labor .......... Bowers

**Education**
- B120 Improvement of Teaching in Secondary Schools .......... Frederick
- B124 Administration of Secondary Schools .......... Bryan
- B151 Administration and Supervision of Elementary Schools .......... Hilliard
- B227 Seminar .......... Wilds
- C120 Mental Hygiene of Adolescence .......... Ellis
- C217 Techniques of Guidance .......... Manske
- C230* Mental Deficiency .......... Ellis
- E102 Legal and Industrial Aspects of Vocational Education .......... Fox
- E109 Techniques of Making Vocational and Job Analyses .......... Fox
- E152 Curriculum Construction in Business Education .......... Hanna

**English**
- 225* Chaucer .......... Brown
- 152* Modern English Grammar .......... Baumann

**Geography**
- 120 Cultural Geography .......... Berry
- 135* Political Geography .......... Logan

**History**
- 177* The Old South .......... Russel
- 180* Roosevelt to Roosevelt .......... Russel

**Political Science**
- 184* American Political Thought .......... Shilling

**Psychology**
- 130* Psychology of Personnel Methods .......... Gibbons

**Sociology**
- 160* Advanced Studies in the Family .......... Lemert
- 270* Advanced Mental Hygiene for Social Workers .......... Williamson

*Graduates and Undergraduates.
DATES OF SATURDAY CLASS MEETINGS

First Semester

September 20, 1947—Registration
September 27—*Saturday Classes Begin
October 4
October 11
October 18
October 25
November 1
November 8
November 15
November 22
November 29—Thanksgiving Holiday
December 6
December 13
December 20-27-Jan. 3—Christmas Holiday
January 10
January 17
January 24
January 31—Examinations

Second Semester

February 7, 1948—Registration
February 14—*Saturday Classes Begin
February 22
February 28
March 6
March 13
March 20
March 27-April 5—Easter Holiday
April 10
April 17
April 24
May 1
May 8
May 15
May 22
May 29
June 5—Examinations

*Weekday classes will meet during the week immediately preceding these dates.
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
- B192 Methods of Research in Education
- B227 Seminar

Elective Courses in Education, 6 hours
Any Education course counting for graduate credit may be elected. The following are suggested: A125, B151, B251, C102, C119, C120, C130, C132, F190, F191.

Cognate Courses, 8 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
- B120 Improving High School Teaching
- B156 High School Supervision
- C102 Educational Psychology, or
- C120 Mental Hygiene
- B192 Methods of Research in Education
- B227 Seminar

Elective Courses in Education, 2 to 6 hours
Any Education course counting for graduate credit may be elected. The following are suggested: A125, B122, B124, C102, C119, C120, C217, E101, F190, F191.

Cognate Courses, 8 to 12 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
- B151 Administration and Supervision of Elementary Schools
- B251 Supervision of Elementary School Instruction
- B192 Methods of Research in Education
- B227 Seminar

Elective Courses in Education, 6 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, F191.

Cognate Courses, 8 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
- B250 Principles of Educational Administration
- B124 Secondary School Administration
- B156 High School Supervision
- B192 Methods of Research in Education
- B227 Seminar

Elective Courses in Education, 6 hours
Any Education course counting for graduate credit may be elected. The following are suggested: A125, B122, B255, B257, C115, C119, C120, C130, C165, C217, E100, E101, F190, F191.

Cognate Courses, 8 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
- B250 Principles of School Administration
- B124 Secondary School Administration
- B151 Elementary School Administration and Supervision
- B255 Social Interpretation
- B192 Methods of Research in Education
- B227 Seminar

Elective Courses in Education, 4 hours
Any Education course counting for graduate credit may be elected. The following are suggested: A125, B105, B122, B257, C115, C119, C120, C130, C165, C217, E100, E101, F190, F191.


Cognate Courses, 8 hours
Economics 152, 193, 255; Political Science 141, 163, 184; Sociology 158, 159, 160; Psychology 130; Speech 151; History 182, 201; Geography 145.

PUPIL GUIDANCE AND PERSONNEL

Required Courses, 12 hours
C19 Educational Guidance and Adjustment
C217 Techniques of Guidance
C120 Mental Hygiene
E101 Vocational Guidance
B192 Methods of Research in Education
B227 Seminar

Elective Courses in Education, 4 hours
Any Education course counting for graduate credit may be elected. The following are suggested: A125, B124, B182, C115, C130, C165.

Cognate Courses, 8 hours
Psychology 130; Health Practice 171; Sociology 158, 159, 160; Economics 193; History 182.

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*

Agriculture .................................................. 218-220
Art .......................................................... 157-161
Biology ...................................................... 221-227
Business Education ......................•.................... 296-305
Chemistry .............................................. 227-231
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Education .............................................. 275-288
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Librarianship ........................................... 289-292
Library ....................................................... 292
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Occupational Therapy .................. 174-179
Philosophy ................................................... 263-264
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Note.—*For information regarding the significance of course numbers and credit for courses see pages 85 and 86.
DIVISION OF FINE ARTS
ART

LYDIA SIEDSCHLAG
HARRY HEFNER
ELAINE L. STEVENSON

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
- Art Appreciation 113A, B

Any one of the following groups of courses constitutes a year’s sequence in art:

(a) Art Structure 106 and Industrial Art 110
(b) Art Structure 106 and Illustrative Handwork 107
(c) Art Structure 106 and Figure Drawing 205
(d) Art Structure 106 and Demonstration Drawing 306
(e) Art Structure 106 and Lettering and Poster Making 108
(f) History of Art 213A and History of Art 213B
(g) Art Appreciation 113A and Art Appreciation 113B

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.

A major in art consists of:

Elementary Design 105 ........................................ 3 semester hours
Art Structure 106 ........................................ 3 semester hours
Industrial Art 110 ........................................ 2 semester hours
Figure Drawing 205 ........................................ 3 semester hours
Art Composition 208 ........................................ 3 semester hours
Commercial Art 214 ........................................ 3 semester hours
History of Art 213A ........................................ 3 semester years
History of Art 213B ........................................ 3 semester hours
Demonstration Drawing 306 ................................ 2 semester hours

Art Observation 340 and Supervision 341 are offered as required education courses for art majors.
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 art problems.

First semester, M. W. F. 8-10, Tu. Th. 10-12, 2-4; second semester, M. W. F. 10-12, Tu. Th. 10-12. Mr. Hefner, Miss Paden. Two or three semester hours.

106 **Art Structure**

This course is especially arranged to help the student to direct art activities in the grades. The semester's work includes lettering, design, color theory, drawing, cut-paper problems, and holiday projects, together with methods of presenting problems and developing a greater appreciation of art among children.

First semester, M. W. F. 9, 11, 1; second semester, M. W. F. 9, 11, 2. Miss Paden, Miss Stevenson. Three semester hours.

107 **Illustrative Handwork**

An elementary course in crafts, with emphasis on the doing process and allowing for the individual creative release achieved through the handling of different materials. Problems relate to interests in primary grades.

A fee of two dollars will be charged for materials.

Each semester, M. W. F, 2-4. Mr. Hefner. Three semester hours.

108 **Lettering and Poster Making**

Special problems for grades; poster work to advertise school activities. The work has been planned to be of special help to students other than those specializing in art.

Second semester, Tu. Th. 10-12. Mr. Kemper. Two semester hours.

110 **Industrial Art**

A studio course in crafts, designed to meet needs of groups with varied interests. Weaving, bookbinding, block print, etc.

A fee of two dollars will be charged for materials.

Each semester, Tu. Th. S. 10-12, 2-4. Miss Stevenson. Three semester hours.

111 **Modeling**

A general course offered to students in all departments. 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.

Second semester, M. W. F. 8-10. Mr. Hefner, Miss Siedschlag. Three semester hours.

113A **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, Tu. 12, W. 12; second semester, W. 12, Th. 12. 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.
First semester, Tu. 12, M. 12; second semester, M. 12. Mr. Hefner. One semester hour.

201 Free Brush
A method of spontaneous drawing and designing, using large brushes, ink, and poster paints.
Not offered in 1947-1948. 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, planeing and contour drawing to finished drawings. Mediums—pencil and charcoal. Prerequisite: Art Structure 106 or consent of instructor.
First semester, M. W. F. 8. Mr. Kemper. Three semester hours.

208 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—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, M. W. F. 1. Miss Paden. Three semester hours.

212 Handicraft
Includes problems in batik, gesso, metal, 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.
Not offered in 1947-1948. Mr. Hefner. Three semester hours.

213A History of Art
Study of primitive, Egyptian, Chaldean, Greek, and Roman architecture, sculpture, painting, and minor arts. Prerequisite: consent of instructor.
Not offered in 1947-1948. Mr. Kemper. Three semester hours.

213B History of Art
Study of the art of the Renaissance in Europe and of modern and contemporary art in Europe and America. Prerequisite: History of Art 213A.
Not offered in 1947-1948. 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 and business activities, lettering, typography,
package design, and other related problems are studied. Various techniques and media, as well as technical methods used in the reproduction of artwork, are discussed. Prerequisite: Art Structure 106 or Elementary Design 105.

First semester, M.W. F. 10-12. Mr. Kemper. Three semester hours.

215 Aesthetic Discernments
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, or the Art Department.

Note:—This course may not be counted toward a major or minor.

Each semester, Th. 9. Mr. Beloof, Mr. Kemper, Miss Loutzenhiser. One semester hour.

220 Stage Design
A course for art and speech students. Class makes practical use of knowledge of scene painting, lighting, and mechanics of staging, in connection with the midwinter play.

Note:—This course may be counted for credit in speech.

Second semester, S. 9-12. Mr. Kemper. Two semester hours.

221 Home Furnishing
Color, design, historic furniture, and arrangement of furnishings will be studied.

Each semester, Tu. Th. 1. Miss Siedschlag. 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.

Each semester, Tu. Th. Evenings 7-9. 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, Tu. Th. 8. Mr. Kemper. Two semester hours.

306 Demonstration Drawing
A drawing course reviewing perspective, composition, and figure, object, and animal drawing. Prerequisite: Art Structure 106.

Not offered in 1947-1948. Miss Siedschlag. 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.
Second semester, M W. 1-3 Mr. Kemper. Two semester hours.

309 Advanced Design
First semester, M. W. F. 10-12. Mr. Hefner. Three semester hours.

310 Painting
Painting of still life and landscape, in the studio and outdoors. Water color is 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, Tu. Th. 1-3. Miss Paden. Two semester hours.

314 Advanced Commercial Art
Continuation of Commercial Art 214 with emphasis on typographic layout, booklet design, letter heads, mailing pieces, packaging and display design and construction. The course will acquaint students with technical methods essential to commercial art such as photoprints and their uses, paste-ups, photostats, and methods of color separation for working drawings.
Second semester, M. W. F. 8-10. Mr. Kemper. Three semester hours.

MUSIC

ELWYN F. CARTER  MARY P. DOTY
SAMUEL B. ADAMS  ETHEL M. GREEN
ELMER BELOOF  H. GLENN HENDERSON
MARGARET F. BELOOF  LEONARD V. MERETTA
ROBERT BEVERLY  WALTER G. MARBURGER
LEOTI C. BRITTON  DOROTHEA SNYDER

ELWYN F. CARTER  MARY P. DOTY
SAMUEL B. ADAMS  ETHEL M. GREEN
ELMER BELOOF  H. GLENN HENDERSON
MARGARET F. BELOOF  LEONARD V. MERETTA
ROBERT BEVERLY  WALTER G. MARBURGER
LEOTI C. BRITTON  DOROTHEA SNYDER

JULIUS STULBERG

The Department of Music offers courses designed to satisfy the needs and interests of the following groups:

1. Students seeking certification as supervisors of public school music (general, vocal, or instrumental).
2. Students majoring or minoring in some field of music, either theoretical or applied.
3. Students majoring in elementary or secondary education who desire some training in music to aid them in their work.
4. Any student in the college who wishes to broaden his background, either by means of music classes, study of applied music, or participation in a music ensemble.
The Department of Music offers courses leading to the Bachelor of Music, Bachelor of Science, and Bachelor of Arts degrees. The Bachelor of Arts and the Bachelor of Science Degrees are defined on pages 90-91 both as to 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. It is strongly recommended that students who wish to major in music aim for the Bachelor of Music degree. All candidates for the Bachelor of Music degree are required to study their applied music performance field, e.g., piano, voice, violin, etc., during their full four-year course. Music majors working toward the Bachelor of Arts or the Bachelor of Science degree and offering a group major in music are advised to complete 20 semester hours in a single field of applied music. The Bachelor of Music degree requires a minimum of 128 semester hours of credit for graduation. All students who wish to major in music will be given a placement examination in theory and applied music at the time of their original registration. Students who plan to major in Composition should present evidence of their ability to the Department of Music, and will be accepted as Composition majors only upon the recommendation of the theory staff.

**BACHELOR OF SCIENCE (and Teaching Certificate) MUSIC MAJOR**

Those students who want a music major with teaching certificate and two non-music minors should work for the Bachelor of Science degree. In addition to the general and education requirements listed on pages — the candidate for the above degree must complete the following music requirements:

- **Applied Music (Major performance field)** ................................................. 12 semester hours
- **Music 106A, B** ................................................................. 6 semester hours
- **Music 205A, B** ................................................................. 4 semester hours
- **Music 207A, B** ................................................................. 4 semester hours
- **Music 208A, B** ................................................................. 6 semester hours
- **or Music 301A, B** ................................................................. 6 semester hours
- **Music Ensemble** ................................................................. 4 semester hours

**BACHELOR OF ARTS MUSIC MAJOR**

Western Michigan College of Education will accept a group major in music toward the Bachelor of Arts degree. The two minors must be in non-music subjects. Courses leading to a major in Public School Music are of a strictly professional character; therefore, a major in Public School Music is not granted with the Bachelor of Arts degree. The following music requirements must be satisfied to offer a major in music toward the Bachelor of Arts degree:

- **Applied Music (Major performance field)** ................................................. 20 semester hours
- **Music 106A, B** ................................................................. 6 semester hours
- **Music 357A, B** ................................................................. 6 semester hours
- **Music Ensemble** ................................................................. 4 semester hours

The balance of the college work must be selected from non-music subjects. A total of 126 semester hours is required for graduation with the Bachelor of Arts degree with a music major.
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.

Most positions for teachers of music involve part-time teaching of some subject outside the field of music. Therefore, in order to be well prepared to teach a second subject, the student should plan to remain in school at least nine semesters.

POLICY POINTS

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 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.

Any student who wishes to transfer from another department of the college must take a placement examination in theory and applied music before he will be accepted as a music major.

No student will be permitted to continue beyond the sophomore level as a music major if his scholarship index is less than 1.0.

No student will be admitted as a candidate for a degree unless the admission requirements are satisfied.

Candidates for the Bachelor of Music degree must fulfill the regular physical education requirements. No semester hours of credit are granted for this work.

Candidates for the Bachelor of Music Degree who are deficient in some part of their entrance requirements are admitted under the following provision: the deficiency must be made up in one year, and without college credit.

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. It is expected that each student will take part for his first two years in a large ensemble employing his major performance area. The student will remain in that large ensemble for the entire academic year. Sometime during the student’s residence he is expected to take one year of small ensemble (136). All music ensembles grant one semester hour of credit for each semester of participation. Not more than eight semester hours credit will be granted for participation in any one ensemble. Not more than twelve semester hours of ensemble credit will be accepted toward any degree. 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. Beloof

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 plays an important part in the life of the school. Besides furnishing 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.)

134 **Auxiliary Choir** .......................................... Mrs. Snyder

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. Many from this organization find their way into the Women's Glee Club, Men's Glee Club, and the College Choir.

135 **College Choir** ........................................... Dr. Carter

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.

136 **Special Music Ensemble** .................................. The Staff

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.

**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 re-
quests 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. Such elected study by non-music majors is granted two semester hours credit per semester. Individual lessons in applied music are not given during examination periods at the end of each semester and summer session. If individual lessons are missed due to official holidays, they may be made up by mutual agreement between the student and his instructor upon the request of the student. Individual lessons will not be made up unless satisfactory notice is given to the instructor 24 hours in advance.

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. Students of applied music who receive credit for full-time study are required to practice nine hours per week in their field of concentration (twelve hours a week during the summer session); three hours per week in secondary and part-time applied music courses, e.g., class lessons (six hours per week during the summer session).

Students should write the head of the Department of Music well in advance of registration and state their first and second choices of instructor. He will assign the instructor, making every effort to honor the student's choice. This assignment cannot be changed except by permission of the head of the Department of Music.

Final examinations are required in all fields of applied music, and will be heard and graded by a panel composed of members of the music faculty. The schedule for applied music examinations will be posted in advance of final examination week.

**AREAS OF CONCENTRATION IN THE FIELD OF APPLIED MUSIC**

<table>
<thead>
<tr>
<th>Piano</th>
<th>Violin</th>
<th>Clarinet</th>
<th>Cornet or Trumpet</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organ</td>
<td>Viola</td>
<td>Flute</td>
<td>Trombone</td>
</tr>
<tr>
<td>Voice</td>
<td>Cello</td>
<td>Oboe</td>
<td>French Horn</td>
</tr>
<tr>
<td>Harp</td>
<td>Bass</td>
<td>Bassoon</td>
<td>Tuba</td>
</tr>
<tr>
<td>Percussion</td>
<td></td>
<td>Saxophone</td>
<td>Baritone</td>
</tr>
</tbody>
</table>

Eight levels of study in the various areas of applied music are indicated in the Music Supplement Catalog. After the student has taken his placement examination upon his original registration at Western Michigan College of Education, he will be told what course number to enroll for in his performance field. The first of the digits indicates the field of applied music and the second indicates the level of the specific course for which the student is enrolled. Regardless of the level of the student's original enrollment, he will be required to complete a minimum of four levels before being granted a degree. Levels one through four grant two semester hours of credit per semester. Levels five through eight grant three semester hours of credit per semester.
Applied Music Fields | Number of Courses
--- | ---
Harp | 11 through 18
Piano | 21 through 28
Organ | 31 through 38
Voice | 41 through 48
Stringed Instruments | 51 through 58
Brass Instruments | 61 through 68
Woodwind Instruments | 71 through 78
Percussion Instruments | 81 through 88

COMPREHENSIVE FEE

The comprehensive fee for music majors and full-time students from other departments who elect some field of applied music at Western Michigan College of Education is $116.00 ($146.00 for non-residents of Michigan*). This fee covers the cost of the following things:

1. Sixty minutes of individual instruction in the major performance medium which amounts to $60.00 per semester.
2. Instruction in the secondary performance fields either in a class or individual instruction (not to exceed 30 minutes per week), whichever means best serves the purpose.
3. Minimum use of a practice room 12 hours per week.
4. Library fee for music and records.
5. Entrance examination fee.
6. Instrument rental. (All instruments are assigned to the student in good playing condition, and he is responsible for replacing parts such as reeds, strings, etc. A deposit of $5.00 must be made when the instrument is assigned. This deposit is refunded to the student when the instrument is returned.)
7. Individual music faculty assistance in working out specific problems in Public School Music (Under Music 410A, B).
8. Tuition fee for under-graduates which amounts to $30.00 per semester for residents of Michigan* and $60.00 per semester for non-residents of Michigan.
9. Student activity fee for health service, student union, library services, class dues, *Brown and Gold*, and subscription to the *Western Michigan Herald*.

Note.—*See page 87 for residence requirements.

COMPREHENSIVE FEE FOR PART-TIME APPLIED MUSIC

The comprehensive fee for non-music majors who elect to study some field of applied music on a part-time basis is $86.00 per semester ($116.00 for non-residents of Michigan*). This fee covers the cost of the following things:
1. Thirty minutes of individual instruction in the major performance medium which amounts to $30.00 per semester. (See possible areas of concentration, page 170.)

2. Minimum use of a practice room 3 hours per week.

3. Library fee for music and records.

4. Entrance examination fee.

5. Instrument rental. (All instruments are assigned to the student in good playing condition, and he is responsible for replacing parts such as reeds, strings, etc. A deposit of $5.00 must be made when the instrument is assigned. This deposit is refunded to the student when the instrument is returned.)

6. Individual music faculty assistance in working out specific problems in Public School Music. (Under Music 360A, B.)

7. Tuition fee for under-graduates which amounts to $30.00 per semester for residents of Michigan* and $60.00 per semester for non-residents of Michigan.

8. Student activity fee for health service, student union, library services, class dues, Brown and Gold, and subscription to the Western Michigan Herald.

Note.—*See page 87 for residence requirements.

MUSIC SCHOLARSHIPS

For scholarships in music see page 73.

DEPARTMENTAL COURSES

Note:—New and more highly specialized courses of study can be started in the fall of any year upon request from a sufficient number of students.

100A Music for Classroom Teachers

Designed for the classroom teacher in schools where music instruction is a responsibility, with or without supervision. 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. The song materials studied will later be used in directed teaching.


100B Music for Classroom Teachers

A continuation of 100A.


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 dictation, and keyboard harmony. Composing of original music is encouraged.


106B Freshman Theory
A continuation of 106A.

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, Th. S. 9. Mrs. Britton. Two semester hours.

107B Music Appreciation
A continuation of 107A.

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.

Second semester, M. W. F. S. Mrs. Snyder. Three semester hours.

110 Elementary Acoustics
Designed for music majors to acquaint them with the science of sound. No science prerequisite.
First semester, Tu. Th. 1. Mr. Marburger. 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, M. W. F. 1. Mrs. Snyder. One semester hour.

116B Voice Class
A continuation of 116A.

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, M. W. 3, Tu. Th. 9. Mrs. Beloof. One semester hour.

117B Piano Class
A continuation of 117A.

118A String Class
A study of four stringed instruments—violin, viola, cello, and bass—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, M. W. F. 9, 11, 12. Mr. Stulberg. One semester hour.

118B String Class
A continuation of 118A.
Second semester, M. W. F. 9, 11, 12. Mr. Stulberg. 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, Tu. 3. Mr. Adams. 0 semester hours.

122B English Diction and Song Literature
A continuation of 122A.
Second semester, Tu. 3. Mr. Adams. 0 semester hours.

205A Advanced Sight-Singing and Ear-Training
Advanced sight-singing using sol-fa syllables, numbers, and mono-syllables. Advanced 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, Tu. Th. S. 9, 11. Miss Green. Two semester hours.

205B Advanced Sight-Singing and Ear-Training
A continuation of 205A.
Second semester, Tu. Th. S. 9, 11. Miss Green. 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, M. W. F. 9, 11. Miss Green. Three semester hours.
206B  Advanced Harmony  
A continuation of 206A.
Second semester, M. W. F. 9, 11. 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 is included. The larger musical forms are stressed in the selection of material.
First semester, M. W. F. 2. Miss Green. Three semester hours.

207B  Music Literature  
A continuation of 207A.

208A  Elementary School Methods and Materials  
The purposes, problems, and procedures of teaching music in the first six grades. The following topics are discussed: 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, M. W. F. 1. Mrs. Britton. Three semester hours.

208B  Elementary School Methods and Materials  
A continuation of 208A.

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 achievement examinations. Prerequisite: Voice Class 116A, B.
First semester, M. W. F. 11. Mrs. Snyder. One semester hour.

216B  Advanced Voice Class  
A continuation of 216A.

217A  Advanced Piano Class  
A continuation of 117A, B. Recommended to elementary education majors. Prerequisite: Piano Class 117A, B.
First semester, Tu. Th. 3. Mrs. Beloof. One semester hour.

217B  Advanced Piano Class  
A continuation of 217A.
Second semester, Tu. Th. 3. Mrs. Beloof. One semester hour.
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, M. W. F. 10. Mr. Beverley. One semester hour.

219B Woodwind Class
A continuation of 219A.

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, Th. 3. Mr. Adams. 0 semester hours.

222B Italian Diction and Song Literature
A continuation of 222A.
Second semester, Th. 3. Mr. Adams. 0 semester hours.

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.

301B Senior High School Methods and Materials
A continuation of 301A on the senior high-school level.

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, M. W. F. 3. Staff. Three semester hours.

305B Counterpoint
A continuation of 305A.

306A Composition
Original work in composition, starting with the smaller forms in both the vocal and instrumental fields. Prerequisite: Advanced Harmony 206A, B.
First semester, Time to be arranged. Staff. Three semester hours.
306B Composition
A continuation of 306A.
Second semester, Time to be arranged. Staff. 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, M.W.F. 1. Miss Green. Three semester hours.

310B Contemporary Music
Harmonic and structural analysis of representative contemporary compositions. Some study of the chronological evolution of modern harmony and musical idioms. Prerequisite: Advanced Harmony 206A, B.
Second semester, M.W.F. 1. Miss Green. 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.
First semester, M.W.F. 1. 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.
Second semester, M.W.F. 1. 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 exceed a total of four semester hours.)
Each semester, Time to be arranged. 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 instruments.
First semester, M.W.F. 2. Mr. Meretta. One semester hour.

320B Brass Class
A continuation of 320A.
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, Tu. Th. 8. 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, Th. 2. Mr. Adams. 0 semester hours.

322B French Diction and Song Literature
A continuation of 322A.
Second semester, Th. 2. Mr. Adams. 0 semester hours.

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, W. 3, Th. 3. Mr. Meretta, Mr. Stulberg. 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, T. Th. 2. Mr. Adams. 0 semester hours.

324B German Diction and Song Literature
A continuation of 324A.
Second semester, T. Th. 2. Mr. Adams. 0 semester hours.

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, Time to be arranged. The Staff. One semester hour.

351B Advanced Conducting
A continuation of 351A.
Second semester, Time to be arranged. The Staff. One semester hour.

355A Orchestration
A study of the characteristics of the various instruments, both as to range and tone color. Practical application in arranging musical compositions for various instrumental combination 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, M. W. F. 2. The Staff. Three semester hours.

355B Orchestration
A continuation of 355A.
Second semester, M. W. F. 2. The Staff. 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, Time to be arranged. The Staff. One to three semester hours.

356B Advanced Composition
A continuation of 356A.
Second semester, Time to be arranged. The Staff. 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, M. W. F. 9. The Staff. Three semester hours.

357B History of Music
A continuation of 357A.
Second semester. The Staff. Three semester hours.

360 Seminar 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.

OCCUPATIONAL THERAPY

MARION R. SPEAR  DORA GOWER
KARL GASSLANDER  JANE E. THOMAS

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 grad-
uates. These four curricula are approved by the American Medical Association and graduates are qualified 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 practical arts. 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.

During the student's first semester only, a supplementary fee of $7.50 is charged for special lectures, field trips, memberships in State and National Occupational Therapy Associations, and delegates to these meetings.

Note—The courses given below under Theory are open to occupational therapy students only; the courses under Therapeutic Occupations may be taken by those not enrolled in the Department of Occupational Therapy, with the consent of the instructors.

THEORY

210 Theory of Occupational Therapy

Study of the history, purpose, and aims of occupational therapy from ancient to modern times. Special emphasis given to professional and hospital ethics and etiquette. Survey of present day trends and applications in the major medical fields. Supplemented by orientation trips to near-by hospitals and allied industries.

First semester, Tu. Th. 2; second semester, Tu. Th. 2. Miss Spear. Two semester hours.

210B Theory of Occupational Therapy

Specific instructions in applying occupational therapy in the various fields of service. Further emphasis on adaptation of training to meet patients' needs. Survey of public and private agencies offering facilities for the placement of the handicapped. Supplemented by field trips to hospitals, social agencies, and allied industries.

First semester, M. W. 1; second semester, M. W. 1. 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. The problems comprise border and all-over patterns, conventionalized and abstract design, and lettering. Emphasis will be placed on the use of color in relation with the above. Instruction in the selection and preparation of teaching aids will be given.

Each semester, M. W. F. 1:00-2:40; Tu. Th. 8:00-9:40. Mr. Gasslander. Two or three semester hours.
216A Kinesiology
A basic study of the muscles of the body, classified as to joint motion. Each muscle to be studied according to origin, insertion, action, and effect of loss. This study to be accompanied by a review of the skeletal and nervous systems and basic terminology of kinesiology. Prerequisite: Anatomy and Physiology (for Occupational Therapists) 215.
First semester, Tu. Th. 1; second semester, Tu. Th. 1. Mrs. Thomas. Two semester hours.

216B Kinesiology
An application of kinesiology in the treatment of orthopedic conditions; joint motion and muscle function; joint measurement; introduction to muscle testing; and significance of the above in treatment of joint limitation and loss of muscle power.
First semester, M. W. 1; second semester, M. W. 1. Miss Gower. Two semester hours.

310 Theory of Occupational Therapy
Correlation of all theory courses in occupational therapy. Specific instruction in the organization and administration of an occupational therapy department. Includes ordering of equipment and material, maintaining an inventory of supplies, problems of office administration, and recording and disposal of finished articles. Supplemented by field trips to hospitals, social agencies, and allied industries.
First semester, Tu. Th. 1.; second semester, Tu. Th. 1. Miss Spear. Two semester hours.

THERAPEUTIC OCCUPATIONS

220 Therapeutic Crafts
Course covers the techniques and equipment used in working with plastics, paper, string, and other craft materials. Emphasis is placed on the application of these techniques to occupational therapy treatment.
First semester, M. W. 10:00-11:40; second semester, M. W. 10:00-11:40. Miss Gower and Miss Spear. Two semester hours.

221 Therapeutic Crafts
Course covers methods used in simple electric wiring, care and arrangement of tools and equipment; different types of printing, carving and metal work. Emphasis is placed on the application of these techniques to occupational therapy treatment.
First semester, M. W. 3:00-4:40; second semester, M. W. 3:00-4:40. Mr. Gasslander. Two semester hours.

222 Therapeutic Crafts
Course covers repair, construction, use of environment, home jobs, hobby and recreation, for use with unskilled patients. Emphasis is on useful, everyday needs and more satisfying living. Experiments include indoor
and outdoor activities, and some of the projects are concerned with the holidays and their observance.

First semester, S. 8:00-11:40; second semester, S. 8:00-11:40. Mr. Gasslander. Two semester hours.

223 Stitchery

Samples of every known simple and decorative stitch, such as Italian hemstitching, Assissi, Swedish darning, and others, are included; also knitting, crocheting, tatting, netting, quilting, and the assembling of projects.

First semester, Tu.Th. 8:00-11:40; second semester, Tu.Th. 8:00-11:40. Mrs. Thomas. Four semester hours.

224 Rug Making

The history and development of the art of rug making. Includes study of materials used and the making of sample rugs.

First semester, F. 10:00-11:40; second semester, F. 10:00-11:40. Miss Spear. One semester hour.

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, M.W.F. 10:00-11:40; Tu.Th. 10:00-11:40. Mr. Gasslander. Two or three semester hours.

226 Basketry

Construction of samples showing stitches used with raffia and pine needles. Also includes completed projects in reed, combining various weaves, borders, handles, and finishes.

First semester, M. 2:00-3:40; second semester, M. 2:00-3:40. Miss Gower. One semester hour.

227 Leatherwork

Fundamental processes and techniques of leatherwork as used in occupational therapy. Includes designing, cutting, stamping, tooling, dyeing, and lacing of leather.

First semester, W. 2:00-3:40; second semester, 2:00-3:40. Miss Gower. One semester hour.

228 Weaving

Designed to give a working knowledge of hand looms. Includes the history of textiles, assembling looms, functional adaptations of them for special treatments, reading and drafting patterns, warping and threading looms, and types of weaving.

First semester, Lecture F. 1, Laboratory M.W.F. 8:00-9:40; second semester, Lecture F. 1, Laboratory M.W.F. 8:00-9:40. Miss Gower. Four semester hours.
229 Bookbinding
Instruction in basic processes in construction of portfolio, scrap book, file, and sewn books, as well as pamphlet and magazine binding. Use of paper, cloth vellum, and buckram are taught. Care and repair of books are included.
First semester, Tu. Th. 2:00-3:40; second semester, Tu. Th. 2:00-3:40. Mrs. Thomas. Two semester hours.

CLINICAL TRAINING

The following courses will be taken during the student’s clinical training at affiliating hospitals. The dates and duration of such training will be determined by Miss Spear, according to the requirements of the American Medical Association.

330 Neurology and Psychiatry
Consists of the history and clinical demonstration of mental diseases; their causes and methods of readjustment. Also a study of the structure and function of the nervous system. Study and emphasis of the application of work to individual needs given during practical training.
Members of Hospital Staff at Kalamazoo and other State Hospitals. Three semester hours.
Note:—This course may be counted toward a minor in biology.

332 Clinical Subjects
Consists of lectures by staff physicians on general medical and surgical conditions, orthopedics, tuberculosis, communicable diseases, cardiac diseases, blindness, and deafness.
Members of the Hospital Staff. During clinical training at each hospital. Four semester hours.

334 Clinical Observations
Consists of observations of clinical activities, including special treatments such as shock therapy, Kenney methods for Poliomyelitis, hydrotherapy, and others; operations such as pneumothorax, skin graft, spinal fusion, thoracoplasty, and others; postmortems and dissection of cadavers; ward rounds with physicians; and clinics. Written reports must be submitted to this department.
Members of Hospital Staff. During clinical training at each hospital. Four semester hours.

351 Social Service in Hospitals
Consists of lectures showing the relationship of the Social Service department to the hospital, and details of their work. Promotes an understanding between occupational therapists and social service workers necessary to their appreciation of each other and the interrelationship of the two departments.
Members of Hospital Staff. During clinical training at each hospital.
352 Hospital Case Studies

Complete and thorough case histories of typical patients observed in occupational therapy departments. Each history to include summary of background material emphasizing causes of or relations to patient’s present condition, and a special report on physical condition, treatment, and progress of patient in the occupational therapy department. Student must submit two case histories for each semester hour credit.

Members of Hospital Staff. During clinical training at each hospital. Three or four semester hours.
The courses in English are planned primarily to meet the needs of students preparing to teach in the various departments of the public schools.

Freshman literature: Where it is necessary or advisable for freshmen to elect courses in literature in addition to the required course in rhetoric, they should elect courses to supplement, not repeat, their work in high school. For example, a student who has had a general course in American literature in the high school should not elect the freshman course in American poets or American prose. He should elect a course in English Literature 107, or General Literature 124. Freshmen who have had four units of English in the high school, including a general survey of American literature and of English literature in the eleventh and twelfth grades, should not elect courses in literature. They might better begin the college study of literature in their sophomore year.

Majors and minors: Students who intend to make a major or a minor in English in any of the courses leading to a certificate to teach should confer with the adviser of the department as early as possible in their freshman year. In so far as possible an attempt will be made to select and arrange the work of each student in accord with his personal needs and the other requirements of his program of study. However, the following general outlines may be of service as tentative guides in planning programs of study:

Students who major or minor in English for the State Elementary Provisional Certificate should plan to take Literature for Children 203; 3 to 6 semester hours in courses in poetry; 3 or 4 hours in courses in non-fiction prose; 3 hours in fiction; 3 or 6 hours in drama, and sufficient electives to meet the requirements for a major or a minor.

Students who major or minor in English for the State Secondary Provisional Certificate should have a fundamental acquaintance with Latin, and a reading knowledge of some modern language, preferably French or German. Majors must take and minors should take the courses in Anglo-Saxon and Chaucer, and should take Shakespeare, the English novel, some course in non-fiction prose, some course in American literature, some course in poetry. For a minor, of course, the student will elect 15 semester hours most suited to his needs. In all cases the student's general program of study from year to year should be considered in making his elections in English.

All majors and minors in English must take in addition to Rhetoric 106A
and B an additional two hours in The 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. The procedure has to do specifically with the ordinary uses of the mother-tongue and with such mechanics as the student will have occasion to practice in his college work. The principles of English grammar and punctuation are reviewed in their application to reading, speaking, and writing. This is done by means of practice exercises, by reading and the discussion of reading, by the writing and revision of themes. Some attention is given to the mechanics of the outline, the methods of indicating footnotes, and the making of a bibliography. One expository paper of considerable length is generally undertaken.

First semester, M. W. F. 8, 9, 10, 11, 12, 1, 2, 3, Tu. Th. S. 8, 10, 11; second semester, M. W. F. 12, 3, Tu. Th. S. 8. Miss Anton, Dr. Baumann, Miss Eicher, Miss Gary, Miss Loutzenhisler, Miss Master, Mrs. Matthews, Dr. Miller, Miss Nobbs, Mr. Rogers, Mr. Smith, Miss Van Horn, Miss Walker. Three semester hours.

106B Rhetoric

A continuation of 106A. The general forms of discourse are introduced, with particular attention to description and narration. Some attention is given to figures of speech and to those traits of style that give character to writing. English prosody in its more elementary aspects is considered in connection with the study of a small group of poems. Usually some masterpiece of English prose is studied in detail as an example of narrative writing. Prerequisite: English 106A or its equivalent.

First semester, M. W. F. 12, 3, Tu. Th. S. 8; second semester, M. W. F. 8, 9, 10, 11, 12, 1, 2, 3, Tu. Th. S. 8, 10, 11. Miss Anton, Dr. Baumann, Miss Eicher, Miss Gary, Miss Loutzenhisler, Miss Master, Mrs. Matthews, Dr. Miller, Miss Nobbs, Mr. Rogers, Mr. Smith, Miss Van Horn, Miss Walker. Three semester hours.

201A Journalism

In this course the content of American newspapers, the origins, development, and ethical principles involved in writing and editing the material that appears in newspapers are studied; and practice in various types of journalistic writing and editing is given. News stories (straight news, advance, follow, sports stories); feature stories (interviews, informative features, human interest, seasonal, and entertainment features, and feature columns); ethics of journalism; publicity agents, copy-editing, and headlines are studied.

First semester, Tu. Th. S. 9. 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.

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 minors and elective for any other student in the college.
Each semester, Tu. Th. 8, 11, 1, 2. Dr. Baumann, Miss Eicher, Miss Master. Two semester hours.

326 Expository Writing
An elective course offering practice in the writing of expository papers of all kinds.
Each semester, Tu. Th. 10. 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, Tu. Th. 11. Miss Nobbs. Two semester hours.

328 Creative Writing
The main purpose of this course is to help students with talent to develop themselves in the theory and practice of writing. Theories of writing held by standard authors will be discussed, each student doing some research in the type in which he wishes to specialize. Original writing may be done in poetry or in prose, the number of pages required depending upon the nature of the work. As much writing as possible will be discussed and criticized in class. Open only to Juniors and Seniors who have shown proficiency in Rhetoric 106A and B and who gain permission from the instructor upon submitting original manuscript.
First semester, M. W. F. 3. Miss Van Horn. Three 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. The work of the course is arranged to develop in the student a careful critical judgment and to cultivate the habit of thoughtful criticism.
Not offered in 1947-1948. 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 for words.
Second semester, S. 9-11. Dr. Baumann. Two semester hours.

LITERATURE
Not more than six hours credit may be counted from courses in literature numbered below 200.

107A English Literature
This course is arranged primarily for freshmen who elect work in literature. It should not be generally elected by freshmen who have had a survey course in English literature in the eleventh or twelfth grades. The course extends over the whole year, but students may elect either semester as a unit in itself. Emphasis is placed on the study of Chaucer, the epic, the drama of Shakespeare, and the important prose works of the eighteenth century.
First semester, M. W. F. 9, 10, 1. Miss Eicher, Miss Loutzenhiser, Miss Van Horn. Three semester hours.

107B English Literature
A continuation of 107A. The development of the novel from its beginning, and with the chief writings in prose, poetry, and drama from 1798 to the present time.
Second semester, M. W. F 9, 10, 1. Miss Eicher, Miss Loutzenhiser, Miss Van Horn. Three semester hours.

121 Chief American Poets
An intensive study of the chief American poets.
First semester, M. W. F. 8, Tu. Th. S. 8; second semester, M. W. F. 11, 2. Miss Eicher, Miss Nobbs, Miss Walker. Three semester hours.

122 American Prose
An intensive study of the chief American prose writers.
First semester, M. W. F. 11, 2; second semester, M.W.F. 8, Tu. Th. S. 8. Miss Eicher, Miss Nobbs, Miss Walker. Three semester hours.

124A General Literature
This course offers students the opportunity, by means of translations, of cultivating a more intimate acquaintance with the greater things in European literatures other than English. No foreign language is necessary for the course. Where possible, students should plan to take both semesters' work; but either semester may be taken as a unit in itself. It is devoted to reading and critical interpretation of the masterpieces of epic and dramatic literature other than English. The Iliad and the Aeneid and important dramas from Aeschylus to Ibsen will be read and analyzed.
First semester, M.W.F. 3. Dr. Brown, Miss Master. Three semester hours.

Note:—Students who have taken 124A General Literature, may not elect 324S European Epic.
124B General Literature
A continuation of 124A. The development of the lyric and the novel in European literatures other than English.
Second semester, M. W. F. 3. Dr. Brown, Miss Master. Three semester hours.
Note:—Students who have taken 124B General Literature, may not elect 315S European Novel.

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, M. W. F. 9, 1. Miss Master. Three semester hours.

205A Nineteenth Century English Prose
A careful reading of selected non-fiction English prose of the nineteenth century. The types of literature selected for study include reflective and familiar essays and longer writings, both critical and philosophical. Coleridge, Hazlitt, Lamb, DeQuincey, Landor, Macaulay.
First semester, M. W. F. 1. Two semester hours.

205B Nineteenth Century English Prose
Second semester, M. W. F. 1. Two semester hours.

207A Representative English Poetry
The aim of this course is to help the student become more familiar with representative poets of England and the relation of each to the period and movement in which he worked. Selections are read and discussed in class.
Not offered in 1947-1948. Miss Eicher, Miss Gary, Miss Loutzenhiser. Three semester hours.

207B Representative English Prose
The purpose of this course is to give the student a greater familiarity with the most representative works of England's best prose writers. Stress is placed upon the significance of each work in relation to the literary and social movements of the time. Selections are read and discussed in class.
Not offered in 1947-1948. Miss Eicher, Miss Gary, Miss Loutzenhiser. 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. The course is intended to be a foundation for further study of literature.
First semester, M. W. F. 2. Miss Eicher. Three semester hours.
211 Lyric Poetry
This course is a more thorough study of one form of literature considered in Literary Interpretation 210. Its aim is to help the student to a fuller appreciation of good poetry, to know why a poem is good literature, and to suggest ways of using poetry with classes.

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. The familiar essay is studied in its historical development, with special emphasis on the essay as written by the best essayists of our own time.
First semester, Tu. Th. 2. 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. Other tragedies, comedies, and histories are read more rapidly with such critical comment as time will permit.
First semester, M. W. F. 10. 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. The work consists of reading and of critical discussion of special subjects of importance in Shakespearian criticism. Some attempt is made to introduce the student to scholarly methods of personal study. Prerequisite: 214A.

216 Contemporary Literature
It is the aim of this course to give the student some acquaintance with the better non-fiction literature of the last thirty years and to help him choose his reading with more critical discrimination. The classroom work consists of reading and interpreting representative selections, and of lectures upon interesting subjects connected with the literature of today. The course is primarily a reading course; much library work is required.
Second semester, Tu. Th. 11. Instructor to be appointed. Two semester hours.

218A The English Bible
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. Students who enroll in the course for credit are required to read the major part of the Bible and to study intensively certain books that are especially rich in literary value. The Old Testament.
First semester, Tu. Th. 1. Miss Gary. Two semester hours.
DESCRIPTION OF COURSES

218B The English Bible
Second semester, Tu. Th. 1. Miss Gary. Two semester hours.

219 The Short Story
This course traces the development of the short story in England, France, and America, with an account of the various types and its general technique. The required reading will serve to acquaint the student with the best short stories and the method of teaching such material. Themes and reports are required.
Each semester, Tu. Th. 11. Miss Van Horn. Two semester hours.

223 Eighteenth Century Prose
This course involves the reading of a variety of types in the non-fiction prose of the eighteenth century, with attention to the ideas and ideals voiced by the leading English writers of that time: Defoe, Swift, Steele, Addison, Johnson, Hume, Goldsmith, and Burke.

224 Eighteenth Century Poetry
A study is made of classicism in English literature as exemplified in the non-dramatic poetry of Dryden, of his successor, Pope, and of some of Pope's contemporaries; the further history of classicism, and the rise and progress of romanticism to the end of the eighteenth century, including the work of Gray, MacPherson, Cowper, Blake, and Burns.
First semester, M. W. F. 9. Dr. Miller. Three semester hours.

225 The Ballad
A study of the form and method of development of the traditional popular ballad. A number of ballads representative of various types are studied minutely, and many others are read. The course gives some attention secondarily to the later artistic ballad.
Not offered in 1947-1948. Miss Master. Two semester hours.

226A Masterpieces
The purpose of this course is to study intensively some of the masterpieces of English literature. At least one example of the novel, the essay, the drama, the tale, and narrative poetry is read and analyzed. *Canterbury Tales, Othello, The Faerie Queene*.
First semester, Tu. Th. 3. Miss Loutzenhiser. Two semester hours.

226B Masterpieces
Second semester, Tu. Th. 3. Miss Loutzenhiser. Two semester hours.

227 Seventeenth Century Poetry and Prose
The poets read and discussed in this course are John Donne, John Milton, and John Dryden. The following prose writers are studied for their style
and for their views: Francis Bacon, Sir Thomas Browne, John Donne, John Milton, John Bunyan, John Dryden.

First semester, M. W. F. 11. 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.

Second semester, M. W. F. 11. Mr. Smith. Three semester hours.

305 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. Special attention is given to *Sartor Resartus, Heroes and Hero Worship, Past and Present*, and the more important essays.

Not offered in 1947-1948. 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 107. A study of English epic and lyric poetry.

First semester, M. W. F. 8, 1. 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, M. W. F. 8, 1. Miss Gary. Three semester hours.

308A The English Drama
The chief aim of the course is to give the student familiarity with many interesting and important, but too seldom read, English plays. Interesting and significant plays by Elizabethan and Jacobean playwrights—Lyly, Greene, Peele, Marlowe, Kyd, Webster, Jonson, Beaumont, and Fletcher—are read and discussed.

First semester, Tu. T. 8. Mr. Smith. Two semester hours.

308B The 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, Tu. Th. 8. Mr. Smith. Two semester hours.

309A Nineteenth Century Poetry
This course aims to cultivate in the student a richer appreciation of poetry and to develop some skill in the critical interpretation of literature. The work consists of wide reading in poetry of the century, supplemented by critical and interpretive lectures on the thought of the period as it was
reflected in the work of the chief English poets. Wordsworth, Coleridge, Byron, Shelley, Keats, Scott, and Landor.

First semester, M. W. F. 3. Dr. Baumann. Three semester hours.

309B Nineteenth Century Poetry
A continuation of 309A. Tennyson, Mrs. Browning, Browning, Clough, Arnold, Rossetti, Morris, and Swinburne.

Second semester, M. W. F. 3. Dr. Baumann. Three semester hours.

Note.—The courses in Wordsworth 312, Tennyson 310, and Browning 311, offered in the summer session and by extension may not be counted together with the semesters of Nineteenth Century Poetry 309, in which these poets appear.

313 The English Novel
The first aim of the course is to acquaint the student with the method of studying and teaching prose fiction. For this purpose some short, well-constructed novel is analyzed in the classroom. After some study of the picaresque tale of the Elizabethan times, the class traces the development of the novel in DeFoe, Richardson, Fielding, Sterne, and Smollett, the Gothic romance, and the novels related to the French Revolution. Later the leading English novelists from Jane Austen to the present date are studied. Each member of the class is required to make a detailed study of some novelist or some phase of the novel, and to report upon it to the class.


314 The 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. Book reviews and a long report will be required.

First semester, Tu. Th. 11. Dr. Brown. Two semester hours.

322 American Literature
This course is intended primarily for juniors and seniors who have had no other courses in American literature and who desire more intimate acquaintance with the subject. The work consists of lectures, discussions, and as wide reading as the time will permit.

Each semester, M. W. F. 8, 11. Dr. Miller, Miss Nobbs. Three semester hours.

Note:—This course can not be counted for credit together with the courses American Poets 121 and American Prose 122.

333 Lives and Letters of English Authors
This course combines a detailed study of the Wordsworths, the Carlyles, and others, with wide reading in biography and letters. Reports and critical essays are required. Prerequisite: freshman or sophomore courses in English literature. The instructor's consent is required.

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, Tu. Th. 11. 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, Tu. Th. 11. 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, and to give him a clearer conception of early English literature. Bright's Anglo-Saxon Reader is used as a text, supplemented with wide reading in translation from early English literature, and in the history of the period.

First semester, M. W. F. 11. 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. A generous amount of reading in the literature of the middle English period is required.


Open to Seniors and Graduates

413(184) The Modern Novel
A study of social interpretation in the English novel from Jane Austen to John Galsworthy.

Not offered in 1947-1948. Dr. Brown. Two semester hours.

414(160) Shakespeare's Tragedies
Students who enroll in the course must have had some course in Shakespeare or in the early English drama.

Not offered in 1947-1948. Dr. Brown. Two semester hours.

416(177) English Literature from the Restoration to 1730
The works of leading literary figures of the period, with emphasis on satire.

Not offered in 1947-1948. Dr. Baumann. Three semester hours.

417(178) English Literature from 1730 to 1798
Not offered in 1947-1948. Dr. Baumann. 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.

Not offered in 1947-1948. Dr. Miller. Two semester hours.

### 422(182) American Literature
A study of representative prose and poetry from 1870 to the present. Individual assignments over schools and tendencies, with emphasis upon Whitman, Mark Twain, Henry James, O'Neill, Robinson, Steinbeck, and Hemingway.

First semester, S. 9-11. Miss Nobbs. Two semester hours.

### 300 Teaching of English
The aim of the course is to give the prospective teacher the best educational information relative to the content and teaching of various phases of English in the junior- and senior-high school. Students should plan to take the course before enrolling for practice teaching in English.

First semester, Tu. Th. 9. Miss Walker. Two semester hours.

### LANGUAGES

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<thead>
<tr>
<th>MATHILDE STECKELBERG</th>
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<tr>
<td>HARRY P. GREENWALL</td>
<td>MARION TAMIN</td>
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<td>EURINCE E. KRAFT</td>
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<td>FRANCES E. NOBLE</td>
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Twenty-four semester hours are required for a major in foreign languages and fifteen for a minor. This 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.

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 342T is prerequisite to directed teaching in Latin. Phonetics 305 is required of students majoring or minoring in French; France and the French 207A, B is required of those 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.

No credit will be given for less than eight semester hours of a beginning 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
The rudiments of grammar, drill in pronunciation, reading of a selected text, writing French from dictation, and memorizing of French songs and poems. The course aims, from the outset, to give training in understanding spoken French.

First semester, M. Tu. W. F. 10, 1. Dr. Noble, Miss Tamin. Four semester hours.

100B Elementary French
This is continuation of 100A. Reading for the two semesters totals 100 to 150 pages.

Second semester, M. Tu. W. F. 10, 1. Dr. Noble, Miss Tamin. Four semester hours.

102A Intermediate French
Composition based on text, assigned topics, and further practice in oral French. About 200 pages of texts, including plays and short stories, are read. Prerequisite: two years of high-school French or one year of college French.

First semester, M. Tu. W. F. 8, 11, 2. 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, M. Tu. W. F. 8, 11, 2. 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, M. W. 2. Miss Tamin. Two semester hours.

201B Conversation and Free Composition
This is a continuation of 201A.

Second semester, M. W. 2. 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, M. W. F. 10. 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, M.W.F. 10. Dr. Noble. Three semester hours.

207A France and the French
A course required of those specializing in French, but conducted in English and open to those not in the Department of French. A study of topics, oral and written, pertaining to French life. Discussion on the art, geography, education, and historical monuments of France. Intended as a cultural background for other courses and for general information. Required of students majoring in French.
First semester, Th. 10. Dr. Noble. One semester hour.

207B France and the French
This is a continuation of 207A.
Second semester, Th. 10. Dr. Noble. One semester hour.

305 Phonetics
The aim of this course is to make a scientific study of sounds and their various groupings, so as to develop accuracy in pronunciation. A great deal of corrective work will be done, aside from the study of theories and rules. Required of all students majoring or minoring in French. Prerequisite: two years of college French or equivalent.

306 Advanced Composition and Grammar Review
A study of grammatical difficulties as they are found in first and second-year high-school readers. Intended to verify and to strengthen the knowledge of fundamental principles of grammar in those students who are planning to teach French. Recommended for all students majoring or minoring in French. Prerequisite: two years of college French or equivalent.

307A Contemporary French Literature
A study of a few well-chosen 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 1947-1948. 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, and rapid reading of other plays from La Petite Illustration.
Not offered in 1947-1948. 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 a center of interest. Prerequisite: three years of college French or equivalent.


310B Seventeenth Century French Literature
A comprehensive study of the great dramatists of the period: Corneille, Racine, Moliere, with an attempt to evaluate their worth against an English background. Prerequisite: three years of college French or equivalent.


313A Survey of French Literature
This course is intended to acquaint students with the masterpieces of French literature as expressing the best aspects of French civilization at different periods of French history, with special emphasis on the medieval period and the Renaissance. Prerequisite: three years of college French or equivalent.

First semester, Tu. F. 2. 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.

Second semester, Tu. F. 2. Miss Tamin. Two semester hours.

GERMAN

100A Elementary German
The aim of this course is to give the student a knowledge of the fundamentals of German grammar, some facility in speaking and writing the language, and the power to understand and reproduce simple German reading matter. The work consists of the systematic study of German grammar, the reading of 100 pages of narrative prose, the reading and memorizing of selected poems, and the writing of simple, idiomatic German. One year of high-school German may be applied on the course.

First semester, M. W. Th. F. 11, M. Tu. W. F. 10, 2. Mr. 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.


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 continued. Prerequisite: one year of college German or two years of high-school German.

First semester, M. W. Th. F. 9, M. Tu. W. F. 3. Mr. Rothfuss, Miss Steckelberg. Four semester hours.

102B Intermediate German

This is a continuation of 102A.


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. They may, upon the advice of the instructors in science and mathematics, suggest articles bearing upon particular problems. Prerequisite: one year of college German or two years of high-school German.

First semester, M. Tu. Th. F. 12. 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 *Kosmos, Naturwissenschaften*, and other current science magazines is introduced.


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, Tu. Th. 8. Mr. Rothfuss. Two semester hours.

201B German Conversation and Composition

This is a continuation of 201A.

Second semester, Tu. Th. 8. Mr. 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, M. Tu. Th. F. 2. 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.

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 1947-1948. Mr. 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 Hofmannsthal, and other poets.

Not offered in 1947-1948. Mr. 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, dental, or other professional course. With 100 B it covers the work of two units of high-school language requirement.

First semester, M. Tu. W. F. 1. Miss Kraft, Mrs. Vincent. Four semester hours.

100B  Elementary and Second-Year Latin

A continuation of 100A.


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.


102B  Cicero and Ovid

This course is a continuation of 102A. Selections from Cicero and from Ovid's "Metamorphoses" are read.


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.


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.

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 1947-1948. 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 1947-1948. Miss Kraft. Four semester hours.

204A Horace
The *Odes*, *Epodes*, and *Satires* are read. A study of the philosophy of Horace accompanies the reading.
First semester, M. W. Th. F. 10. 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.

305 Latin Writing
Practice is made in the fundamental principles of correct expression in Latin. Required of all students majoring in Latin.
First semester, M. W. F. 8. 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.

310 Catullus, Tibullus, and Propertius
Selections from these poets and a study of the period in which they wrote.
Not offered in 1947-1948. 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.
Not offered in 1947-1948. 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, Tu. W. F. S. 8, 9, 12. Mr. Greenwall, Miss Windsor. Four semester hours.
100B Elementary Spanish
This is a continuation of 100A.
Second semester, Tu. W. F. S. 8, 9, 12. Mr. Greenwall, 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, Tu. W. F. S. 11, M. Tu. Th. F. 2, 3. Mr. Greenwall, Miss Windsor. Four semester hours.

102B Intermediate Spanish

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, Tu. Th. 9. Two semester hours.

201B Spanish Conversation and Composition
This is a continuation of 201A.
Second semester, Tu. Th. 9. 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, M. Tu. Th. F. 12. Mr. Greenwall. Four semester hours.

203B Advanced Spanish
This is a continuation of 203A. Business correspondence is introduced.

SPEECH

Laura V. Shaw  Wallace L. Garneau
Albert B. Becker  Anna E. Lindblom
Gifford Blyton  Charles Van Riper
Clara Bush  Zack L. York

A major sequence in speech consists of courses 105A, B, 206, 210, 215, 225, 231, 320, and one other course.
A minor sequence in speech consists of courses 105A, B, 206, 210, and other course totaling 6 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.


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.

First semester, M. W. F. 8, 9, 10, 11, 1, 2, 3; Tu. Th. S. 8, 9, 10; second semester, M. W. F. 8, 9, 10, 11, 1; Tu. Th. S. 9. Mr. Becker, Dr. Blyton, Miss Bush, Miss Lindblom, Miss Shaw, Mr. York. 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.

First semester, M. W. F. 9, 11, 1; second semester, M. W. F. 8, 9, 10, 11, 1, 2; Tu. Th. S. 8, 9, 10. Mr. Becker, Dr. Blyton, Miss Lindblom, Miss Shaw. 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, Th. 3. Mr. Becker, Dr. Blyton. One semester hour.

Note:—This course may not be counted toward fulfillment of a minimum requirement in Group I.

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., or consent of instructor.

Second semester, M. W. F. 11. Mr. Becker, Dr. Blyton, Miss Lindblom. Three semester hours.
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, Tu. Th. 11. Mr. Becker, Miss Lindblom. Two semester hours.

210 Interpretive Reading
Analysis and oral interpretation of the more simple types of prose and poetry. Prerequisite: Fundamentals of Speech 105A, B.

First semester, M. W. F. 1; second semester, M. W. F. 2. Miss Shaw. 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, M. W. F. 1. Miss Shaw. Three semester hours.

220 Stage Design
A course for speech and art students. It deals with the basic problems of the visual aspect of play production, and considers elementary art principles and technique as applied specifically to stage design. Members work in conjunction with the Players Club in staging laboratory and mid-winter productions. No special art training or theatrical experience is required.

First semester. Hours to be arranged. Mr. York. Two semester hours.

Note:—This course may be counted for credit in art but not toward fulfillment of a minimum requirement in Group I.

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 inter-collegiate debate are advised, so far as possible, to elect this course first. Prerequisite: Fundamentals of Speech 105A, B, or consent of instructor.

First semester, M. W. F. 11. Mr. Becker, Miss Lindblom. Three semester hours.

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. Maximum of 6 semester hours allowed during college course, and not more than 2 semester hours each year.

Each semester, M. Tu. W. Th. 3. Dr. Blyton, Miss Lindblom.
**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, M. W. F. 11. 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, M. W. F. 11. 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. History of radio and radio terminology will be studied. Special emphasis will be placed on the use of radio as a teaching device in the classroom. Visits to various studios will be arranged, and students will participate in broadcasts over a local station. Prerequisite: Fundamentals of Speech 105A, B, Interpretive Reading 210 or Public Speaking 206, or consent of instructor.


**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, M. W. F. 10. 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, M. W. F. 2. Dr. Van Riper. Three semester hours.

**306 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 ora-
torical contests will find this course useful. Prerequisite: Fundamentals of Speech 105A, Public Speaking 206, or consent of instructor.

Second semester, Tu. Th. 11. Mr. Becker, Miss Lindblom. Two semester hours.

308A Principles of Forensics
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 constructor.

First semester, 3. Dr. Blyton, Miss Lindblom. One semester hour.

308B Principles of Forensics
A continuation of the work done in 308A. Prerequisite: Principles of Forensics 308A.

Second semester, 3. Dr. Blyton, Miss Lindblom. One semester hour.

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.

Second semester, hours to be arranged. 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, Tu. Th. 2. 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, M. W. F. 10. 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, M. W. F. 2. Dr. Van Riper. Three semester hours.

320 Play Production
Methods of staging plays, including 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, Tu. Th. 1-3. 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 plate, 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, M. W. F. 9. 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. Educational programs and transcriptions will be studied and evaluated. 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.
Each semester, M. W. F. 9. 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.
Each semester, Tu. Th. 9. Mr. Garneau. Two semester hours.

Open to Graduates

540(151) Fundamentals of Broadcasting
Instruction concerning every department of the broadcasting studio. Prerequisite: Fundamentals of Speech 105A, B, Public Speaking 206 or Interpretive Reading 210, or consent of instructor.
First semester, S. 1-3. Mr. Garneau. Two semester hours.
DIVISION OF PHYSICAL EDUCATION AND HEALTH

PHYSICAL EDUCATION FOR MEN

JUDSON A. HYAMES
MITCHELL J. GARY
JOHN W. GILL
CHARLES H. MAHER
CLAYTON J. MAUS

FRANK S. NOBLE
HERBERT W. READ
DONALD N. SCOTT
J. TOWNER SMITH
ROY J. WIETZ

All men students must participate in general physical education for three class hours weekly during the first six semesters of residence, unless excused officially from participation, if they enroll for the first time during the first semester. Students enrolling for the first time at the beginning of the second semester will postpone enrollment in General Physical Education until the fall semester immediately following so that a regular sequence of activity may be effected. This arrangement is necessary because of limited facilities. Three class hours of credit are granted for satisfactory completion of each semester of participation. Sequence of courses must be observed as follows: 103A, 103B, 203A, 203B, 303A, 303B.

A medical examination is required of all students. The findings of this examination determine the type of physical education program in which the student participates. An approved corrective and recreative program is prescribed for men whose physical examination indicates the inadvisability of participation in the regular program of physical activity.

Men majoring in physical education are not required to participate in general physical education classes because participation in major classes satisfies that requirement.

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.

Freshmen entering Western Michigan College of Education during the year of 1946-1947 and thereafter will be enrolled in general physical education during the first term of residence, unless they enroll for the first time at the beginning of the second semester as noted above. Men who have attended Western Michigan College of Education prior to 1946-1947 but who have not completed the requirement of ten hours of physical education which was in effect prior to 1946-1947 will enroll in 108A and participate in the regular sequences of courses until ten hours of participation have been completed. 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.

Swimming will be required of all men students who are physically able to participate, including members of athletic teams, as soon as satisfactory facilities are available.

All students taking courses in this department pay $3.00 for laundry and towel and lock deposits. At the close of the semester $1.75 is refunded if towel and lock are returned.

COURSES FOR NON-SPECIALIZING STUDENTS

103A General Physical Education
This course, together with 103B, is intended to give the student instruction in fundamentals, playing skills, rules, and competition in swimming, touch football, soccer, volleyball, boxing, gymnastics, and tumbling, and sufficient military drill and calisthenics for class organization. Instruction in each activity is given on a rotating basis for approximately four weeks, with swimming for eight weeks as soon as swimming facilities become available.

First semester, M. W. F. 9, 12, Tu. Th. S. 9. Mr. Maher, Mr. Noble, Mr. Scott, Mr. Wietz. Three class hours.

103B General Physical Education
This course is a continuation of 103A, which precedes it, and follows the same general rotation of four week periods, which completes instruction during the two semesters for each student in the seven activities mentioned in 103A. Prerequisite: 103A.

Second semester, M. W. F. 12, 2, Tu. Th. S. 9. Mr. Maher, Mr. Noble, Mr. Scott, Mr. Wietz. Three class hours.

203A General Physical Education
This course, together with 203B, is intended to give the student instruction in fundamentals, playing skills, rules, and competition in wrestling, basketball, advanced gymnastics and tumbling, softball, track, speedball, and advanced swimming, with additional competition in activities experienced in 103A and 103B. Rotation on a four-week basis will continue. Prerequisite: 103B.

First semester, M. W. F. 8, 11, Tu. Th. S. 11. Mr. Maher, Mr. Noble, Mr. Scott, Mr. Wietz. Three class hours.

203B General Physical Education
This course is a continuation of 203A, which precedes it, with instruction during the two semesters for each student in the six activities mentioned in 203A. Prerequisite: 203A.

Second semester, M. W. F. 9, 11, Tu. Th. S. 11. Mr. Maher, Mr. Noble, Mr. Scott, Mr. Wietz. Three class hours.
303A General Physical Education

This course, together with 303B, is intended to give additional participation in activities covered in 103A, 103B, 203A, and 203B, with instruction in handball, golf, badminton, baitcasting, and safety procedures. Competition will be emphasized rather than instruction in fundamentals. Prerequisite: 203B.

Not offered in 1947-1948. Mr. Maher, Mr. Noble, Mr. Scott, Mr. Wietz.

Three class hours.

303B General Physical Education

This course is a continuation of 303A, which precedes it, and follows the same general rotation of four-week periods, with emphasis on competition. Prerequisite: 303A.

Not offered in 1947-1948. Mr. Maher, Mr. Noble, Mr. Scott, Mr. Wietz.

Three class hours.

General physical education is not required during the seventh and eighth semesters of residence, provided courses 103A through 303B have been completed previously. However, participation is strongly recommended. Senior students wishing to continue participation may enroll in 303A during the first semester and 303B during the second semester, but regular attendance is required so that class procedure is not interrupted.

COURSES FOR SPECIALIZING STUDENTS

Physical Education Major

Minimum requirements for men who elect physical education as their major field are:

Group I. Language and Literature .................. 12 semester hours
Rhetoric (in addition) ............................. 6 semester hours

Group II. Science

General Biology 100A, B .......................... 8 semester hours
Hygiene 112 ........................................ 2 semester hours
Anatomy 211A ....................................... 4 semester hours
Physiology 211B ..................................... 4 semester hours

Group III. Social Science ......................... 12 semester hours

Group IV. Education ................................ 20 semester hours

Group VII. Physical Education

Required courses for twenty-four hour major:

General Athletics 105A, B .......................... 2 semester hours
Advanced Athletics and Gymnastics 205A, B ...... 2 semester hours
History and Principles of Physical Education 206 .... 3 semester hours
Fundamentals and Technique of Football 208 ...... 2 semester hours
Fundamentals and Technique of Basketball 209 .... 2 semester hours
Fundamentals and Technique of Baseball 210 ...... 2 semester hours
Fundamentals and Technique of Track and Field 211. 2 semester hours
Principles and Technique of Gymnastic Teaching 305 .. 2 semester hours
First Aid and Athletic Training 306 .......................... 3 semester hours
Swimming 310 ..................................................... 1 semester hour
Playground and Community Recreation 320 .......................... 3 semester hours

Strongly recommended electives:
Camping and Scouting 207 .......................... 3 semester hours
Physiology of Exercise 307 .......................... 2 semester hours
Psychology of Coaching 312 .......................... 2 semester hours

Recommended electives:
Kinesiology 308 ..................................................... 2 semester hours
Tests and Measurements in Physical Education 309 .......................... 3 semester hours

Organization and Administration of Physical Education 343 is required of those who plan to do directed teaching in physical education. A course in Library Methods is required.
The remaining semester hours may be selected from the courses regularly offered by the college, subject to degree requirements.

Physical Education Minor

Minimum requirements for men who elect physical education as their minor are:
General Athletics and Elementary Gymnastics 105A .......................... 1 semester hour
Elementary Gymnastics and Outdoor Games 105B .......................... 1 semester hour
Psychology of Coaching 312 .......................... 2 semester hours
Fundamentals and Technique of Football 208 .......................... 2 semester hours
Fundamentals and Technique of Basketball 209 .......................... 2 semester hours
Fundamentals and Technique of Baseball 210 .......................... 2 semester hours
Fundamentals and Technique of Track and Field 211 .......................... 2 semester hours
Playground and Community Recreation 320 .......................... 3 semester hours

105A General Athletics and Elementary Gymnastics

This course covers material used in physical education classes for grade and high school level. In the fall, the fundamentals and playing of soccer are stressed. The winter activity consists of fundamental activities on various pieces of apparatus such as buck, side horse, high bar, parallel bars, ladder, etc. The latter part of the semester is devoted to instruction in the fundamentals of boxing.
First semester, M. W. F. 1, Tu. Th. F. 1. Mr. Wietz. One semester hour.

105B Elementary Gymnastics and Outdoor Games

Virtually a continuation of 105A with the first part of the semester devoted to fundamentals of wrestling. Until the weather is suitable for outdoor work, instruction is continued in fundamentals on apparatus, marching, and calisthenics. During the spring instruction and participation is given in softball and touch football.
Second semester, M. W. F. 1, Tu. Th. F. 1. Mr. Wietz. One semester hour.
175 Camping and Outdoor Education

A course designed for major and minor students in physical education, to be offered annually at Clear Lake Camp during the two weeks preceding the opening of the fall semester. The purpose is to acquaint the student with the current trends and practices in camping, school camping, and outdoor education. Emphasis will be given to counseling techniques, skills in waterfront activities, living out of doors, nature exploration, and crafts.

A minimum fee will be charged for living expenses at the camp.

Staff members of Clear Lake Camp and of the Departments of Physical Education for Men and Women. Two semester hours.

205A Advanced Athletics and Gymnastics

This course covers material as initiated in 105A, but with more developed skills, and the angle of leadership is stressed. The work is outdoors during seasonable weather and transfers indoors to gymnastics during the early winter months.

First semester, M. W. F. 10, Tu. Th. S. 10. Mr. Read. One semester hour.

205B Advanced Gymnastics and Outdoor Games

Virtually a continuation of 205A, with gymnastics in the late winter months and a complete program of playground games outdoors in the spring. In addition, a track athletic program suitable for a playground is covered.

Second semester, M. W. F. 10, Tu. Th. S. 10. Mr. Read. One semester hour.

206 History and Principles of Physical Education

Courses formerly taught separately as History of Physical Education and Principles of Physical Education are combined in this course. Cycles in types of physical education practices are seen as related to political and economic cycles, while at the same time underlying principles common to all epochs have due consideration. The final effort is to arrive at guidance in setting up a sound program of physical education for the secondary schools. Lectures, assigned reading, discussions, and reports.

Each semester, M. W. F. 9. Mr. Read. Three semester hours.

207 Camping and Scouting

Managing and planning of summer camps, including such topics as housing, sanitation, commissary, program, activities; administration of canoeing, hiking, swimming, and various other camp interests.

History, aims, and principles of the Boy-Scout movement. Methods of the patrol and troop are studied. Students are given the opportunity of practical experience in the various phases of scouting and woodcraft. Particular emphasis is placed on the value of the scout program in supplementing the influences of the home, church, and school life of the adolescent boy. Those completing the course satisfactorily are awarded the standard leader's diploma, issued by the Boy Scouts of America.

Second semester, M. W. F. 11. Mr. Read. Three semester hours.
208 Fundamentals and Technique of Football
Fundamentals of football coaching, with special emphasis on catching, passing, kicking, blocking, tackling, principles of line and backfield work, and the manner of playing the various positions. Building of plays, defensive formation, generalship, signal systems, and scouting. Some problems of the coach. Study of the rules.

First semester, M. W. F. 11. Mr. Gill. Two semester hours.

209 Fundamentals and Technique of Basketball

First semester, M. W. F. 2. Mr. Read. 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.

Second semester, M. W. F. 2. Mr. Maher. Two semester hours.

211 Fundamentals and Technique of Track and Field
The accepted forms of starting, hurdling, distance running, pole vaulting, discus and javelin throwing, and sprinting. Study of physical conditions affecting speed, endurance, and fatigue. The selection and preparation of contestants for the various track and field events. Managing and officiating of games and meets. Study of rules. Practice on the track.

Second semester, M. W. F. 1. Mr. Smith. Two semester hours.

305 Principles and Technique of Gymnastic Teaching
The underlying principles used in the selection of activities of modern physical education in the United States; principles used in the selection of activities which are adapted to and suitable for elementary school, secondary school, and college. The course presents methods of class organization and conduct of the activities. The field covered includes mass games, organized games, relay races, stunts, combative events, natural activities on the apparatus, folk dances, clogging, marching, and calisthenics. Testing and grading results are included. An opportunity is given for practice in class instruction and visitation.

Second semester, M. W. F. 8. Mr. Noble, Mr. Read. 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 coaches point of view. Prerequisite: Anatomy 211A, Physiology 211B.

Each semester, M. W. F. 10. Mr. Scott. Three semester hours.
DIVISION OF PHYSICAL EDUCATION

307 Physiology of Exercise
Fundamental principles underlying the physiology of muscle and nerve, with special application to physical activities. Study of the inter-relationship of digestion, respiration, excretion, and internal secreting glands to muscular activity and efficiency. Study of the effects of over-exertion and fatigue. Prerequisite: Anatomy 211A, Physiology 211B.

First semester, Tu. Th. Mr. Scott. Two semester hours.

308 Kinesiology
This course includes a study of the types of muscular activity; the mechanics involved in their performance; a detailed study of the muscles, ligaments, and joints used in gymnastic, athletic, and occupational movements, and their relation to the problems of bodily development and efficiency. Prerequisite: Anatomy 211A, Physiology 211B.

First semester, Tu. Th. Mr. Gary. Two semester hours.

309 Tests and Measurements in Physical Education
A study of the historical development of measurements in physical education from the early anthropometric and strength tests, through the athletic ability tests, up to a detailed consideration of the various types of tests now used in physical education. Prerequisite: Anatomy 211A, Physiology 211B.

Second semester, M. W. F. 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, Tu. Th. Mr. Noble. One semester hour.

312 Psychology of Coaching
This course is designed primarily for those who are planning to make coaching a profession, although playground leaders will find the course helpful in working out their problems. The first part of the semester is given over to the discussion of certain principles of educational psychology and their application to athletics, along with the physiological analysis of the principal sports. The latter part of the semester is confined to athletic coaching. Some of the topics discussed are the following: getting ready to coach, planning the practice sessions, presenting material effectively, planning the season's campaign, playing the game; the "jinx" and how to handle it, the element of fear and how to conquer it; morale, personality, and will power; the personal touch in coaching.

Each semester, Tu. Th. Mr. Gill. Two semester hours.

320 Playground and Community Recreation
Nature and function of play; age periods and adaptation of activities; social environment; playground development, construction, management, and supervision. Practice in class instruction in games, story plays, handi-
work, and other physical activities. A survey of recreational material, athletic and field meets.

Each semester, M. W. F. 11. Mr. Hyames. Three semester hours.

**PHYSICAL EDUCATION FOR WOMEN**

CRYSTAL WORNER
MARY BOTTJE
ISABEL CRANE
DORIS A. HUSSEY
SARAH H. McROBERTS
JEAN SMITH
DOROTHY VESTAL

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 physical examinations. No student is excused from physical education, but program adjustments are arranged to take care of those with physical handicaps. Appropriate uniforms, obtainable at Western’s Campus Store, are required for the various activities. A fee of fifty cents will be charged each semester for the use of the locker. An additional laundry fee is necessary for students enrolled in the swimming classes. This fee is seventy-five cents for classes which meet once or twice a week and one dollar for classes meeting three or four times a week.

Students other than those majoring in physical education may not earn more than three class hours of physical education in one semester. (A class hour is to be interpreted to mean one hour of class work each week for one semester.)

**PHYSICAL EDUCATION MAJOR**

Requirements in science and in physical education for students who wish to make physical education their major field are:

**Group II. Science**
- General Biology 100A, B ........................................ 8 semester hours
- Hygiene 112 ....................................................... 2 semester hours
- Anatomy 211A .................................................... 4 semester hours
- Physiology 211B ................................................... 4 semester hours

**Group VII. Physical Education and Health**
- Physical Education Theory and Practice 151A, B ........... 4 semester hours
- Camping and Outdoor Education 175 ........................ 2 semester hours
- Physical Education and Practice 251A, B .................. 4 semester hours
- Elementary School Physical Education 270A, B .......... 4 semester hours
- First Aid 271 ...................................................... 1 semester hour
- Applied Anatomy 273 ........................................... 2 semester hours
- Secondary School Physical Education 274A, B .......... 3 semester hours
- History and Principles of Physical Education 275 .... 3 semester hours
- Community Recreation, Scouting, and Camp Fire 276 2 semester hours
- Health Education 285 ............................................ 2 semester hours
- Methods in Physical Education 344 ........................ 2 semester hours
- Administration and Organization 345 ....................... 2 semester hours
Physical Education Theory and Practice 351A, B .... 2 semester hours
Physical Education Theory and Practice 361A, B .... 2 semester hours
Individual Gymnastics 373 ..................... 3 semester hours

TWENTY-FOUR HOUR MAJOR
(This is not to be confused with the requirements for students who are specializing in this field.)

Physical Education Theory and Practice ..................12 semester hours
(The student will elect the remaining 12 hours from the following group: Students who expect to teach are required to take either Elementary School Physical Education 270A, B or Secondary School Physical Education 274A, B.)
Camping and Outdoor Education 175 .................. 2 semester hours
Elementary School Physical Education 270A, B .... 4 semester hours
First Aid 271 .......................................1 or 2 semester hours
Secondary School Physical Education 274A, B ...... 3 semester hours
History and Principles of Physical Education 275 .. 3 semester hours
Community Recreation, Scouting, and Camp Fire, 276 2 semester hours
Health Education 285 .................................. 2 semester hours

PHYSICAL EDUCATION MINOR

Required:

Physical Education Theory and Practice ............... 6 semester hours
(This is the equivalent of 18 class hours of physical education practice.)
Elementary School Physical Education 270A, B .... 4 semester hours
or
Secondary School Physical Education 274A, B ...... 3 semester hours

Elective:
The remaining five or six hours may be selected from the following courses:
Camping and Outdoor Education 175 .................. 2 semester hours
First Aid 271 .......................................1 or 2 semester hours
History and Principles of Physical Education 275 .. 3 semester hours
Community Recreation, Scouting, and Camp Fire 276 2 semester hours
Health Education 285 .................................. 2 semester hours

It is advisable for any student who wishes to be recommended by the department for the teaching of physical education to take as electives Methods in Physical Education 344, 2 semester hours, and Directed Teaching in Physical Education, 4 semester hours. These courses may not be included in the 24 semester hours required for the major nor in the 15 semester hours required for the minor.

PHYSICAL EDUCATION COURSES FOR WHICH CLASS HOURS OF CREDIT ARE GIVEN

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 determin-
ing her physical abilities and needs. A variety of activities with some lectures and discussion will be included.

First semester, Tu. Th. 9, 12, 2, 4; second semester, Tu. Th. 12, 2, 4. Miss Bottje, Miss Smith, Miss Vestal, Miss Worner.

101 Early American Dancing
First semester, M. W. 4; second semester, M. W. 4. Miss Bottje, Miss Worner.

105 Physical Education
Volleyball, folk dancing, basketball, softball and other seasonal sports. Prerequisite: Physical Education 100.

Not offered in 1947-1948.

108A Restricted Exercise
Exercise for restricted groups. Hiking, bowling, quoits, archery, and light activity suited to the season. First semester. Hours for class meeting are to be arranged with the instructors. Miss Bottje, Miss Vestal.

108B Restricted Exercise
A continuation of 108A.
Second semester. Hours for class meeting to be arranged with the instructors. Miss Bottje, Miss Vestal.

109 Individual Gymnastic
A course of remedial exercise for students who do not pass the physical examination. Credit will be given in this course for one repetition only.

First semester, Tu. Th. 10, 1, 2; second semester, Tu. Th. 70, 2, 3. Miss Hussey, Miss Smith.

110 Swimming
Swimming, diving, and life-saving. Prerequisite: Physical Education 100.

First semester, M. W. F. 11, Tu. Th. 3; second semester, M. W. F. 11, 2, 3. Miss Bottje, Miss Hussey, Miss McRoberts, Miss Smith.

111 Advanced Basketball
Prerequisite: Physical Education 100.
First semester, Tu. Th. 11. Miss Bottje, Miss Vestal, Miss Worner.

113 Tennis
Prerequisite: Physical Education 100.
Second semester, M. Tu. W. Th. F. 8, 1, 2. Miss Bottje, Miss Hussey, Miss Vestal, Miss Worner.

114 Golf
Practice of form for the various shots, with some work on the course. Prerequisite: Physical Education 100.


115 Folk Dancing
Folk dances, country dances, and clogs. Prerequisite: Physical Education 100. Not offered in 1947-1948. Miss Worner.
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, Tu. Th. 4. Miss Hussey.

117 Winter Sports
Skiing, skating, and hiking during the winter season. Prerequisite:
Physical Education 100. Miss Smith.

118 Archery
Prerequisite: Physical Education 100.

119 Tap Dancing
Prerequisite: Physical Education 100.
First semester, M. W. 8. Miss McRoberts.

120 Badminton
Minor individual sports such as shuffleboard, ring tennis, bowling, ping-pong, badminton or fencing. Prerequisite: Physical Education 100.
First semester, M. Th. 9; second semester, Th. 9. Miss Bottje, Miss Hussey, Miss Smith, Miss Vestal.

121 Modern Dance
Individual and group study of expression through rhythmical movement. Development of bodily coordination and control. Prerequisite: Physical Education 100.
First semester, M. W. 12. Miss McRoberts.

122 Social Dancing
Each semester Tu. 5. Miss McRoberts.

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, Tu. Th. 3. Miss Bottje.

330 Early Elementary 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.
Second semester, Tu. Th. 4. Miss Bottje.

331 Later Elementary Physical Education
A study of needs and interests of pupils of later-elementary grades in physical education, and presentation of physical-education activities suited to that age. Prerequisite: Physical Education 100.
Second semester, Tu. Th. 4. Miss Vestal.
214 DESCRIPTION OF COURSES

332 Secondary School Physical Education
A course giving in theory and practice physical-education activities suitable for high-school students. Prerequisite: Physical Education 100.
First semester, W. F. 8. Miss Vestal.

PHYSICAL EDUCATION COURSES FOR WHICH SEMESTER HOURS OF CREDIT ARE GIVEN

151A Physical Education Theory and Practice
Fundamental skills, body mechanics, folk dancing, social dancing, swimming, and hockey or soccer.
First semester, Tu. Th. 10,1; M. Tu. W. Th. F. 11. Miss Hussey, Miss Vestal, Miss Worner. Two semester hours.

151B Physical Education Theory and Practice
Baseball, social dancing, folk dancing, tennis, and swimming.
Second semester, M. Tu. W. Th. F. 11, Tu. Th. 1. Miss Hussey, Miss Vestal, Miss Worner. Two semester hours.

171A First Aid
The standard course in first aid, leading to the Red Cross certificate. This course meets during the first half of the semester. Students who wish may elect 171B, Advanced First Aid, for the remainder of the semester.

171B Advanced First Aid
Additional practice in first aid techniques. The Red Cross advanced certificate is awarded for satisfactory completion. This course meets during the last half of the semester only. Prerequisite: First Aid 271A.

175 Camping and Outdoor Education
A course designed for major and minor students in physical education, to be offered annually at Clear Lake Camp during the two weeks preceding the opening of the fall semester. The purpose is to acquaint the student with the current trends and practices in camping, school camping, and outdoor education. Emphasis will be given to counseling techniques, skills in waterfront activities, living out of doors, nature exploration, and crafts.
A minimum fee will be charged for living expenses at the camp.
Staff members of Clear Lake Camp and of the Departments of Physical Education for Men and Women. Two semester hours.

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, Tu. Th. 10,1; M. Tu. W. Th. F. 11. Miss Bottje, Miss Hussey, Miss Worner. Two semester hours.
251B Physical Education Theory and Practice
An activity program which affords an opportunity for organization and participation in simple games, simple team games, stunts, track and field, skill tests, rhythms and dances.
Second semester, M. Tu. W. Th. F. 11; Tu. Th. 1. Miss Bottje, Miss Hussey, Miss Worner. Two 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 1947-1948. 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 1947-1948. 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, W. F. 9. 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, M. Tu. Th. F. 2. Miss Vestal. 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.

275 History and Principles of Physical Education
A brief historical survey of physical education with a study of its relation to the social and political ideals of different periods. In addition, a study is made of the derivation of the principles of physical education and of the types of programs that develop through their application.

276 Community Recreation, Scouting, and Camp Fire
The study of the organization and administration of community play. Students beyond the sophomore year may elect this course by obtaining permission from the instructor.
First semester, M. W. F. 10. 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 advance healthful living on the part of the students and to make prospective teachers aware of modern methods and materials useful in helping school children solve their health problems.

First semester, Tu. Th. 10; second semester, Tu. Th. 10. Miss Worner. Two semester hours.

351A Physical Education Theory and Practice
This course continues through the year and offers instruction in the theory and practice of group and team games of secondary level, individual sports, such as ping-pong and ring tennis, and practice in marching, gymnastics, apparatus, tumbling, and dance.

First semester, Tu. Th. 11, M. W. 2, Tu. Th. 4. Miss Hussey, Miss McRoberts, Miss Vestal. One semester hour.

351B Physical Education Theory and Practice
A continuation of instruction in the theory and practice of activities suitable for secondary-school level.


361A Physical Education Theory and Practice
Advanced work in sports, swimming, and dancing, with opportunities for teaching and officiating.

First semester, W. F. 10. Other hours to be elected according to the activity the student needs. Miss Hussey, Miss McRoberts, Miss Vestal. One semester hour.

361B Physical Education Theory and Practice
Continuation of the work begun in 361A with changes in the sports to suit the season.

Second semester, W. F. 10. Other hours to be elected according to the activity the student needs. Miss McRoberts, Miss Vestal. One semester hour.

373 Individual Gymnastics
The study of preventive as well as prescribed exercise for remedial defects in case of curvature and physical abnormalities. Practice with patients will be given. Prerequisite: Anatomy 211A, Physiology 211B, Applied Anatomy 273.

The Division includes the Departments of Agriculture, Biology, Chemistry, Geography and Geology, Mathematics, 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 group 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 (Agriculture, 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 group 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.
It aims through lectures, discussions, and numerous demonstrations to bring to each student a measure of scientific knowledge and understanding, and an appreciation of the value of the scientific method as well as the role of the physical sciences in modern life.
First semester, Lecture, M. Tu. Th. 11, Quiz, F. 11. Dr. Berry, Mr. Erickson, Mr. Marburger, Dr. Osborn, Dr. Rood. Three semester hours.

100B Physical Science
This course is a continuation of 100A.
Second semester, Lecture, M. Tu. Th. 11, Quiz, F. 11. Dr. Berry, Mr. Erickson, Mr. Marburger, Dr. Osborn, Dr. Rood.
Teaching of Physical Science
    Prerequisite: a major or minor in physics or chemistry.
    Second semester, Tu. Th. 3. Mr. Marburger, Dr. Osborn. Two semester hours.

Open to Graduates

The Teaching of Science
    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.
    Not offered in 1947-1948. Dr. Osborn. Two semester hours.

AGRICULTURE

Howard D. Corbus

The Department of Agriculture has added a series of short courses for veterans who might want instruction in practical agriculture without college credit as such. These courses are described in a special bulletin that may be obtained from the Registrar’s office, or from the Department of Agriculture, Western Michigan College of Education.

Regular college courses carrying college credit have been organized to serve three and possibly four groups or classes of students enrolling in the college. Students in one of these groups are preparing to teach either in one-teacher rural schools or in consolidated rural schools with elementary grades in which the pupils come from rural homes. The teacher in such a position should be well informed about the environment and means of support of people in a rural district.

A second group of students includes those who enroll in a pre-professional curriculum with the intention of finishing their work in a college of agriculture, forestry, or veterinary science, to which their credits may be transferred.

A third group consists of those who are preparing to teach courses in agriculture and science, and perhaps shop courses, in consolidated rural high schools or agricultural schools.

Still other students, in whatever curriculum enrolled, who wish to know more about the general field of agriculture as an important national industry, may constitute a fourth group. A group of agriculture courses may be combined with other science courses, such as biology or geography or chemistry, to form “group” or “combination science” majors. A good selection of related minors is also desirable, such as manual arts, geography, etc.

Special effort has been made to fit courses into the rural life and education curriculum, and combinations have been arranged to fit the needs of small high schools. Those preparing to teach courses in agriculture in secondary schools should choose Animal Husbandry 106, 107, 108; Soils 201; Farm Crops 202; Horticulture 203. Rural School Agriculture 105 is planned to assist rural elementary teachers to understand the agricultural problems in connection with their school work in districts where farming is the
main source of income. A well-stocked, fertile, demonstration farm provides opportunity for first-hand observation and for participation in actual farm experiences.

105 Rural School Agriculture

This course is planned to assist teachers who are going into rural schools in districts where farming provides the main source of cash income. Attention is given to the sources and amounts of cash likely to be derived from farm enterprises in such districts, to the environment that surrounds the rural pupil during the time he is not in school, to the major problems confronting patrons of the rural school, to adaptation of elementary science work to the nature of the pupils' experiences, and to intelligent counsel with pupils regarding their personal problems.

Each semester, M. W. F. 2. Mr. Corbus. Three semester hours.

Note:—This course may not be counted toward fulfillment of a minimum requirement in Group II.

106 Animal Husbandry

This course deals with market types, classes, grades, and breeds of cattle, hogs, sheep, and horses from the farm-use standpoint. Consumer problems in meat consumption are linked with producer and breeder problems. The origin of types and breeds is studied with the purpose of meeting demands with a satisfactory supply. Utilization of the products of farm enterprises, as wool, meats, etc., is studied. A visit to the International Livestock Exposition in Chicago is part of the course and is included as a method of fixing ideals in livestock breeding.

First semester, M. W. F. 3. Mr. Corbus. Three semester hours.

107 Animal Husbandry

This course concentrates on the dairy industry, particular attention being given to the nature and properties of the salable products and the systems used in manufacturing and distributing of these products to the consumer. The feeding of animals as a means of furnishing raw materials for conversion into usable animal products, and animal feeding from the economic standpoint are considered.

Second semester, M. W. F. 3. Mr. Corbus. Three semester hours.

108 Animal Husbandry

The subject of poultry is considered, both as a separate specialized type of industry and as a supplementary farm enterprise. Size of business, investment, selection of types and breeds, and equipment are studied. Attention is given to the problems of getting established in the various poultry enterprises, their approximate incomes, expenses, and handicaps.

First semester, Tu. Th. 10. Mr. Corbus. Two semester hours.

201 Soils

Soils and their management are studied as the source of livelihood, not only of those living on farms but also of others in related occupations. Soil types, productivity, and methods of building and maintaining fertility are studied. Observations of actual soil management are made on the
college farm: profiles, commercial-fertilizer applications, liming, and organic-matter content are seen and studied on this representative, family-sized farm. Laboratory exercises to illustrate important principles are used in addition to classroom work. Soil conservation districts, and their organization are observed at first hand.

First semester, M. W. F. 8. Mr. Corbus. Three semester hours.

202 Farm Crops
This course deals with practices used to supply farm products for direct cash sales or for indirect cash production through feeds for farm animals. Improved practices in crop and soil management, better seed, more efficient culture, and better marketing are studied in connection with the survey of our domestic crops. The probable cash income from the production of these crops is used in the economic study of farm life.

Second semester, M. W. F. 8. Mr. Corbus. Three semester hours.

203 Horticulture
Horticulture is studied in its several divisions—the growing of fruits, vegetables, and flowers, and landscape decoration or home beautification. Consideration is also given to the size, location, production problems, and returns when these enterprises furnish the money needed to support a farm home. The commercial fruit industry is compared with general farm supplementary fruit work, as to the incomes and uncertainties of each. Commercial nurseries, the college farm, and local greenhouses offer opportunities for class visitation.

Second semester, Tu. Th. 10. Mr. Corbus. Two semester hours.

310 Organization in Agriculture
The purpose of this course is to outline the developments in the improvement of agriculture through education. A survey will be made of the early efforts to extend information about agriculture by way of farmers' clubs, granges, and cooperative associations; of the later organization of courses in college, secondary school, and elementary school, and extension work with adults and 4-H clubs; and of the new developments in evening agricultural schools and part-time classes.

Another objective is to show where and how education in agriculture fits into the general school system. Prerequisite: eight semesters hours in Agriculture.

Second semester, Tu. 1. Mr. Corbus. One semester hour.

Note:—This course may not be counted toward fulfillment of a minimum requirement in Group II.
To serve as the biological foundation for a cultural education, General Biology 100A, B is recommended.

For students taking the secondary school curriculum, a major sequence consists of Group (a) below and any two of the other groups; a minor consists of Group (a) and any one of the other groups, provided such election will give the required number of hours.

(a) General Biology 100A, B
(b) Botany 221A, B
(c) Zoology 242A, B
(d) Anatomy 211A and Physiology 211B
(e) Bacteriology 212A and Community Hygiene 212B
(f) Hygiene 112, Evolution and Genetics 305, and Human Genetics 306.
(g) Cytology and Histology 341 and Vertebrate Embryology 342

For students anticipating medicine or dentistry, a major consists of Groups (a) and (c) required, and (d), (e), or (g) recommended. The latter three, however, will not be recognized by medical schools as filling the requirements in these subjects nor will these be accepted as a part of the 90 semester hours required by most medical schools.

For students anticipating forestry, horticulture, or landscape architecture a major consists of Groups (a), (b), and (c).

For special-education students and students interested primarily in social sciences, a recommended major includes Groups (a), (e), and (f) above.

For physical-education students, required work consists of Groups (a) and (d) above and Hygiene 112. This is the minimum requirement from such students for a minor in biology.

For occupational therapy students, a minor consists of Group (a), Anatomy and Physiology 215, and Neurology and Psychiatry 330.

For special nature-study students the required major in science consists of the following courses.

1. General Biology 100A, B
2. Nature Study 231A, B
3. 8 semester hours chosen from Botany 221A, B; Zoology 242A, B; Bird Study 234; Nature Study and Materials and Methods 233S. Geology, chemistry, and physics are suggested as desirable additional courses.
A minor for elementary teachers may consist of the following courses:

1. General Biology 100A, B
2. Nature Study 231A, B

There is a laboratory fee of fifty cents per semester for materials used in biology courses.

**GENERAL COURSES**

**100A General Biology**
This course, together with 100B, is intended to give the student a general survey of the principles of plant and animal life as part of the foundation for a liberal education or as a basis for the advanced courses in biology. It covers the organization of plants and animals, the general physiology of living things, and a study of the lower plant and animal groups with special stress upon their importance to man.

First semester, Lecture, M. F. 8, 9, Tu. Th. 9, 10, M. W. 12, 3, W. F. 2; Laboratory, M. F. 8-10, 10-12, Tu. Th. 8-10, 10-12, 12-2, 2-4, W. S. 8-10, 10-12, W. F. 12-2, M. W. 2-4; second semester, Lecture, Tu. Th. 2; Laboratory, M. F. 8-10, 10-12, 12-2. Mr. Hinds, Mr. Joyce, Dr. Kenoyer, Mr. Maus, Dr. Steen. Four semester hours.

**100B General Biology**
This is a continuation of 100A, which should precede it, and considers the structure and classification of the higher groups of animals and plants, and the larger aspects of genetics, embryology, evolution, and ecology.

First semester, Lecture, Tu. Th. 12; Laboratory, M. F. 8-10, 10-12, 12-2; second semester, Lecture, M. F. 9, 11, Tu. Th. 9, 10, 12, 1, M. W. 3; Laboratory, M. F. 8-10, 10-12, Tu. Th. 8-10, 10-12, 12-2, 2-4, W. S. 8-10, 10-12, W. F. 12-2, M. W. 2-4. Mr. Hinds, Mr. Joyce, Dr. Kenoyer, Mr. Maus, Dr. Steen. Four semester hours.

**304 Methods and Materials in Biology**
This course is required of applicants for student teaching in biology. It is a laboratory and field course in the preparation and use of biological materials of instructional value. Emphasis is placed on the construction of inexpensive equipment, the maintenance and care of plants and animals under high-school laboratory conditions, and the preparation of teaching collections. Prerequisite: General Biology 100A, B.

Second semester, Tu. Th. 10. Mr. Deur. Two semester hours.

**305 Evolution and Genetics**
In the classroom, supplemented by demonstrations, the evidence supporting the theory of evolution is examined. The field of genetics is explored largely from the basis of the significance of hereditary changes in relation to evolution. Informal laboratory work is included. Prerequisite: General Biology 100A, B.

First semester, M. W. F. 1. Dr. Kenoyer. Three semester hours.
306 Human Genetics
This course considers the principles of heredity and their application to man; sociological problems and their biological basis; and possibilities for the improvement of human society. Classroom work, library studies, and visits to institutions. Prerequisite: General Biology 100A, B.

Second semester, M. W. F. 1. Dr. Kenoyer. Three semester hours.

ANATOMY, PHYSIOLOGY, AND HYGIENE

112 Hygiene
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, Tu. Th. 8, 11, 1, 3. Miss Clegern, Mr. Hinds, Mr. Joyce, Dr. Steen, Mr. Wiseman. 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. Recommended for anyone desiring a knowledge of the structure of the body. Prerequisite: General Biology 100A, B, or equivalent.

First semester, Lecture, Tu. Th. 8, Laboratory, M. W. 8-10. Mr. Maus. Four semester hours.

211B Physiology
This course is designed to give the student a knowledge of the fundamental principles of physiology and their application to the functioning of the organs and systems of the body, particularly among vertebrates, with emphasis on man. The various metabolic processes are studied in detail. Prerequisite: General Biology 100A, B, and Anatomy 211A or its equivalent.

Second semester, Lecture, M. Tu. W. 8, Laboratory, Th. 8-10. Mr. Maus. Four semester hours.

212A Bacteriology
This course deals with microorganisms, including protozoa, molds, yeasts, and bacteria. Their structure, classification, culture, staining, and control are taken up in classroom and laboratory. Prerequisite: General Biology 100A.

First semester, Lecture, W. F. 8, Laboratory, Tu. Th. 8-10. Mr. Wiseman. Four semester hours.

212B 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;
recreation; school health; and the functioning of organized health agencies are topics which receive major emphasis. Classwork and demonstrations. Prerequisite: General Biology 100A and consent of instructor.

Second semester, M. W. F. 8. 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.

First semester, Lecture, M. W. 1, Th. 12, Laboratory, Tu. Th. 1-4. 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.

Second semester, Lecture, Tu. Th. 3, Laboratory, M. 2-4, W. 2-4. Mr. Joyce. Three semester hours.

215 Anatomy and Physiology (for Occupational Therapists)
An abridgment similar to Anatomy and Physiology (for Nurses) 213 but adapted to the needs of the students in occupational therapy. Prerequisite: General Biology 100A or 100B.

First semester, Lecture, Tu. Th. 11, Laboratory, M. F. 10-12. Mr. Wise-man. Four semester hours.

301 Health Education
An off-campus laboratory course in which the teacher, children, and others in the community cooperate in developing healthful living in school, home, and community. Class meetings will cover 24 hours divided into two- and three-hour periods which will be spent in developing a guiding point of view for the work, in broadening the teachers' and others' awareness of healthful living, and in discussion of reports on problems being developed. In addition to class work the instructor will visit each class member in his working situation and will hold conferences with groups. A report of accomplishment will be required.

Miss Crane, Mr. Joyce, Miss Worner. Three semester hours.

335 Medical Technology (for Medical Technologists)
This course consists of a training program divided between the Michigan Department of Health and various hospital laboratories in such a way as to give a total of 17 weeks of public health laboratory training and 34 weeks of hospital laboratory training.

Members of Staff of Michigan Department of Health and/or hospital training school. Thirty semester hours.
514(171) Public Health Practices

A practical course of lectures and demonstrations designed to familiarize the student with the facts and methods necessary for making an effective health supervision of school children. The principles and practices of health teaching in the various grades are considered. The interrelation of health teaching and the teaching of other subjects in the school curriculum is emphasized.

First semester, W. 7-9 p.m. Mr. Hinds. Two semester hours.

BOTANY

221A Botany

This and the following course furnish a good botanical background for high-school biology teachers and for foresters. A general study of the gross and microscopic structures of higher plants, accompanied by field studies which aim to give a closer acquaintance with the major groups of the plant kingdom. Morphology of the algae and fungi. Prerequisite: General Biology 100A, B, or a year of high-school botany.

First semester, Lecture, M. Th. 2, Laboratory, W. F. 2-4. Mr. Joyce. Four semester hours.

221B Botany

This course includes the mosses, ferns, and seed plants, studied from the standpoint of their structure, identification, and ecological relationships. Considerable attention is paid to field work and the preparation of a herbarium. Prerequisite: Botany 221A.

Second semester, Lecture, M. Th. 2, Laboratory, W. F. 2-4. Mr. Joyce. Four semester hours.

420(122) Systematic Botany

This course aims to familiarize the student with both native and cultivated plants and to enable him to understand the principles of plant classification and the characteristics of the more important families of flowering plants. Prerequisite: one year of general biology or one semester of college botany.

Not offered in 1947-1948. Dr. Kenoyer. Two semester hours.

NATURE STUDY

231A Nature Study

The aims of this course are to develop an ability to interpret natural phenomena with scientific accuracy, to develop an understanding of some of the laws of nature, and to help the student enjoy and appreciate the wonders of nature. The materials of this course are: autumn flowers, seed dispersal, flowerless plants, insects, spiders, winter birds, heat, light, weather, and astronomy. Field trips are a part of the scheduled work.

First semester, Lecture, M. F. 9, Tu. Th. 2, Laboratory, Tu. Th. 8-10, M. F. 2-4. Miss Argabright. Four semester hours.
231B Nature Study

The aims of this course are the same as 231A. The materials of this course are: rocks, minerals, electricity, spring flowers, pond life, migratory and resident birds. Field trips are a part of the scheduled work.

Second semester, Lecture, M. F. 11, Tu. Th. 2, Laboratory, M. F. 2-4, Tu. Th. 10-12. Miss Argabright. 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, and nesting habits, their relation to environment, and their importance to man. The student learns to identify a minimum of fifty birds in the field and one hundred in the laboratory. Use is made of the Kellogg Bird Sanctuary, Kleinstueck Preserve, and Wolf Lake.

Second semester, Tu. Th. 8, and early morning trips. Miss Argabright. Two semester hours.

ZOOLOGY

242A Invertebrate Zoology

The work of this semester deals with the structural characteristics, physiology, life histories, habits, distribution, and classification of the invertebrates. Identification of local forms and economic values are emphasized. This and the following courses are desirable for those intending to teach biology in the high school. They also cover entrance requirements in medicine or dentistry. Prerequisite: General Biology 100A, B.

First semester, Lecture, Tu. Th. 2, Laboratory, M. W. F. 2-4. Mr. Hinds. Four semester hours.

242B Vertebrate Zoology

The work of this course covers the classes of vertebrates with emphasis on classification, structure, functions, environmental relations, and economic aspects. Field work is emphasized during the spring. Prerequisite: General Biology 100A, B.

Second semester, Lecture, Tu. Th. 2, Laboratory, M. W. F. 2-4. 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 of organs. Prerequisite: General Biology 100A, B, and 8 additional hours, preferably to be chosen from 242A, B, and 211A.

Not offered in 1947-1948. Mr. Hinds. Four semester hours.

342 Vertebrate Embryology

This course takes up in detail the embryological development of vertebrates and puts special emphasis on human development. Maturation, fertilization, cleavage, origin and development of germ layers, histogenesis and organogenesis are considered. In the laboratory the frog, the chick, and the pig or mouse are used to demonstrate the course of development.
Prerequisite: General Biology 100A, B, and 8 additional hours in biology, preferably including 242A, B, and 211A.

Second semester, Lecture, M. W. F. 9, Laboratory, Tu. Th. 8-10. Dr. Steen. Four semester hours.

Open to Seniors and Graduates

441S(60) Advanced Ornithology

This course affords the student an opportunity for a review of introductory ornithology. Special attention is given to details of song, habitat, habits, and identification of shore and marsh birds in their native haunts. Skins of birds both resident and migrant in Michigan are provided for identification in the laboratory. Students enrolling are expected to have their own field glasses. Early morning field trips will be a part of the scheduled class work. Prerequisite: 8 hours of college laboratory courses in biology and zoology and permission of instructor.

Not offered in 1947-1948. Mr. Hinds. Two semester hours.

GERALD OSBORN
JAMES W. BOYNTON
ROBERT J. ELDREDGE

Students who wish to teach chemistry should have a minimum of 15 semester hours in chemistry. A major in chemistry is 24 semester hours and a minor is 15 semester hours.

Students who wish to specialize in chemistry should plan programs including the following sequence: general chemistry and mathematics during the first year; qualitative analysis, quantitative analysis, calculus, and physics, the second year; organic chemistry, the third year; physical chemistry and special courses, the fourth year.

Two of the six semester hours earned in Physical Science 100A, B may be counted toward a major or a minor in chemistry.

In General Chemistry 100A, B, 101A, B, 105A, B, and 106 a deposit of $2.00 per semester for lock and supplementary supplies is required; in advanced laboratory courses a deposit of $5.00 per semester is required. These deposits are made in the main office and numbered receipts are given students. Students must present these receipts before admission to the laboratory.

At the close of the semester these deposits will be refunded, less a flat laboratory fee of fifty cents and any charges caused by breakage of materials or loss of lock.

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 by students desiring a broader knowledge of their
DESCRIPTION OF COURSES

environment. Prerequisite: one year of algebra. Designed for students who have had no high school chemistry.

First semester, Lecture, Tu. Th. F. 8, Laboratory, M. W. 8-10. Mr. Eldridge. Four semester hours.

Note:—Courses 100A, B and 101A, B each constitute a year's work. Students should plan to take the two semesters' work; however, credit is given for each semester's work.

100B General Chemistry
A continuation of General Chemistry 100A. Prerequisite: General Chemistry 100A.

Second semester, Lecture, Tu. Th. F. 8, Laboratory, M. W. 8-10. 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.

First semester, Lecture, M. W. F. 9, 11, 1, 4; Laboratory, Tu. Th. 8-10, 10-12, 12-2, 3-5; second semester, Lecture, M. W. F. 10, Laboratory, S. 8-12. Chemistry Staff. Four semester hours.

101B General Chemistry
A continuation of course 101A. Prerequisite: General Chemistry 101A.

First semester, Lecture, M. W. F. 10, Laboratory, S. 8-12; second semester, Lecture, M. W. F. 9, 11, 1, 4; Laboratory, Tu. Th. 8-10, 10-12, 12-2, 3-5. Chemistry Staff. Four semester hours.

105A General Chemistry
The fundamental theories of chemistry are studied, along with some of the common non-metallic elements and their compounds. The laboratory work involves the general practice of chemical manipulation. Open only to students in the Department of Home Economics.

First semester, Lecture, M. W. F. 3, Laboratory, Tu. Th. 2-4. 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, Lecture, M. W. F 3, Laboratory, Tu. Th. 2-4. 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. The course is divided into three parts: inorganic chemistry, organic chemistry, and biological chemistry. Credit for this course applies only to the combined curriculum in letters and nursing.

First semester, Lecture, W. F. 12, Laboratory, M. 12-2, Tu. 12. Dr. Meyer. Three semester hours.
DIVISION OF SCIENCE AND MATHEMATICS

201 Qualitative Analysis
A lecture and laboratory course treating the theory and practice of separation and identification of both cations and anions. Emphasis is placed on ionization, equilibrium, common ion effect, pH, oxidation and reduction. Prerequisite: General Chemistry 100A, B or 101A, B. A knowledge of common logarithms is essential.

First semester, Lecture, Tu. Th. 2, Laboratory, M. W. F. 2-4. Dr. Osborn. Four semester hours.

202 Quantitative Analysis
This course includes the theory and practice of volumetric and gravimetric analysis. In order to obtain the fifth hour of credit the student must analyze in addition both brass and limestone samples. Prerequisite: General Chemistry 100A, B or 101A, B, and Qualitative Analysis 201. A knowledge of quadratic equations and common logarithms is essential.

Second semester, Lecture, Tu. Th. 2, Laboratory, M. W. F. 2-5. Mr. Boynton, Dr. Knowlton. Four or five 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. (See Department of Industrial Arts Education, page 316.) Prerequisite: General Chemistry 100A, B or 101A, B.

Each semester, Lecture, M. W. F. 12. Mr. Eldridge, Dr. Knowlton. Three semester hours.

303A Physical Chemistry
This course is valuable for students who expect to teach chemistry, physics, and mathematics in the high school. A thorough grounding is made in the fundamental principles in chemistry. The course includes studies in kinetic theories of gases, liquids, solids, solutions, thermodynamics, physical bases for molecular structure, thermochemistry, homogeneous equilibria, heterogeneous equilibria, etc. Prerequisite: General Chemistry 100A, B or 101A, B; Qualitative Analysis 201; Quantitative Analysis 202 or 307S; Physics 203A, B; College Algebra and Analytic Geometry 104A, B or equivalent; and Calculus 205A, B.

First semester, Lecture, M. W. F. 9, Laboratory, M. W. F. 3-5. Mr. Boynton, Dr. Knowlton. Five semester hours.

303B Physical Chemistry
A continuation of course 303A. The course includes radioactivity, quantum theory, atomic structure, conductance of solutions, pole potentials, oxidation potentials, polarization, chemical thermodynamics, colloids, etc. Prerequisite: Physical Chemistry 303A.

Second semester, Lecture, M. W. F. 9, Laboratory, M. W. F. 3-5. Mr. Boynton, Dr. Knowlton. Five semester hours.
230 DESCRIPTION OF COURSES

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 at time to be arranged. Dr. Osborn. 1 or 2 semester hours depending on amount of work.

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. Credit is given for each semester's work, but students are advised against taking one course only. Prerequisite: General Chemistry 100A, B or 101A, B. Open to qualified sophomores.

First semester, Lecture, Tu. Th. F. 11, Laboratory, M. W. 10-12. Mr. Eldridge, Dr. Osborn. Four semester hours.

306B Organic Chemistry
A continuation of course 306A. Prerequisite: Organic Chemistry 306A.

Second semester, Lecture, Tu. Th. F. 11, Laboratory, M. W. 10-12. Mr. Eldridge, Dr. Osborn. Four semester hours.

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 old theories is critically presented. The reasons for the ultimate rejection of the old theories are studied, and a somewhat critical examination of modern theories is made. Prerequisite: Two years of college chemistry would be desirable. However, certain students who have completed three semesters of college chemistry may be admitted with the consent of the chairman of the department.

Not offered in 1947-1948. Dr. Osborn. Two semester hours.

341 Food Analysis
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, Lecture, S. 8, Laboratory, S. 9-12. 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.

Second semester, Tu. Th. 1. Dr. Meyer. Two semester hours.
351 Biochemistry Laboratory
Analysis of blood, urine, and gastric juices, and other experiments according to the needs of the student and the number of hours credit elected. To accompany Elementary Biochemistry 350.
Second semester, Laboratory, S. 9-12. 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 of facts are sought. Classroom, one hour a week; laboratory, ten hours a week. Consult instructor before enrolling.
Given on request at time to be arranged. 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 at time to be arranged. Mr. Eldridge, Dr. Osborn. Two semester hours.

398 Inorganic Preparations
Consult instructor before enrolling. Laboratory work only.
Given on request at time to be arranged. 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 at time to be arranged. Mr. Eldridge. Two semester hours.

GEOPHYSICS AND GEOLOGY

WILLIAM J. BERRY          MARGUERITE LOGAN

Introductory Geography, either 105A, B or 305, must precede all undergraduate geography courses except Conservation of Natural Resources 312, Introduction to Commercial 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:
Introductory Geography 105A, B ...................... 6 semester hours
Dynamic Geology 230A .............................. 4 semester hours
(General Geology 230S may be substituted)
Climatology 325 ................................................ 2 semester hours
Field Geography 340 ........................................ 3 semester hours
Geographic Techniques 303 or equivalent .......... 3 semester hours
Regional Geography ....................................... 3 semester hours
Elective ..................................................... 3 semester 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 15 semester hours, including Field Geography 340 or an approved equivalent.

Students majoring in geography are advised to elect Economics 220A, B and modern American and European history, and to acquire the ability to read German, French, or Spanish.

Some recommended sequences to meet particular interests are the following.

1. If major is history: 105A, B or 305, 310, 316, and the regional geography of the continent of special interest.

2. If major is business administration or business education: 105A, B or 305, and 318.

3. If major is general science: 105A, B or 305, 325, 340, and Geology 230S or 230A, B.

FOUNDATIONAL COURSES

105A Introductory Geography
   Designed to build the background of factual material and principles basic to the study of regional geography. Introductory Geography continues throughout two semesters and the two semesters' work should be taken consecutively.

   First semester, M. W. F. 8, 10, 11, 1, 3; Tu. Th. S. 9; second semester, M. W. F. 2, 9. The Staff. Three semester hours.

105B Introductory Geography
   Continuation of Introductory Geography 105A.

   First semester, M. W. F. 11; second semester, M. W. F. 8, 10, 11, 1, 3; Tu. Th. S. 9. The Staff. Three semester hours.

305 Introductory Geography for Juniors and Seniors
   Course should be elected instead of 105A, B by two groups of students: (1) those who do not begin the study of geography before the junior year and yet desire to complete a minor or major in the field and (2) upper classmen who are interested in electing a sequence in geography as a part of their general cultural or professional training. Not open to students who have received credit for Introductory Geography 105A or 105B.

   First semester, M. W. F. 9. Dr. Berry. Three semester hours.
SURVEY REGIONAL COURSES

206 United States and Canada
Study of a real differentiation in Anglo-America and of present-day problems, with emphasis upon occupational crises in selected regions. Prerequisite: Introductory Geography 105A, B or Geography 305.
First semester, M. W. F. 10; second semester, M. W. F. 9. 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, M. W. F. 9. Miss Logan. Three semester hours.

208 South America
Historical background for the division of the continent into many countries; distribution of racial and national groups and conditions to which related; economic, social, and political geography of the several countries with special emphasis upon the geography of Argentina, Brazil, Chile, an Andean country, and a Caribbean country. Prerequisite: Introductory Geography 105A, B or Geography 305.
First semester, M. W. F. 11; second semester, M. W. F. 2. Three semester hours.

209 Mexico and the Caribbean Lands
Includes the geography of Mexico, Central America, the Guianas, and the West Indian Island; present economic, social, and political development of these regions; their potentialities and trends. Prerequisite: Introductory Geography 105A, B or Geography 305.
First semester, Tu. Th. 11. 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. Prerequisites: Introductory Geography 105A, B or Geography 305.

308 Africa
Earth conditions that retarded exploration, occupation by the white race, and economic development; 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: Introductory Geography 105A, B or Geography 305.
Not offered in 1947-1948. 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: Introductory Geography 105A, B or Geography 305.
Not offered in 1947-1948. Three semester hours.

INTENSIVE REGIONAL COURSES

304 The British Isles
Geographic analysis of their present and potential development. Prerequisite: Geography 105A, B or Geography 305, and Europe 207.
Not offered in 1947-1948. 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 particular parts of the state where each activity is prominent. Prerequisite: Introductory Geography 105A, B or Geography 305.
Second semester, Tu. Th. 1. 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: Introductory Geography 105A, B or Geography 305.
Not offered in 1947-1948. Two semester hours.

320 Japan
Detailed study of the geography of Japan, with attention focused on present developments and future potentialities. Prerequisite: Introductory Geography 105A, B or Geography 305.
Not offered in 1947-1948. Miss Logan. Two semester hours.

323 Union of Soviet Socialist Republics
Analysis of the geography of the whole of the Soviet realm. Prerequisite: Introductory Geography 105A, B or Geography 305.
Second semester, M. W. F. 1. Miss Logan. Three semester hours.

FUNCTIONAL COURSES

218 Introduction to Commercial 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.
First semester, M. W. F. 8, Tu. Th. S. 8; second semester, M. W. F. 8, Tu. Th. S. 8. Three semester hours.

Note.—Only one of the three semester hours may be counted toward a major or minor in geography.
225 Meteorology
Study of the elements of weather, such as temperature, precipitation, and pressure; the reading of weather maps; and the characteristics of fronts and air masses. Thermodynamics and the mechanics of the atmosphere are used to explain weather phenomena, but as far as possible the course is non-technical.
First semester, Tu. Th. 2. 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: Introductory Geography 105A, B or Geography 305.
First semester, M. W. F. 10; second semester, M. W. F. 10. 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: Introductory Geography 105A, B or Geography 305.
Second semester, S. 1-4. 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.
First semester, Tu. Th. 1. Dr. Berry. Two semester hours.

316 Political Geography
Study of some relationships between natural environmental conditions and political development of a state and its attitudes toward international affairs. Areas of special study vary somewhat with changing world conditions but usually include the Soviet Union, Japan, Southwest Asia, Italy, the Balkan States, France, French and British African colonial empires, Argentina, and Brazil. Prerequisite: at least one year of college geography.
Second semester, Tu. Th. 11. Miss Logan. Two semester hours.

318 Advanced Commercial Geography
World survey of regions producing commodities of international significance, with emphasis upon the problems of international trade. Prerequisite: Introductory Geography 105A, B or Geography 305 or consent of instructor.
Second semester, M. W. F. 11. Three 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: Introductory Geography 105A, B or Geography 305 or Meteorology 225.
Second semester, Tu. Th. 2. 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: Introductory Geography 105A, B or Geography 305.
Second semester, Tu. Th. 10. Two semester hours.

FIELD GEOGRAPHY

340 Field Geography
Intensive study is made of various type areas within the Kalamazoo vicinity 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 and affords training in observing geographical relationships, field note-taking, and detailed mapping of areas studied. Required of students who specialize in geography. Prerequisite: Introductory Geography 105A, B or Geography 305.
Second semester, Tu. 2-5. Dr. Berry. Three semester hours.

341 Advanced Field Geography
The course is 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. This is not a residence course but one that offers opportunity for teachers to continue collegiate work. 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 instructor.
Each semester, Hours as arranged. 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. Class will carry on individual projects in mapping the urban and rural patterns of the community and will evaluate them in the light of natural patterns. Off-campus course giving residence credit. The Staff. Three semester hours.

Open to Seniors and Graduates

410 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 1947-1948. Dr. Berry. Two semester hours.
DIVISION OF SCIENCE AND MATHEMATICS

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: Introductory Geography 105A, B, or consent of instructor.
Second semester, S. 1-3. Dr. Berry. Two semester hours.

516(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 1947-1948. Miss Logan. 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, recent significant contributions to the literature of the field, and the treatment of graphic forms as applied to geography are covered. Prerequisite: Introductory Geography 105A, B or Geography 305 and Commercial Geography 218 or 318, or consent of instructor.
Not offered in 1947-1948. Dr. Berry. Two semester hours.

GEOLOGY

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, Lecture, M. W. F. 2, Laboratory or field, Tu. Th. 2. 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 two Saturday field trips. Prerequisite: Dynamic Geology 230A. Desirable antecedent: General Biology 100A, B.
Second semester, Lecture, M. W. F. 2, Laboratory, 2 hours a week as arranged. 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.
Second semester, Tu. Th. 10. 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 given in 1947-1948. Dr. Berry. Two semester hours.

MATHEMATICS

Harold Blair
Fred A. Beeler
Charles H. Butler
William H. Cain
Pearl L. Ford

Courses in the Department of Mathematics are designed to meet the needs of students presenting three types of preparation in the high school. A freshman electing work in mathematics for the first time should be careful to select from courses 100A, 103A, and 104A 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 is designed for students who present trigonometry as part of their high-school preparation. Sequence B 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 in the high school; sequence D, 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 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.

Elementary Sequences in Mathematics

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*Solid Euclidean Geometry 100B may be taken in combination with course 100A or course 100C, either the first or the second semester.

Second Year

205A
205B

Following course 205B, a student has the privilege of electing several courses for which calculus is a prerequisite. A junior might elect Solid Analytic Geometry 323, or Theoretical Mechanics 325.
For all students, including those not majoring in mathematics, there is offered by the department a group of subjects consisting of the following courses: Mathematics of Finance 227, Mathematics of Insurance 228, Introduction to Statistics 211, College Geometry 230. One or more of these courses will be offered each semester at eleven o'clock.

Opportunity is offered for more varied work in mathematics, but the courses should be chosen with some regard for the particular interests and objectives of the student. Members of the department will be glad to confer with students concerning the arrangement of their courses.

Students expecting to teach mathematics are advised to elect the professional course in the teaching of mathematics best suited to their particular requirements. It should be noted, however, that adequate appreciation of, and acquaintance with, subject matter is the first and inevitable step in the acquisition of professional skill in teaching. Professional preparation for teaching mathematics demands both academic accomplishment and training in proficiency of method, but in general the relative importance of these two types of education is in the order in which they are mentioned here.

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.

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.

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. Applications for directed teaching in mathematics must have the approval of the head of this department. Solid Euclidean Geometry is a prerequisite to directed teaching in either algebra or geometry.

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; numerical and literal quadratic equations; problems; fractional negative, and literal exponents; radicals; imaginaries; functions and their graphs. Prerequisite: one year of high-school algebra and one year of high-school geometry.

First semester, M. W. F. 8, 9, 1, 3; Tu. Th. S. 10; second semester, M. W. F. 10, 1, 3; Tu. Th. S. 8. Mr. Cain and other departmental members. 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, is required of 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, Tu. Th. 11. Miss Ford. Two semester hours.

100C Plane Trigonometry

Trigonometric ratios, identities and equations, inverse functions, 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, M. W. F. 8, 9, 1, 3; Tu. Th. S. 10. Mr. Beeler and
other departmental members. 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. Appli-
cations are made to problems in geography, navigation, aviation, surveying
and cartography. Prerequisite: Plane Trigonometry 100C.


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.


103A Trigonometry and College Algebra

Designed for students who have studied algebra in high-school one and
a half or two years, but who have not taken trigonometry as part of their
high-school course. It includes all of the work given in Plane Trigonometry
100C and, in addition, an introduction to college algebra. Prerequisite:
one and one-half years of high-school algebra and at least one year of
high-school geometry.

First semester, M. Tu. W. Th. F. 8, 11, 1, 2, 3. Dr. Halnon and other
departmental members. Five semester hours.

103B College Algebra, Plane and Solid Analytic Geometry

Simultaneous linear equations, rectangular and polar coordinates, and
all of the work offered in 104B, including a unit of solid analytic geometry. Prerequisite: Trigonometry and College Algebra 103A.

Second semester, M. Tu. W. Th. F. 11, 2. Mr. Hannon and other depart-
mental members. Five semester hours.

104A College Algebra and Analytic Geometry

Designed for students who have taken trigonometry as part of their
high-school course. Polar and cartesian coordinates, the straight line, and
relations between two or more straight lines; simultaneous linear equations,
determinants of any order, permutations and combinations, functions of
the second degree and complex numbers, with geometric interpretations as applied to the circle and the parabola. Prerequisite: trigonometry.


104B College Algebra, Plane and Solid Analytic Geometry
Cubic functions, the general polynomial, Horner's method, the parabola, ellipse, and hyperbola, the general equations of the second degree as related to the definition and classification of conic sections, rectangular coordinates, of three dimensions, the plane and the straight line, and a unit of solid analytic geometry. Prerequisite: College Algebra and Analytic Geometry 104A.


112 Applied Mathematics
For students in industrial arts who desire a course in the application of elementary mathematics to machines and designs.
Will be offered if requested in 1947-1948. Mr. Cain. Two semester hours.

115 College Algebra
A review of exponents, radicals, and quadratic equations, including systems of quadratic equations, progressions, the binomial theorem, complex numbers; theory of equations, 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 the equivalent.

First semester, M. W. F. 3; second semester, M. W. F. 8, 3. Mr. Beeler and other departmental members. 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.

Second semester, M. Tu. Th. F. 2. Dr. Butler, Mr. Cain. Four semester hours.

120 Business Mathematics
This course will include diagnostic and remedial work in the fundamental operations of arithmetic, followed by a study of the elementary problems with which modern business is concerned. Among the topics studied are percentage and its applications, interest, logarithms, graphs, and equations. Enrollment in this course is restricted to students enrolled in the Department of Business Education.

First semester, W. F. 9, Tu. Th. 2; second semester, W. F. 9. Mr. Cain, Miss Ford. Two semester hours.
200 Mathematics of Buying and Investment
Designed to give the individual actual and concrete appreciation of the relation of cash and time payments to his own business or budgetary problems, and to afford students with a limited background of mathematics an appreciation of ways in which understanding of the relations of the individual to organized society is promoted by mathematics. Methods of financing installment purchases as commonly encountered are studied, and their actual cost to the consumer is investigated. The student is introduced to tables of interest, annuities, and other readily available means of assistance in dealing with business practices. The amount of credit earned in the course will be determined by the extent to which the student participates in the investigation of illustrative exercises outside of the class hour. Prerequisite: high-school algebra and geometry.

Not offered in 1947-1948. Mr. Cain. Two or three semester hours.

201 Field Work in Mathematics
Designed to familiarize the student with the nature and use of common mathematical instruments. Classroom discussion will be supplemented by practical field work. This course will be highly useful to teachers of mathematics or science, and to persons interested in scouting. It supplements the Teaching of Mathematics 401, the two courses being offered in alternate years. With the approval of the head of the department course 201 may be offered in place of course 401T in fulfilling the requirements for student teaching. Prerequisite: high-school algebra and geometry and plane trigonometry.

Not offered in 1947-1948. Dr. Butler. Three 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: College algebra and analytic geometry.
First semester, M. W. Th. F. 9, M. Tu. W. F. 10, M. Tu. Th. F. 1, 3. Mr. Blair, Dr. Butler, Miss Ford, Mr. Beeler. 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.

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.
Second semester, M. W. F. 3-5. Mr. Ackley. Three semester hours.
211 Introduction to Statistical Theory
The object of this course is to give the student a knowledge of logical principles and methods of procedure underlying statistical analysis. The topics studied will include measures of central tendency, of dispersion, and of relationship. Prerequisite: College Algebra and Analytic Geometry.

First semester, Tu. Th. 11. Dr. Butler. Two semester hours.

212 Elementary Statistical Practice
This course is designed to acquaint students with the fundamental ideas, formulas, and procedures involved in elementary statistical work. Problems will be emphasized. The course should be helpful to many students who need some statistical background but who lack the full prerequisite for course 211. Prerequisite: College Algebra.

Second semester, Tu. Th. 11. Dr. Butler. Two semester hours.

227 Mathematics of Finance
Simple and compound interest, annuities, amortization and sinking funds, valuation of bonds and other securities, mathematics of depreciation, and of loan associations. Prerequisite: one year of college mathematics.

First semester, M. W. F. 11. Dr. Butler. Three semester hours.

228 Mathematics of Insurance
An introduction to the mathematics of life insurance, including the theory of probability as related to life insurance, the theory and calculation of mortality tables, expectation of life, life annuities, premiums, and reserves. Prerequisite: Mathematics of Finance 227.


230 College Geometry
While this course is designed primarily for those who plan to teach high-school mathematics, it will be of interest to anyone desiring to apply Euclidean methods to many interesting problems beyond the scope of a high-school text. The course consists of the study of such topics as geometric construction, properties of the triangle, harmonic ranges and pencils, circle of Apollonius, inversions, poles and polars, and orthogonal and co-axial circles. Prerequisite: one year of college mathematics.

Offered if there is sufficient demand. Three semester hours.

315A History of Mathematics
Treats of the history of geometry and trigonometry from earliest times to the present. Prerequisite: analytic geometry.

Not offered in 1947-1948. Mr. Blair. Two semester hours.

315B History of Mathematics
Treats of the history of arithmetic and algebra. Prerequisite: History of Mathematics 315A.

Not offered in 1947-1948. Mr. Blair. Two semester hours.
321 Differential Equations
An elementary course in ordinary differential equations. Prerequisite: Calculus 205B.
First semester, M. W. F. 10. Mr. Blair. 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, Tu. Th. 10. Mr. Beeler. Two semester hours.

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, Tu. Th. 10. Mr. Beeler. Two semester hours.

325 Theoretical Mechanics
The material of this course consists of the composition and resolution of translations by vector methods, without, however, making use of the notation of vector analysis. In linear and plane kinematics a critical study is undertaken of the following topics: velocity, acceleration, angular velocity, angular acceleration. In dynamics, mass, density, moments and centroids of particles, lines areas, and volumes, are studied. Prerequisite: Calculus 205B.
Second semester, Tu. Th. 10. Mr. Blair. 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, M. W. F. 10. Mr. Blair and Mr. 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. While this is not primarily an academic course, 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 is supplemented by readings, lectures, and reports. This course is prerequisite to directed teaching in mathematics. Prerequisite: analytic geometry.
First semester, M. W. F. 9. Dr. Butler. Three semester hours.
The Department of Physics offers two types of courses: (1) those for students who while not planning to specialize in science want an appreciation of the important part physics plays in every day life; and (2) those for individuals who intend to major or minor in the subject. Physical Science 100A, B, Household Physics 202, and Astronomy 210 belong to the former group; and the remainder of the courses listed below belong to the latter. Courses 203A and 203B belong in both groups.

A major in physics consists of 24 semester hours. It must include Mechanics, Sound, and Heat 203A, Problems 204A, Electricity and Light 203B, and Problems 204B, together with 14 semester hours chosen from the following courses: Physical Science 100A, B, (see under Division of the Sciences and Mathematics 2 semester hours counted in physics), Astronomy 220, Statics 320, Atomic Physics 340, Light 350, Introduction to Electronics 361, Electrical Measurements 362, Principles of Radio Communication 365, Laboratory Techniques 390, Advanced Laboratory Physics 399.

A minor in physics consists of 15 semester hours. Eight of these hours must be in Mechanics, Sound, and Heat 203A, and Electricity and Light 203B. The remainder may be chosen from any of the courses listed below with the exceptions of Elementary Acoustics 110, Household Physics 202, Astronomy 210, Photography 220, and Teaching of Physical Science 300T.

Students wishing to do directed teaching in physics must offer a major or minor in this field. It is advisable that a considerable portion of the major or minor be completed before making application for directed teaching. The postponement of directed teaching until the student's senior year is strongly recommended. Application for directed teaching in physics must be approved by the head of the department.

110 Elementary Acoustics
In this course are considered the nature of sound, how sounds are produced, reflection and absorption of sound by different materials, reverberation in rooms and auditoriums, the physics of hearing and the physical basis of musical scales. Only simple mathematics will be used. It is a required course for students majoring in music. Open to any student interested in acoustics.

First semester, Tu. Th. 1. Mr. Marburger. Two semester hours.

166 Practical Radio
This course is designed to meet the needs of teachers and students preparing to teach this subject in high-school physics and general science. It is an elementary course in the fundamental principles underlying radio communication. Types of transmitting and receiving circuits are studied. Laboratory exercises in setting up, testing, and adjusting simple receiving
and transmitting equipment are included. Prerequisite: high-school physics.

Not offered in 1947-1948. Mr. Marburger. Three semester hours.

200 Slide Rule
A course in the use of the slide rule.
Each semester, Tu. 3. Mr. Baker. One semester hour.

202 Household Physics
A course designed to help students appreciate and interpret the problems which arise in the home, such as volume and weight relationships, temperature control by thermostats, refrigeration, insulation, meter reading, computation of electric light and gas bills, electric devices, and illumination problems. Open only to women students. Required of Home Economics students.
Second semester, Tu. Th. 11. Mr. Baker. Two semester hours.

203A Mechanics, Sound, and Heat
A general college course dealing with the laws of mechanics, of sound, and of heat and their applications. Four class periods and one two-hour laboratory period each week. Freshmen may elect this course on consultation with the head of the department. Engineering students must elect course 204A to accompany this course. Prerequisite: high-school physics and trigonometry.
First semester, Lecture, M. Tu. W. Th. 8, Laboratory, one day a week, 3-5; second semester, Lecture, M. Tu. W. Th. 8, Laboratory, Tu. 3-5. Mr. Marburger, Dr. Rood. Four semester hours.

203B Electricity and Light
This course is a continuation of Mechanics, Sound and Heat 203A. A study is made of static and of current electricity, of magnetism, and of light. Four class periods and one two-hour laboratory period per week. Freshmen may elect this course on consultation with the head of the department. Prerequisite: Mechanics, Sound and Heat 203A, and (for engineering students) Problems 204A.
First semester, Lecture, M. Tu. W. Th. 8, Laboratory, Tu. 3-5; second semester, Lecture, M. Tu. W. Th. 8, Laboratory, one day a week, 3-5. Mr. Marburger, Dr. Rood. Four semester hours.

204A Problems
A course in the solution of problems in mechanics, sound and heat. It is designed to accompany 203A and must be elected by all engineering students.
Each semester, F. 8. Mr. Marburger, Dr. Rood. One semester hour.

204B Problems
A course in problems in electricity and light designed to accompany 203B. It must be elected by all engineering students.
Each semester, F. 8. Mr. Marburger, Dr. Rood. One semester hour.
210 Astronomy
A non-mathematical course in astronomy, including the study of the solar system, meteors, comets, stars, and nebulae. Full use is made of a 9-foot planetarium in learning to recognize the common stars and constellations.

Each semester, M. W. F. 10. Dr. Rood. Three semester hours.

220 Photography
This is an elementary course in the theory and use of photographic materials. The time is divided between lecture-demonstrations and laboratory work by the student. To enroll in this course students should get permission from the instructor.

First semester, M. W. F. 1. Mr. Baker. Three semester hours.

Note:—This course may not be counted toward fulfillment of a minimum requirement in Group II.

320 Statics
This course 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 involving friction, frameworks of various kinds, and the loading of structures. Prerequisite: Mechanics, Sound, Heat 203A, Electricity and Light 203B, Calculus 205A, B.

Second semester, M. W. F. 2. Mr. Fox. Three semester hours.

340 Atomic Physics
A study is made of the electron, electron waves, spectra, artificial and natural radioactivity, high voltage machines for nuclear disintegrations, nuclear structure, cosmic rays and the quantum theory. Open to seniors and graduate students. Prerequisite: Mechanics, Sound and Heat 203A, Electricity and Light 203B, Calculus 205A, B.

First semester, M. W. F. 3. Dr. Rood. Three semester hours.

350 Light
A study of the laws of physical optics designed for those who desire a general knowledge of modern interpretations of light and also for those who may later wish to specialize in this subject. A study is made of reflection and refraction, on the basis of Huggen's Principle dispersion, interference, double refraction, polarization, the electromagnetic and quantum theories of light. Prerequisite: Mechanics, Sound and Heat 203A, Electricity and Light 203B, Calculus 205A, B.

Second semester, M. W. F. 3. Dr. Rood. Three semester hours.

361 Introduction to Electronics
This course, which is introductory to all intermediate courses in electricity, deals with the following general topics: circuit laws and elementary methods, of circuit analysis; the functions of resistors, inductors, and capacitors; resonant circuits and tuning; coupled circuits; power ratios and gains in amplifiers and attenuators; simple filters, thermionic emission and electron tubes; tube rectifiers, amplifiers, and oscillators; radio trans-
mission and reception; thyatrons and other gaseous control tubes; photo-electric control devices. Prerequisite: Electricity and Light 203B, Calculus 205A, B.

Each semester, Lecture, M. F. 9, Laboratory, Tu. or W. 9-11. Mr. Marburger. Three semester hours.

362 Electrical Measurements
This course deals chiefly with direct-current theory and measurements, together with the measurements of magnetic quantities. Standard laboratory methods of measuring potential differences, current, resistance, and power, are investigated experimentally. Ballistic galvanometer methods are studied. Fluxmeters are used in measuring magnetic flux. Experimental B-H and magnetic hysteresis curves for samples of iron and magnetic alloys are determined. In this course more emphasis is placed on techniques of measurement and precision methods than in the earlier courses. Prerequisite: Introduction to Electronics 361.

Second semester, Lecture, M. 2, Laboratory, Tu. Th. 2-4. Mr. Marburger. Three semester hours.

365 Principles of Radio Communication
The physical principles involved in radio communication form the basis of this course. Some of the topics considered are: amplification and amplifiers of both audio and radio frequencies; oscillations and conventional types of oscillators; amplitude and frequency modulation; demodulation and systems of detection; radiation and antenna systems. The laboratory work provides experience in: A.C. bridge methods for measuring impedances both at audio and at radio frequencies; measuring frequency; measuring radio frequency currents and voltages; determining the frequency and amplitude responses of an amplifier; testing and adjusting oscillators; measuring field intensities. Prerequisite: Introduction to Electronics 361, Calculus 205A.

Not offered in 1947-1948. Mr. Marburger. Three semester hours.

390 Laboratory Techniques
This course requires two hours a week in the laboratory. Open to students in physics and a limited number of students from other fields of science.


399 Advanced Laboratory Physics
A course in laboratory experimentation of a more advanced nature than that included in 203A or 203B. This course may be elected only by arrangement with the supervising instructor. Prerequisite: Mechanics, Sound, Heat 203A, Electricity and Light 203B.

First semester, Laboratory, Tu. Th. 9-11. Mr. Marburger, Dr. Rood. Two semester hours.
DIVISION OF SCIENCE AND MATHEMATICS

Open to Seniors and Graduates

440(105) Modern Physics
A study of certain of the developments in physics since 1896. Beginning with the discovery of the electron, it covers the successive developments in the emission of electricity from hot bodies, photo electricity, x-rays, radio activity, both natural and artificial, high voltage machines used for nuclear disintegrations, the Bohr theory, and the theory of special relativity. Prerequisite: same as for Statics 320.

Not offered in 1947-1948. Dr. Rood. Three semester hours.

PSYCHOLOGY

THEODORE S. HENRY
CHARLES C. GIBBONS

HOMER L. J. CARTER
DOROTHY J. MCGINNIS

General Psychology 200 is prerequisite to all other courses in this department, except courses 100 and 202, and with course 201 constitutes a basic year of work. Approach to the field of clinical psychology is afforded by courses 302, 305, 307 and 309. 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. Twelve semester hours from this department will satisfy Group II of the degree requirements.

Students majoring in psychology are advised to elect from the department of biology General Biology 100A and B and Anatomy 211A.

Students expecting to do graduate work in education should bear in mind the fact that graduate schools of education universally require general psychology as a prerequisite to entrance.

100 Introduction to Learning and Adjustment
The psychological principles of effective learning will be demonstrated and applied under the supervision of the instructor; methods of note-taking, reading, memorizing, and organizing will be discussed and practiced; the methods presented are to be applied to the different courses the student is carrying. Students who feel themselves handicapped by poor habits of study are urged to enroll in this course. The psychological problems involved in the transition from control by adults to self-management will be considered, and the resources of clinical psychology will be made available for the solution of difficulties of individual adjustment. Open only to freshmen and sophomores.

Each semester, Tu. Th. 8. Mr. Carter and Miss McGinnis. One semester hour.

Note:—This course may not be counted toward a major or a minor in psychology or in fulfillment of the requirements in Group II.

200 General Psychology
This course affords a brief survey of the field of general psychology.
First semester, M. W. F. 9, 10; M. Tu. Th. 2; second semester, M. W. F. 9, 10, 3. Dr. Henry. Three semester hours.
201 Elementary Experimental Psychology
An introduction to laboratory methods through experimental work in the general field of sensory, imaginal, and affective experience; perception, memory, learning, etc.
Second semester, Lecture, Th. 9, Laboratory, Tu. Th. 10-12. Dr. Henry. Three semester hours.

202 General Psychology (for Nurses)
An introductory course in general psychology intended to fit the needs of students of nursing. Not open to regular students. It covers the four units recommended in the Curriculum Guide for Schools of Nursing, namely, the “Nature and Methods of Psychology”; the “Biological and Social Basis of Behavior”; “Essentials of Learning”; and “Personality and Adjustment”.
First semester, W. F. 2. Dr. Henry. Two semester hours.

204 Applied Psychology
A study of the psychological factors in occupational choice and adjustment; and the implications of psychology for advertising and selling and for the field of industry.
First semester, Tu. Th. 11. Dr. Henry. 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 mental life.
Second semester, Tu. Th. 2. Dr. Henry. Two semester hours.

207 Psychology of Personality
This course will consider the individual as a biological and social unit, relating each group of factors to the development of personality. Attention will be given to the differentiation of the individual; individual differences and abilities, personality, attitudes, and adjustment; modification of behavior; varieties of adjustive behavior; and behavior deviations.

302 Laboratory in Psychological Testing
A broad basic course for teachers and others interested in the field of psychology, clinical work, or sociology. The course will consider selection, administration, and interpretation of tests used for elementary and secondary schools; the use of tests in classification, diagnosis, prognosis, and educational and vocational guidance; the principles of teacher-made tests, and the effect of testing on marking systems. A competency in minimal statistics will be developed.
First semester, Lecture, M. 9; Laboratory, W. F. 9. Mr. Carter, Miss McGinnis. Three semester hours.

305 Abnormal Psychology
A discussion of the causes, nature, and forms of mental abnormality.
First semester, M. W. F. 3. Dr. Henry. Three semester hours.
307 Mental Testing
The primary purpose of this course is to give the student careful training in the administration and interpretation of the Revised Stanford-Binet Scale. Students will be required to administer the test to twenty individuals and to interpret their findings in terms of the life history of each individual tested. The work of the course consists of reports, laboratory demonstrations, and individual testing. This intensive training in Binet testing should be followed by at least five months of intern work in an institution of psychological clinic.

First semester, S. 9-11. Mr. Carter, Miss McGinnis. Two semester hours.

309 Clinical Psychology
Clinical studies of pupils presenting psycho-educational problems, such as behavior difficulties, deficiencies in reading, educational and social maladjustment. Work of the course involves individual case studies, home visits, interviewing, conferences, laboratory and clinical procedure. Theory and practice of the case study, including case history, and physical, psychological and educational examinations, as well as interpretation and treatment, will be considered. Detailed work of the course is carried out under the direction of the Psycho-Educational Clinic. Prerequisite: Abnormal Psychology 305, Mental Testing 307, or consent of instructor.

Second semester, S. 9-11. Mr. Carter, Miss McGinnis. Two to four semester hours.

Note:—A student may elect this course a second time. Repetition does not involve repetition of content but additional practice in procedure.

Open to Seniors and Graduates

407(130) Psychology of Personnel Methods
A survey of the methods in use for personnel selection; application blanks, tests, ratings and interviews. Special emphasis will be placed on the interview.

Second semester, W. 7-9 p. m. Dr. Gibbons. Two semester hours.
The Division of Social Sciences includes the Departments of Economics, History, Philosophy, Political Science, and Sociology.

Major and Minor requirements and suggestions are listed below under the respective departments. Heads of departments will advise students relative to their chosen majors and minors. It is frequently desirable that students majoring in one department of the division should minor in one of the other departments of the division. Candidates for the A.B. degree who major in any department of the division are advised to take a minimum of six semester hours in at least two of the other departments of the division. In certain cases, "mixed" or "group" social science majors and minors are allowed. The chairman of the division advises students relative to such social science majors and minors. The following requirements are observed:

A. For a social science major:
   1. Thirty or more semester hours in the division.
   2. Acceptable courses in at least three of the five departments of the division.
   3. Ten or more semester hours in at least one of the five departments of the division.
   4. At least one minor in a field of study not included in the five departments of the division.

B. For a social science minor:
   1. Twenty or more semester hours in the division.
   2. Acceptable courses in at least three of the five departments of the division.
   3. Eight or more semester hours in at least one of the five departments of the division.
   4. At least a major or a minor in a field of study not included in the five departments of the division.

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 120A, B, and 223.

120A Description of Industry
An orientation course. The course aims to make the student more familiar with the terms, concepts, common data, and institutions he must know about if he is to participate intelligently in business affairs. Not the laws of our economic organization, but rather the factual material about industry and commerce are studied. Topics include raw material sources, labor supply and efficiency, manufacturing, agriculture, domestic and foreign trade, money, credit, banking, the corporation, partnership, and other forms of business organizations.

First semester, Tu. Th. 8, 10, 1, 2; second semester, Tu. Th. 3. Mr. Hicks, Mr. Ripple. Two semester hours.

120B Description of Industry
A continuation of Description of Industry 120A.
First semester, Tu. Th. 10; second semester, Tu. Th. 8, 10, 1, 2. Mr. Hicks, Mr. Ripple. Two semester hours.

220A Principles of Economics
A study of the fundamental principles of economics and their application to some of the more important of our economic problems. Special emphasis is placed on the laws of price, the fundamental principles involved in production, and the principles underlying our monetary and banking systems. A few problems, such as those presented by the business cycle, inter-regional trade, business organization, and marketing, are frequently included.

First semester, M. W. F. 9, 11, 1, 3, Tu. Th. S. 8, S. 8-12; second semester, M. W. F. 10. Mr. Bigelow, Mr. Bowers, Dr. Moore, Mr. Ripple. 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
Primary emphasis is placed upon the principles involved in what is technically known as distribution of wealth. The list of problems studied includes railroad regulation, the control of industrial monopolies, risk bearing, insurance, speculation, public finance, taxation, employment relations, and proposed forms of our economic system. Prerequisite: Principles of Economics 220.

First semester, M. W. F. 10; second semester, M. W. F. 9, 11, 1, 3, Tu. Th. S. 8, S. 9-12. Mr. Bigelow, Mr. Bowers, Dr. Moore. Three semester hours.

221A 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, Tu. Th. 2. Mr. Bigelow. Two semester hours.

221B Money and Credit
This course is a continuation of 221A, stressing mainly the financial institutions of our present economic system. Commercial, saving, and investment banking, building and savings associations. Federal and semigovernmental financial institutions, consumptive credit agencies, the Federal Reserve System, and banking reform in the United States and abroad are among the subjects studied. Prerequisite: Money and Credit 221A.

Second semester, Tu. Th. 2. Mr. Bigelow. Two semester hours.

222 Business Insurance and Taxes
A study of the specific risks involved in the business enterprise; how insurance both voluntary and compulsory may be used to meet some of these risks; the major taxes that confront the modern business; and an introduction to the record keeping involved in current insurance and taxes. Prerequisite: Principles of Economics 220A, B.


223 Economics of Consumption
A study of the present-day problems of the consumer. It helps to establish rational standards of expenditures, based on a careful analysis of human wants and on a consideration of the consumer's available income and of the existing standards of living. Careful analysis is made of the marketing system, investment, insurance, the recent development of installment buying, and the wise use of credit by the consumer.

First semester, M. W. F. 9. Mr. Bigelow. Three semester hours.

320 Public Finance
A study of public expenditure, revenues, debts, and problems of fiscal administration. Deals with the characteristics of and trends in public expenditures; the sources of government income; the principles and problems of taxation; an analysis of typical modern taxes, such as the general property tax, income tax, inheritance tax, and customs duties; the use of public credit; and the budget system and other methods 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, M. W. F. 10. Mr. Bigelow. Three semester hours.

321 Business Administration
This course deals with the elementary principles of internal organization and management of industrial enterprises. It includes a discussion of the nature of modern industry; plant location and types of construction; material equipment and power; planning and routing; statistics and accounting; marketing methods and problems; production management; per-
sonnel administration; purchasing, traffic, credit, and collections. Prerequisite: Principles of Economics 220A, B.

Second semester, M. W. F. 2. Dr. Moore. Three semester hours.

322 Corporations
A study of the place of the corporation in modern business life. Consideration is given to the problems of organization, direction, finance, and control, from the point of view of the promoter, the manager, the creditor, the investor, and the public. Prerequisite: Principles of Economics 220A, B.

First semester, M. W. F. 10. Mr. Bigelow. Three semester hours.

323 Marketing
A study of the principles, methods, and problems of marketing. The following are some of the topics covered in this course: the marketing functions; the marketing of farm products, raw materials, and manufactured goods; the operation of middlemen and their place in the market structure; retail types and policies; consumer and producer cooperation; market finance; brands and trade names; specialization; price maintenance; cost of marketing; prices and price factors; general criticism of existing market structure and proposals for its reform. Prerequisite: Principles of Economics 220A, B.

First semester, M. W. F. 2. Dr. Moore. Three semester hours.

324 Transportation
An analysis of the various means of transportation, of the problems of service, cost, and revenues, and of the development of government regulation. The problem of transportation is considered as one of coordinating the various means of transportation into an efficiently related whole serving the best interests of consumers, owners, and employees. Prerequisite: Principles of Economics 220A, B.

First semester, M. W. F. 11. Mr. Bowers. 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, Tu. Th. 10. Mr. 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, Tu. Th. 10. Mr. Bowers. Two semester hours.

326 Business and Government
The relations of the government to public service corporations and to private business. The course includes a study of the necessity for regulation, franchises, intermediate permits, public utility commissions, principles
of valuation, rate-making service, capitalization, government ownership, legal and constitutional aspects of regulation, control of corporations and trusts, regulation of competition, government encouragement of business, and national policies toward business. Prerequisite: Principles of Economics 220A, B. Work in government may be substituted in special cases by permission of the instructor.

Second semester, M. W. F. 1. Dr. Moore. Three 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, Tu. Th. 1. Mr. Bowers. 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.

Second semester, S. 11-1. Mr. 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 1947-1948. 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 at various economic levels. Methods by which teachers can learn about the standards and levels of living of their pupils and of the communities in which they live and work, the relationship of standards and levels of living to consumer choice, and an analysis of the complicated psychological, technological, economic, and social processes involved in increasing the satisfaction to be derived from living are considered. Included is sufficient comparative study of the theories of consumption held by the principal schools of economic thought to enable the student to understand and evaluate current thinking about consumption problems. Prerequisite: Principles of Economics, 220A, B, or consent of instructor.

Not offered in 1947-1948. Mr. Bigelow. 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 class-
school, socialistic tendencies, and the controversial theories of the
present experimental era. Prerequisite: not fewer than 12 semester hours
in economics.

First semester, S. 9-11. Dr. Moore. Two semester hours.

HISTORY

JAMES O. KNAUSS
ROBERT FRIEDMANN
MARGARET E. MACMILLAN
ROBERT R. RUSSEL

NANCY E. SCOTT
RUSSELL H. SEIBERT
CHARLES R. STARING
JOHN H. YZENBAARD

The Department of History offers two sequences of courses designed to
give a survey of the history of Europe, namely, (1) Foundations of Western
Civilization 100A, B, 6 semester hours, and (2) Ancient and Medieval Civil-
ization 105A, B, and Modern Europe 108A, B, 12 semester hours. Credit is
not given for both Foundations of Western Civilization 100A and Ancient
and Medieval Civilization 105A, B; nor is credit given for both Foundations
of Western Civilization 100B and Modern Europe 108A, B.

Students preparing to teach in the later-elementary grades are advised to
take one of the sequences in European history 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; 406B; 418.

Students are advised not to take both English History 109A, B, and 100A,
B, 105A, 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 cur-
riculum (see page 120), and students who are specializing in English litera-
ture.

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; 319; 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, stu-
dents majoring in history are urged to elect at least two years of French or
German.
Students who desire to major or minor in history should confer with the departmental adviser for history as early in their college careers as possible; and those majoring or minoring in history are required to confer with the departmental adviser before enrolling in courses in their junior and senior years.

100A Foundations of Western Civilization

This course is designed to acquaint students with those civilizations of the past that have made major contributions to the modern world. It is essentially a history of culture. It treats various periods so as to reveal their nature, their interrelationships, and their contributions to contemporary society.

First semester, M. W. F. S. 8, 9, M. T. W. F. 8, 10, 1, 2, M. Tu. Th. F. 9, 10, 11, M. Tu. Th. S. 10, M. W. Th. F. 11, 1, 2, 3; second semester, M. W. Th. F. 3. Dr. Friedmann, Dr. Macmillan, Dr. Seibert, Mr. Starring, Mr. Yzenbaard. Four semester hours.

100B Foundations of Western Civilization

This course is a continuation down to contemporary times of Foundations of Western Civilization 100A. Prerequisite: Foundations of Western Civilization 100A.

Second semester, M. W. F. S. 8, 9, M. Tu. W. F. 8, 10, 1, 2, M. Tu. Th. F. 9, 10, 11, H. Tu. Th. S. 10, M. W. Th. F. 11, 1, 2, 3. Dr. Friedmann, Dr. Macmillan, Dr. Seibert, Mr. Starring, Mr. Yzenbaard. Four semester hours.

105A Ancient and Medieval Civilization

Development of civilization to 27 B.C. Contributions of the cultures of the Nile Valley, the Fertile Crescent, and the Aegean basin to the Greeks and to modern civilization; rise of the Greek city-states; development of Athenian democracy and culture of the age of Pericles; the Athenian Empire; failure of the Greeks to unify; Alexander and Hellenistic civilization; rise of the Roman republic; struggle of the orders; conquest of Italy and the Mediterranean; break-up of the Roman republic; Roman culture and ideals.

First semester, M. W. F. 10. Dr. Friedmann. Three semester hours.

105B Ancient and Medieval Civilization

Development of civilization from 27 B.C. to 1500 A.D. Augustus and the Augustan age; success, peace, and prosperity of the Roman Empire; rise of Stoicism and Christianity; forces of decay and attempts to arrest them; Diocletian and Constantine; barbarian invasions; the Frankish Empire and Charlemagne; monasticism; Justinian and the Byzantine Empire; Mohammedans; Norsemen; the feudal age; the Christian church; the crusades; the rise of towns and commerce; rise of France and England.

Second semester, M. W. F. 10. Dr. Friedmann. Three semester hours.
108A  Modern Europe 1500-1815
A study of the Reformation and the religious wars which followed it; 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; the world-wide colonial conflict between France and Great Britain; social and political ideas of the eighteenth century; the French Revolution; and the era of Napoleon.
First semester, M.W.F. 9, 11, 1; second semester, M.W.F. 3. Dr. Friedmann, Dr. Scott. 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; the World War I; the peace treaties; causes and progress of World War II.
First semester, M.W.F. 3; second semester, M.W.F. 9, 11, 1. Dr. Friedmann, Dr. Scott. Three semester hours.

109A  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, M.W.F. 11. Dr. Russel. 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, M.W.F. 11. Dr. Russel. Three semester hours.

201A  United States History to 1860
This course begins with the European background of American history, traces the origin and growth of the colonies, considers their relations to the mother country, and gives special attention to the causes and course of the Revolution and to the beginnings of state and national government. A study is made of the first seventy-five years of national existence, showing the country's territorial, social, political, and economic changes.
First semester, M.W.F. 8, 9, 10, 11, 1, 2, 3; second semester, Tu. Th. S. 8. Dr. Knauss, Dr. Macmillan, Dr. Russel, Mr. Starring, Mr. Yzenbaard. Three semester hours.

201B  United States History, 1860 to the Present Time
The course of the Civil War and its results are discussed. The development of the nation from an agricultural country to an industrial world power is studied, together with the simultaneous social, cultural, and political changes.
First semester, Tu. Th. S. 8; second semester, M.W.F. 8, 10, 11, 1, 2, 3,
Tu. Th. S. 8. Dr. Knauss, Dr. Macmillan, Dr. Russel, Mr. Starring, Mr. Yzenbaard. Three semester hours.

305A United States History, 1783-1815
An intensive study of selected topics dealing with the making of the Constitution of the United States, the launching of the new federal government, and the problems of the young republic. The course is conducted as a pro-seminar. 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 1947-1948. Dr. Russel. Two semester hours.

305B United States History, 1845-1877
This course is primarily concerned with the great sectional quarrel over slavery, secession, the Civil War, and Reconstruction. It is conducted in the same manner as 305A. Prerequisite: Six semester hours of history.

Not offered in 1947-1948. Dr. Russel. Two semester hours.

306A United States History, 1877-1901
The course deals with the problems of politics of an era of rapid economic expansion. It is conducted as a pro-seminar. An effort is made to use some of the more available sources and to compare and weigh divergent historical interpretations. Prerequisite: six semester hours of history. It is desirable that the student shall have had Principles of Economics 220A, B, American National Government 230, and American State and Local Government 231.

First semester, Tu. Th. 8. Dr. Russel. Two semester hours.

306B United States History, 1901 to the Present Day
A study of the more immediate historical background of present-day problems, issues, and policies. The 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. It is desirable that students shall have had Principles of Economics 220A, B, American National Government 230, and American State and Local Government 231.

Second semester, Tu. Th. 8. 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, Tu. Th. 10. Dr. Knauss. Two semester hours.

308 European Diplomatic History, 1878-1919
A study of the causes of World War I as revealed by an analysis of the principal diplomatic documents; the military events of the war; the revolu-
tionary movements leading to the fall of the central and eastern empires and the creation of new states; the peace settlement.

First semester, M. W. F. 2. Dr. Scott. Three semester hours.

Note:—Courses 308, 309 represent consecutive work in recent European history for juniors and seniors. Each unit, however, may be taken separately. A general knowledge of European history, such as may be gained from 100A, B; 108A, B, or 109A, B, is necessary for an effective understanding of the material studied in these courses.

309 Europe Since World War I
A study of post-war reconstruction; the problems growing out of the peace treaties, reparations, war-debts, and revisionism; successive changes in Italy, Russia, and Germany; the Spanish War; political aspects of the economic tension; causes and outcomes of World War II.

Second semester, M. W. F. 2. Dr. Scott. Three semester hours.

Note:—See note under European Diplomatic History 308.

311 Economic History of Europe
A study of the evolution of the economic institutions of Europe. The emphasis is upon the interrelationships of the various parts of the economic system at different stages and the causes of the changes that have occurred.

Second semester, M. W. F. 1. Dr. Russel. Three semester hours.

312 Economic History of the United States
A general survey of the subject. The object is to give a description of economic growth and expansion in the United States and of the changes that have occurred in technology, economic organization, and standards of living and to account for and evaluate such changes. A general knowledge of United States history, such as may be gained from 201A, B, is presupposed.

First semester, M. W. F. 1. 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.


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, Tu. Th. 10. Dr. Knauss. Two semester hours.

315 Downfall of the Old Regime, to 1792
A study of the life and thought of the eighteenth century, with special emphasis upon France; the causes of the French Revolution; belated efforts at reform; and the overthrow of the French Monarchy.

First semester, Tu. Th. 11. Dr. Seibert. Two semester hours.

Note:—Courses 315 and 316 represent consecutive work in European history for juniors and seniors. Course 315, however, may be taken separately. Students are expected to have taken an introductory course in European history.
316 The French Republic and Napoleon, 1792-1815
A study of the First French Republic; the effect of war upon the revolutionary movement in France; the Directory, the Consulate, and the Napoleonic Empire; and the spread of revolutionary principles throughout Europe. Prerequisite: Downfall of the Old Regime 315, or the consent of the instructor.

Second semester, Tu. Th. 11. 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 United States history, such as may be gained from 201A, B, is presupposed.

Not offered in 1947-1948. Dr. Russel. Three semester hours.

319 History of Russia
This course consists of two parts: (1) a series of lectures, accompanied by reading, stressing those phases in the evolution of the Russian people necessary to an understanding of the present; (2) a critical analysis by the student, based upon at least two texts and wide collateral reading of books representing different viewpoints, of conditions and tendencies in present-day Russia in order more fully to understand her economic, social, and political potentialities. Prerequisite: six hours of history.

First semester, Tu. Th. 2; second semester, Tu. Th. 2. Dr. Scott. Two semester hours.

Open to Seniors and Graduates

404(162) The Era of the American Revolution 1763-1787
The causes, character, and consequences of the American Revolution.
First semester, S. 1-3. Dr. Macmillan. Two semester hours.

406B(182) United States from the Spanish-American War to the Present
Special emphasis upon the progressive movement, Post-World War I, readjustments, the New Deal, and our entrance in the Second World War.
Not offered in 1947-1948. 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.
Second semester, S. 9-11. Dr. Russel. Two semester hours.

Open to Graduates

510(281) Studies in Modern European History; Race Conflict in Central Europe
Migration and settlement of Germans, Czechs, Slovaks, and Magyars in central Europe; history of the kingdom of Bohemia, especially in the period
of its greatest influence; the question of a specifically Czech culture; racial
difficulties in the Hapsburg monarchy; diplomatic and revolutionary move-
ments of 1914-1918; the peace settlement; domestic and foreign policy of
Czechoslovakia; Munich and its results.

Not offered in 1947-1948. Dr. Scott. Three semester hours.

511(282) Studies in Modern European History: The Impact of the Present
War on National Groups of Eastern Europe
Migration and settlement of peoples of Eastern Europe; study of those
periods of their early history, respectively, which gave them identity
and the right to call themselves nations; revolutionary changes 1914-1918
and degree of progress since 1918; significance to them and to the world
of German or Russian encroachment.

Not offered in 1947-1948. Dr. Scott. Three semester hours.

513(201) Studies in Michigan History
Studies in the history of Michigan since its admission as a state. At-
tention is given to the critical use of historical materials and the prepara-
tion of bibliographies.

Not offered in 1947-1948. Dr. Knauss. Two semester hours.

515(285) Studies in Western Europe: Eighteenth Century Enlightenment
Lectures and reading on the background and 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 phil-
osophes.

Not offered in 1947-1948. Dr. Seibert. Two semester hours.

519(262) Studies in Russian History
The course consists of (1) lectures and reading on those phases of Rus-
sian history necessary for an understanding of the present, and (2) the
critical study and 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, such as the Baltic states, Poland,
and the Ukraine; (b) the evolution of Soviet institutions.

Not offered in 1947-1948. Dr. Scott. Three semester hours.

PHILOSOPHY
ROBERT FRIEDMANN

Philosophy, in a sense, concludes our liberal arts education. It tries to be
comprehensive and to interpret the wide compass of our factual knowledge.
Beyond that, it also poses the questions of value and of the meaning of life.
Since more maturity is necessary, only juniors and seniors will, in general,
be admitted. The courses are independent from each other; each semester
another course will be offered.
Description of Courses

390 Introduction to Philosophy
A first acquaintance with the problems of philosophy, and with the philosophical approach to the problems of life. Theoretical and practical philosophy, and relationship between philosophy, science, and religion. The problem of the universe, of man, his nature, inner life, and moral conduct. The different schools such as idealism, naturalism, etc. Meaning of life.

Not offered in 1947-1948. Dr. Friedmann. Two semester hours.

391 History of Philosophy
The great thinkers and the great schools of thought. Greek philosophers, Roman, early Christian, and medieval thinkers, the Renaissance, the great rationalists since Descartes, the nineteenth and the twentieth centuries. America's contribution.

Not offered in 1947-1948. Dr. Friedmann. Two semester hours.

392 Problems of Ethics
The basic principles of moral philosophy. The human conflict situation. Different answers such as relative and absolute ethics, will power, love, etc. The evil and the limits of the human nature. Practical ways and the model of great moral teachers. Religion and morals, ethics and education.

First semester, Tu. Th. 10. Dr. Friedmann. Two semester hours.

393 Philosophy of Natural and Social Sciences
Logical foundations, methodology of the sciences. The eternal principles of the universe as discussed by Physics, Chemistry and Biology. The laws. The enigma of life. Natural and social sciences in contrast. Meaning of history.

Second semester, Tu. Th. 10. Dr. Friedmann. Two semester hours.

Political Science

D. C. Shilling

Carl Santoro

In this department of the social sciences the student has an opportunity to further his acquaintance with the theory and workings of governments at various levels, the nature of political processes and organization, and the privileges and obligations of a citizen. The significance of such knowledge is recognized by the fact that many of the states require that some instruction in this field be given in all tax-supported institutions of higher learning. The Michigan requirement may be met by any one of the following courses: American National Government 230, American State and Local Government 231, or Survey of American Government 234.

Majors and minors in political science must include American National Government 230 and American State and Local Government 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.
First semester, M. W. F. 8, 9, 10, 1, 3, Tu. Th. S. 8; second semester, M. W. F 11, 2. Tu. Th. S. 8. Mr. Santoro, Dr. Shilling, Dr. Weber. Three semester hours.

231 American State and Local Government
Since the citizen has many contacts with the state, city, and county government, an effort is made to acquaint the student with the organization, aims, and problems of state, county, and municipal government. Special emphasis on Michigan.

First semester, M. W. F. 10, 11, 2; second semester, M.W.F. 8, 9, 10, 1, 3. Mr. Santoro, Dr. Shilling, Dr. Weber. Three semester hours.

234 Survey of American Government
This course covers national, state, and local governments and is intended for those who do not find time for the more extensive study in American Government 230 and American State and Local Government 231.

First semester, Tu. Th. 1; second semester, Tu. Th. 1. Dr. Weber. Two semester hours.

330 Political Philosophy
An attempt is made to introduce the student to a selected portion of the political thought that has influenced the thinking of all ages and areas. The approach is a historical one, the method consisting of a study of the author, his times, and his contribution to political thought. Prerequisite: American National Government 230 and American State and Local Government 231, or consent of instructor.

Second semester, M. W. F. 2. Mr. Santoro. Three semester hours.

331 Public Administration
Analyses of the principles of administrative organization and supervision, and of fiscal and personnel agencies, with special reference to current problems in American government. Prerequisite: American National Government 230 or State and Local Government 231.

First semester, Tu. Th. 1. Mr. Santoro. Two semester hours.

332 American Rural Government
The course deals with rural government in the United States, with special emphasis upon Michigan. Following a brief discussion of the historical development of rural government, a more detailed study is made of the functions of county, township, and village government and their relation to the state, the types of organization, and problems of administration. 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: American National Government 230, American State and Local Government 231.

Not offered in 1947-1948. Dr. Shilling. Two semester hours.

333 Political Parties
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. Some use is made of
laboratory materials. Prerequisite: American National Government 230. American State and Local Government 231, or consent of instructor.
Second semester, M.W.F. 10. 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: American National Government 230 or six hours of Modern European history.

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: American National Government 230 and American State and Local Government 231, or consent of instructor.

337A Contemporary Economic and Governmental Problems
A practical study of some of the more important politico-economic and politico-social problems, recent and pending in Congress and in State legislatures. In addition to text and lectures current periodicals will be used and individual research will be required. Prerequisite: Principles of Economics 220A, B, or American National Government 230 and American State and Local Government 231, or consent of instructor.
First semester, Tu. Th. 10. 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, Tu. Th. 10. 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 belligerants, 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 or consent of instructor.

339 World Politics and International Organization
An examination is made of the psychological, economic, social, and political causes of wars and the needs for international cooperation. A critical study will be made of recent attempts in international organization. Prerequisite: American National Government 230 or consent of the instructor.
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 or consent of the instructor.
Not offered in 1947-1948. 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 or consent of the instructor.
Not offered in 1947-1948. 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: American National Government 230, American State and Local Government 231.
Second semester, Tu. Th. 2. Dr. Shilling. Two semester hours.

431(141) Municipal Government and Administration
The first part of this course consists of an analysis of the political, legal, and sociological aspects in the development of American cities. The main emphasis, however, will be placed upon administration, studying such services as planning, zoning, police, welfare, utilities, and public works. Problems of metropolitan communities will be considered. Considerable source materials will be used. Prerequisite: American National Government 230 and American State and Local Government 231, or equivalent.
First semester, S. 11-1. Dr. Shilling. Two semester hours.

434(132) Legislative Process
An introductory study of the processes by which federal and state laws are made. Prerequisite: American National Government 230 or American State and Local Government 231.
Not offered in 1947-1948. Two semester hours.

439(163) Foreign Policy of the United States
A survey of the diplomatic history of the United States from the American Revolution to the outbreak of World War II. Prerequisite: six hours of political science or six hours of United States history.
Not offered in 1947-1948. Dr. Shilling. Two semester hours.
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.

Students who desire to major or minor in sociology should plan their work with the departmental adviser as early in their college career as possible. A major in the field consists of 24 semester hours and a minor of 15 semester hours of course work. Introduction to Contemporary Society 101A, B may be counted as 6 semester hours toward the major or as 3 semester hours toward the minor.

Courses 241 and 242 are intended to give a student a general knowledge of human relationships and of the more outstanding social problems. They 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.

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 are considered. Chief emphasis, however, is placed upon an analysis of various forms and processes of group association, including such topics as the forms of collective behavior, the structure and functions of community organization, the nature of social interaction, and the character of social change.

First semester, Tu. Th. S. 8, M. W. F. 9, 10, 1, 2; second semester, M. W. F. 8, 1. Mr. Horton, Dr. Kercher, Dr. Lemert. Three semester hours.

242 Modern Social Problems
A general survey of some of the major social problems now confronting American society, such as family disorganization, physical and mental ill health, economic insecurity, juvenile delinquency and crime, population changes, and industrial hazards. Special consideration is given to the cultural background and the social significance of these problems as well
as to the various public and private proposals for their alleviation. Prerequisite: Principles of Sociology 241.

First semester, M. W. F. 8, 2; second semester, Tu. Th. S. 8, M. W. F. 9, 1, 2. Mr. Horton, Dr. Kercher, Dr. Lemert. 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. The major divisions of the course include the nature of the individual and society, the processes of socialization, the character of human personality and its problems of adjustment, and the meaning of social situations in personal behavior. Prerequisite: Principles of Sociology 241.

First semester, Tu. Th. 10. Mr. 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. A study of the biological, social, and cultural factors involved in the development of human personality, with emphasis on the community setting of personality growth. Attention will be paid to personality disorganization and to problems of health and professional organization.

Second semester, M. W. 3. Mr. Horton. Two semester hours.

246 Juvenile Delinquency and the Community
A course organized specifically for off-campus instruction with residence credit. It is designed so as to make maximum use of the research opportunities, the leadership, the youth service agencies and the other social resources of the immediate community in which it is taught. Attention is centered upon both the delinquent personality and the delinquency situation. The character, causes, treatment, and prevention of delinquent behavior are considered. Each student is expected to carry through a study project in which some aspect of the delinquency problem in the local community is analyzed.

Offered off-campus only. Dr. Kercher. Three semester hours.

247 Problems of Family Life
A study of the institutional functions of the family, with particular attention to their nature, history, and problems. An emphasis will be laid also on the inter-personal adjustments of family life. Prerequisite: Principles of Sociology 241.

First semester, M. W. F. 3; second semester, M. W. F. 10. Mr. Horton. Three semester hours.

248 Cultural Anthropology
Although this course deals primarily with cultural anthropology it opens with a brief survey of physical anthropology, particularly as it relates to the evolution, character, and distribution of modern races. There fol-
allows a descriptive and comparative study of the cultures of primitive peoples; their technology, art, social life, and religion. The course concludes with a consideration of the origins and functional interrelationships of significant aspects of contemporary culture.

First semester, M. W. F. 10. Dr. Lemert. Three semester hours.

340 Urban Community
A study of community life as influenced by the processes of industrialization and urbanization. The rural community, the small town, the small city, and the metropolis will be studied in some detail from the standpoint of personality and social organization. Community problems and social planning for community life will also be given appropriate consideration. Prerequisite: Principles of Sociology 241.

Not offered in 1947-1948. Mr. Horton. Two semester hours.

341 Social Control
A study of the relationships between social deviation, power, the means of social control 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.

First semester, Tu. Th. 1. Dr. Lemert. Two semester hours.

342 Criminology
A study of crime as a social problem. Beginning with a survey of the various theories of crime and punishment, both past and present, this course leads to an analysis of the various factors involved in criminal conduct; a critical study of the organization and functioning of American police systems and of the American courts; a survey of the problems of penology, including prison types, prison government, prison labor, parole, and probation; and finally, a consideration of crime prevention. Visits to institutions may be arranged. Prerequisite: Principals of Sociology 241.


343 Population
Four objectives will be attempted in this course: first, a review of population theory from Malthus to the present; second, a survey of the outstanding facts with respect to quantitative and qualitative changes in world population, but more especially in the population of the United States; third, an analysis of the causal factors underlying contemporary changes; and fourth, an interpretation of the social and biological significance of present population trends. Prerequisite: Principles of Sociology 241.

First semester, M. W. F. 11. 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. The development of social theory is stressed, and an endeavor is made to appraise the contributions
of various individual thinkers of different schools of thought. Prerequisite: Principles of Sociology 241 or consent of instructor.

Second semester, Tu. Th. 2. Dr. Friedmann. Two semester hours.

347 Race and Inter-group 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, Hours to be arranged. Dr. Kercher. 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. In stressing the meaningful interpretation of social data, elementary statistical concepts and methods are studied, and their application to specific social problems made. Each student will take part in a group study project. Prerequisite: 12 semester hours of social science other than history.

Second semester, M. W. F. 2. Dr. Lemert. Three semester hours.

349 Contemporary Social Movements
The social and cultural basis of social movements and the circumstances favorable to their growth; their functions and development, and their place in the power structure of contemporary society. Current movements, including communism, fascism, Ku Klux Klan, Townsend movement, the labor movement, and other movements of economic, or religious nature are considered. Prerequisite: Principles of Sociology 241 and Social Psychology 243 or consent of instructor.

Second semester, Tu. Th. 10. Mr. Horton. Two semester hours.

350 The Community and the School
A study of the social functions of education in promoting constructive community life. Two objectives dominate the course. The initial purpose is to acquire general insight into the character of our social order, and also to acquire an understanding of the principal social problems that signify failure in communal living today. The second major objective is to develop the subject matter, the curricular organization, and the methods of instruction that would make the school an effective instrument in bringing about desirable community change. When offered off-campus for resident credit each student, working singly or in small committees, is expected to develop a complete instructional unit for practical classroom use in dealing with some social problem having significant local implications. Prerequisite: Principles of Sociology 241 or equivalent.

Not offered in 1947-1948. Mr. Horton. Three semester hours.
DESCRIPTION OF COURSES

445(162) Cooperative Social Organization
A study of cooperative social organization and enterprise. Five aspects of the subject are emphasized: first, the principles underlying cooperative organization; second, the history and character of major historical cooperative movements; third, the forms and manifestations of cooperative enterprise today; fourth, the organization and operating of cooperative enterprise; and fifth, the role of cooperative enterprise in present-day society. Prerequisite: Principles of Sociology 241, or equivalent.

First semester, S. 11-1. 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 1947-1948. Dr. Kercher. Two semester hours.

447(118) Migrations
A study of major human migrations. While world trends, both historical and contemporary, are surveyed, major stress is placed on modern movements into and within the United States. 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 1947-1948. 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.

Not offered in 1947-1948. Dr. Lemert. Two semester hours.

543(115) Advanced Population Studies
This course deals primarily with the quantitative and equalitative aspects of population trends in the United States, but is also concerned with the quantitative aspects of the world population situation. The basic objectives are: to become familiar with the theory and concepts of population changes, to understand their underlying causes, to interpret their significance, and to evaluate the social policies aiming to control them. Prerequisite: Principles of Sociology 241 or equivalent.

Not offered in 1947-1948. Dr. Kercher. Two semester hours.

547(160) Advanced Studies in the Family
The major aspects of family life will be explored. Attention will be 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.

Second semester, S 1-3. Dr. Lemert. Two semester hours.

SOCIAL WORK

255 The Field of Social Work
A study of social work as a professional field. The philosophy functions, and methods of social work are surveyed. The patterns of specialization within the profession are studied as well as the relation of the profession as a whole to other professions. An analysis is made of the employment opportunities in the different divisions of the field, and also of the personal qualifications and education needed to take full advantage of these opportunities. Interpretative visits to varied types of social work agencies are made.

Second semester, Tu. Th. 9. Mrs. Reid. Two semester hours.

351 Family and Child Welfare
The development of family and welfare services are traced. The problems of rendering these services are considered from both a private and public agency point of view. Students prepare summaries of record materials in adoptions and foster home placements, and carry on evaluative studies of family case records. Prerequisite: 12 semester hours of social science other than history.

First semester, Tu. Th. 8. Mrs. Reid. Two semester hours.

353 Social Legislation and Public Welfare
A general course in social welfare legislation. The history of social legislation and the philosophy underlying it are briefly considered. An analysis is made of various aspects of welfare legislation of importance to the social worker including settlement or residence laws; maternal and child welfare legislation; social security legislation covering old age insecurity, unemployment, illness, and physical handicaps; and the like. Prerequisite: 12 semester hours of social science other than history.

Second semester, Tu. Th. 8. 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. The problem of the most effective approach to the individual and his social situation is discussed. Case material is analyzed to acquaint the student with the characteristic methods and processes of social case work in its community setting. 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, M. W. F. 9. 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. Each student, in accordance with his interests and abilities, is placed in the case-work or group-work agency in which he intends later to do his field work. A minimum of 50 hours of on-the-spot study of the agency's organization, functions, and methods are required. Selected case materials are read and evaluated. At the conclusion of the course each student is expected to have his assignment for field work well defined and under way. Prerequisite: Principles of Social Work 355, and consent of the instructor.
First semester, Tu. Th. 9. 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 work is done under direct supervision of an agency staff member, and students hold frequent conferences with the instructor to discuss their individual field work problems. 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.

Open to Graduates

548(258) Psychiatric Information for Social Workers

549(243) Child Psychiatry
Discussion of causation, symptomatology, prognosis, and treatment of mental and emotional maladjustments of childhood.
First semester, M. 7-9 p. m. Dr. Williamson. Two semester hours.

550(270) Mental Hygiene in Social Science 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. Various types of symptomatic behavior studied with interpretation of causes. Case studies submitted with critical analysis of cause and effect relationships operating in the lives of the clients involved in a treatment situation.
Second semester, M. 7-9 p. m. Dr. Williamson. Two semester hours.
Courses in the Department of Education are designed primarily to meet the professional needs of the student preparing to teach. Certain regulations are set up which affect all students.

Students in the provisional certificate curricula are required to take Introduction to Directed Teaching 240 or 351.

All students pursuing a curriculum for a provisional certificate and a degree are required to take as a minimum 21 semester hours of professional work in education. The following, or their equivalent, are required: Human Growth and Development 251, 3 semester hours; Introduction to Directed Teaching 240 or 351, 3 semester hours; and Directed Teaching, Laboratory in Education, and General Educational Problems 370 A, B, C, 15 semester hours. It is possible for students to 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 the other semester of the senior year. This may be necessary to permit students to take elective courses or to complete their major, minor, or group requirements. Students with irregularities in their professional work should confer with the departmental adviser at the earliest possible date.

Students who upon reaching the senior year have educational credits which satisfy the above, with the exception of directed teaching may meet this requirement by taking one or more of the following: Directed Teaching 371, 372, or 373.

Students preparing for the State Elementary Provisional Certificate are required to take Psychology of Reading 212, 3 semester hours.

Elective courses are available in education 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.
Undergraduate students are not encouraged to specialize in the field of education. The department takes the position that, except in the case of very mature students who have had experience in teaching, specialization in the field of education should be reserved for graduate study. Students should feel free to take such electives in education as will give them better professional preparation for teaching and serve their individual interests. Specialization in undergraduate study should as a general rule be confined to the school-subject fields, such as history, mathematics, business education, and industrial arts.

REQUIRED WORK IN EDUCATION
(For Provisional Certificate)

Sophomore or Junior Year

251 Human Growth and Development

This class will meet four periods each week, one of which will be devoted to the presentation of illustrative materials and lectures from the fields of sociology, biology, psychology, and other fields of interest which contribute to the objectives in this course. The course is designed to help the student understand efficient guidance through appreciating the varied problems of the developing human being on each and every growth level from conception to maturity. Prerequisite: as many honor points as semester hours of credit acquired.

First semester, M. W. F. S. 9; M. W. Th. F. 8, 10, 11, 1, 2; second semester, M. W. F. S. 9, M. W. Th. F. 8, 10, 11, 1, 2. Dr. Beirge, Miss Blackburn, Dr. Burge, Dr. Ellis, Dr. Hilliard, Miss Mason, Mrs. Phillips. Three semester hours.

Junior Year

351 Introduction to Directed Teaching

The immediate aim of this course is to prepare students for successful student-teaching. It deals with the particular problems of organization and management of the school, and with the selection, organization, adaptation, and presentation of materials of instruction that function in teaching-learning situations. Prerequisite: Human Growth and Development 251 or equivalent.

First semester, M. W. F. 9, 10, 1, 2, Tu. Th. S. 11; second semester, M. W. F. 9, 11, 1, 2, Tu. Th. S. 10. Miss Mason, Mrs. Phillips, Miss Steele. Three semester hours.

Senior Year

REGULAR COURSES IN DIRECTED TEACHING

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 semester hours of credit acquired.

Miss Blackburn, Dr. Burge, Dr. Ellis, Dr. Frederick, Dr. Manske, Miss Steele, supervisors, and resource persons. Fifteen semester hours.

370A  Directed Teaching
A student devotes half of each school day for one semester to this work and the other half day to 370B and C. Students are expected to become acquainted with the whole program of the training schools in which they are teaching. In addition to observing and teaching, students are expected to participate extensively in planning assemblies, sponsoring clubs, and cooperating in other activities of the school and community. Students should enroll for directed teaching in the Training School Office as soon as the schedule of classes for the ensuing semester is published.


370B  Laboratory in Education
Students work individually and in groups on problems which they face in their directed teaching situation in classroom, school, and community. Other problems to be faced later as full-time teachers also are considered. Each laboratory room is equipped with tables, chairs and bookshelves. Generous use is made of many school books, professional books, courses of study, bulletins, pamphlets, educational periodicals, and mimeographed materials which are of assistance to the students in solving their actual teaching problems. Suggestions and guidance are afforded by staff members and by resource persons who are brought to the laboratory groups for the help they can give the students.

A fee of $2.00 will be charged for supplementary materials used in this course.


370C  General Educational Problems
Laboratory groups come together in general sessions for the consideration of problems of general interest and value to all teachers regardless of level or area in which they teach. These include 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, M. W. F. 11, 1, 3. Three semester hours.

370A, B  Directed Teaching and Laboratory in Education
For seniors who can take twelve semester hours of professional education work during the same semester but who desire to take elective courses or to take one course during this semester to complete major, minor, or group requirements. (See descriptions above)

Twelve semester hours (eight and four semester hours, respectively)
370C General Educational Problems
Open only to those who take the course during their senior year either
the semester before or the semester after they take 370A and B. (See
description above)
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 Training School Office for Directed Teaching 371, 372,
or 373 as soon as the schedule of classes for the semester is published.
Prerequisite: as many honor points as semester hours of credit acquired.
Dr. Burge and 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. Dr. Burge and 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. Dr. Burge and Supervisors. Four semester hours.

374 Directed Teaching
A course in the teaching of arts and crafts related to work in occupa-
tional therapy in the public schools and in institutions for defective chil-
dren. Prerequisite: same as for Directed Teaching 371. Open only to
students of occupational therapy.
Each semester. Mrs. Struble. Five semester hours.

ELEMENTARY EDUCATION

208 Stories for Childhood
A study of stories and poems suitable to childhood. Classroom practice
in story telling.
First semester, Tu. Th. 10; second semester, Tu. Th. 1. Miss Blackburn,
Mrs. Phillips. 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.
First semester, Tu. Th. S. 10, M. W. F. 11; second semester, M. W. F. 10,
11. Miss Blackburn, Dr. Hilliard. 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.


308 Parent Education
The course will enable students to appraise and organize materials and methods of work suitable for child-study groups or parent-teacher meetings. The means of securing better habits and attitudes in school and home will be studied. Behavior problems based upon actual case material secured from experiences of visiting teachers will be discussed. Efforts will be made to secure real practice in handling child-study groups. This course will be adapted to the needs of both early- and later-elementary teachers.

Not offered in 1947-1948. Miss Blackburn. 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. A study will be made of the nature of the pre-school child and of the materials and environment necessary to promote correct growth.

Second semester, Tu. 3-5. Miss Blackburn. 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 1947-1948. 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.—Not open to those who have not had 311A during the preceding semester.

Not offered in 1947-1948. 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.

First semester, M. W. F. 1. Miss Mason. 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, S. 9-11. 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.

Not offered in 1947-1948. 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. Involves statement of laws of learning, survey of experimental studies, psychological principles in learning situations, selection of subject matter, and examination of textbooks and courses of study.

Not offered in 1947-1948. Dr. Hilliard. Two semester hours.

510B(C107b) Psychology of the Elementary School Subjects: Arithmetic, Spelling, and the Social Studies
Deals with the psychological principles underlying the present and projected practices in the teaching of arithmetic, spelling, and the social studies. Involves a consideration of the laws of learning with special emphasis on the psychological principles of specific learning situations in the school subjects stressed in the course. Units of instruction, courses of study, and textbooks will be reviewed in terms of the results of experimental studies of the learning processes.

First semester, S. 11-1. Dr. Hilliard. Two semester hours.

511(B105) Construction of the Elementary School Curriculum
Acquaints students with theories, techniques, and practices utilized in curriculum building.

Not offered in 1947-1948. Dr. Frederick. Two semester hours.

513(B251) Supervision of Elementary School Instruction
Required of students preparing for the preliminary examination for the doctorate in elementary education. Presupposes training and experience in elementary education and a rudimentary knowledge of public-school administration.

First semester, S. 1-3. Dr. Beirge. Two semester hours.
514(B151) Administration and Supervision of Elementary Schools
Deals with the general managerial problems of the elementary school. Open to students of maturity and experience who wish to fit themselves for principalships or supervisorships in grades one to eight.
Second semester, S. 11-1. Dr. Hilliard. 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 1947-1948. 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 1947-1948. Dr. Hilliard, 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 1947-1948. Dr. Hilliard, Dr. Manske. Two semester hours.

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.
Second semester, S. 11-1. Dr. Frederick. 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.
First semester, S. 11-1. Dr. Frederick. Two semester hours.

523(C119) Educational Guidance and Adjustment of High School Pupils
Deals with the personal, recreation, educational, and vocational guidance of youth. Methods of counseling and techniques of gathering pertinent personnel data will be presented.
First semester, S. 1-3. 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, S. 1-3. Dr. Bryan. Two semester hours.

525(B156) Supervision of High School Subjects
Deals with the measure, aims, and principles of supervision of secondary school subjects.
Not offered in 1947-1948. Dr. Bryan. Two semester hours.

527(B227) Supervision in the Secondary School Curriculum
Designed for students prepared to do curriculum research work in secondary education. Prerequisite: Education B122 and B192 or equivalents, and one or more other courses in secondary education.
Second semester, S. 1-3. Dr. Wilds. Two semester hours.

528(B228) Seminar in Secondary School Administration
For advanced students interested in making an intensive study of a particular problem concerned with the administration of the secondary school.
Not offered in 1947-1948. Dr. Bryan. 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 practice employed in selected institutions and agencies are a requirement of the course.
Second semester, S. 9-11. Dr. Manske. Two semester hours.

SPECIAL EDUCATION

234 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, M.W.F. 10. Mr. Robinson. Three semester hours.

235 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 lipreading skill as well as practice in the techniques of teaching.
First semester, M. W. F. 11. Mr. Robinson. Three semester hours.
236 Advanced Lipreading
This course is primarily for those students preparing to be teachers of the deaf and hard of hearing. Opportunities for lipreading are presented in many situations of varying difficulty. The special problems of deaf individuals are discussed and the students receive advanced training in the teaching of lipreading to both children and adults.

Second semester, M. W. F. 11. Mr. Robinson. Three semester hours.

237 Audiometry and Hearing Aids
This course is designed to equip the student with a knowledge of the audiometer, including training in its use, and appreciation of the history, advantages, and limitations of hearing aids. The student is given the opportunity to make and interpret audiograms on deaf and hard of hearing individuals. Emphasis is placed upon the importance of the audiometer and hearing aids in remedial work with persons who have hearing losses.

Second semester, Tu. Th. 11. Mr. Robinson. Two semester hours.

331 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, T. Th. 10. Dr. Ellis. Two semester hours.

332 Mental Deficiency
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.

Second semester, Tu. Th. 2. Dr. Ellis. Two semester hours.

335 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; the genetic development of personality; adolescence and its problems; sex development; personality disorders; juvenile delinquency; maladjustment in elementary school, high school, and college; the mental hygiene of courting, mating and marital relations; the mental hygiene of religion.

Second semester, M. W. F. 2. Dr. Ellis. Three semester hours.

336 Character Education
Character outcomes of education are emphasized in this course. The theories of character education are considered, the objectives of character education are studied and cataloged, and a bibliography of references to methods and materials is collected. Consideration of the individual and respect for personality are stressed. Life-situations are the center of interest, with classroom management, group cooperation, and problem-solving in the foreground. Socialized discussion, case discussions, child guid-
ance, pupil participation, and the significance of the teacher's influence receive attention, together with the influences of the community and the home upon character.

Each semester, Tu. Th. 8. 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 1947-1948. 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, Tu. Th. 8. Mr. 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 1947-1948. Dr. Ellis. Two semester hours.

435(C120) Mental Hygiene of Adolescence
Problems and adjustment of youth of high school age. Emotional growth and development. Among topics considered are: physical and sex development in adolescence; adjustment and maladjustment in adolescence; personality disorders; behavior problems and juvenile delinquency; mental hygiene of religion, courting, mating, marital adjustment; adjustment and maladjustment in college.

Second semester, S. 9-11. Dr. Ellis. Two semester hours.

436(C121) Mental Hygiene of Childhood
Problems and adjustment of children of elementary age. Preventive techniques. Among topics considered are: emotional growth and development; school discipline; needs of children; developmental tasks; personality growth and development; behavior problems.

Not offered in 1947-1948. Dr. Ellis. 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 1947-1948. Dr. Ellis. Two semester hours.
DIVISION OF TEACHER EDUCATION

METHODS OF TEACHING

340 Art Observation
Observation of art activities in the training school and discussion and illustration of these problems. First semester, Tu. 12. Miss Paden. 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, Tu. Th. 12. Miss Paden. 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, Tu. Th. 8. 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 seasons play; principles of supervision; construction and equipment of building, grounds, swimming pools, athletic fields, stadia.
Each semester, M. W. F. 8. 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, Tu. Th. 10. 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, Tu. Th. 3. Miss Vestal. Two semester hours.

346 Teaching of Business Subjects
Consideration of approved methods for presenting material for training in business occupational skills and methods of testing and determining standards of achievement for those skills; the examination and compilation of supplementary and collateral material for the use of the teacher. It is recommended that this course either precede or accompany directed teaching in any of the business occupational skills.
Second semester, Tu. Th. 2. Mr. Lindquist. Two semester hours.
Plan and Organization of a School Shop

A course to help teachers plan and organize the school shop. Topics considered include the physical needs of the subject, a selection of activities, the shop layout, purchasing equipment, establishing a supply routine, planning personnel organization and shop management, and installation of instructional aids.

Each semester, Tu. Th. 9. Dr. Feirer. Two semester hours.

Teaching of Industrial Arts

This course deals with the problems in teaching industrial arts subjects, the techniques employed in the analysis and organization of instructional units, the development of pupil personnel program charts, construction of tests and rating scales, etc. A simple and direct technique of analysis for the purpose of the selection and organization of learning units in Industrial Arts is covered. Also the principal methods of instruction used in industrial arts subjects, demonstrations, lecture, discussion period, use of individual instructional material, etc., will be emphasized.

Each semester, M.W. F. 9. Dr. Feirer. Three semester hours.

Theories and Principles of Education

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.

Each semester, Tu. Th. 3. Dr. Beirge. Two semester hours.

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. The aims, types, content, agencies, organization, and methods of education are studied from their origins down to the present time, in order to provide a sound basis for the understanding, interpretation, and evaluation of the current theories and practices in the public school system of Michigan. Prerequisite: Human Growth and Development 251.

Not offered in 1947-1948. Dr. Wilds, Dr. Frederick. Three semester hours.

Open to Seniors and Graduates

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 1947-1948. Dr. Wilds. Two semester hours.
Open to Graduates

550(C102) Advanced Educational Psychology
Will deal with problems of individual differences, learning, and social and emotional adjustment.

Not offered in 1947-1948. 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 1947-1948. Mr. 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 1947-1948. Mr. 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, S. 9-11. 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.

Not offered in 1947-1948. 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, S. 9-11. Dr. Wilds and others. Two semester hours.
HEALTH EDUCATION

186 Safety
An introductory course dealing with various phases of accident prevention and general safe living in school and out. Emphasis is given to teaching aids and methods of coordinating safety with the usual laboratory and classroom activities. Home, highway, and recreational safety are also considered.

First semester, Tu. 3, Th. 3; second semester, Tu. 3, Th. 3. Mr. Sherwood. One semester hour.

Open to Graduates

580S(F190) The Camp as an Educational Agency
A course designed primarily for graduate students who are interested in exploring the educational possibilities of school camping. The work includes an intensive study of the literature on camping, a comparison of the philosophies of education and those of camping, group discussions of camping problems, investigation of the opportunities for guidance and group work in camp living, actual participation in various camp activities, and when feasible, visitation of neighboring camps.

Not offered in 1947-1948. Dr. West. Two semester hours.

581(F208) Community Recreation
Deals with the development, administration, and community use of leisure time. Stresses the social and economic factors which have given rise to the present-day movement toward education for leisure.

Not offered in 1947-1948. Dr. West. Two semester hours.

582(F191) The Principles and Practices of Outdoor Education
A general course intended to give teachers, supervisors, and administrators an understanding of the principles and practices of outdoor education. Consideration will be given to the content of the outdoor curriculum, integration with the in-school work, selection of outdoor teaching areas, methods of working, and problems of organization and administration.

Not offered in 1947-1948. Dr. West. Two semester hours.

585(F213) Curriculum Problems in Physical Education and School Health
Considers the aims, objectives, and goals of physical education and school health. Principles underlying the curriculum standards for the selection of activities, and criteria for judging outcomes are discussed. A thesis may be initiated.

Not offered in 1947-1948. Dr. West. Two semester hours.
A program for the preparation of librarians has been established at Western Michigan College of Education. The curriculum aims to develop skill in the selection, organization, and use of books and teaching materials and in stimulating in others an interest in books and reading. The instructional program places special emphasis upon the school library’s opportunity to enrich the pupil’s background and to serve as a cooperating agency with city and county public libraries. The curriculum is planned to serve the needs of (1) students who wish to qualify for positions as librarians in elementary or secondary schools under the requirements of the Michigan Teachers’ Certification Code; (2) students who wish to prepare for library service in small communities and rural areas; (3) teachers and prospective teachers who feel the need of wider acquaintance with books and other library materials in work with children and youth.

With the exception of the course, Reading Interests of Children 202, for which students of sophomore standing are eligible, the courses are open to juniors and seniors who meet the general college requirements specified in the introductory sections of the college catalog. Candidates for the A.B. or B.S. degree may present a major of 24 semester hours in library science. Provision is also made for students to present a minor, 15 semester hours in prescribed courses in library science, in preparation for part-time school library service. Those students who wish to qualify for school library certification must also meet the requirements for the provisional teaching certificate. Since the librarian needs a broad general background to meet the varied demands of a school program, students preparing to major in library science are advised to devote their first two college years to the liberal arts program, including a foreign language and a laboratory science.

During the third and fourth years, in addition to completing the library science major, they should meet the college requirements in Education, including Psychology of Reading 212, which is required of candidates for the B.S. degree with (Teacher certificate) and major in library science.

The courses in the Department of Librarianship count in the following subject groupings:

Group I. Language and Literature
   - Reading Interests of Children ............................................ 202
   - Reading Interests of Youth ............................................. 302
   - Reading Interests of Adults ........................................... 304
   - Selection of Reading Materials ..................................... 303
   - Reference Service ...................................................... 311

Group III. Social Science
   - The Library in the Modern Community ..................................... 362

Group IV. Education
   - Administration of School Libraries .................................... 361
   - Administration of County Libraries ................................... 363
   - Curriculum Enrichment .................................................. 305
Group VI. Practical Arts
Organization of Library Materials .............................................360
Classification and Cataloging .....................................................370
Library Observation and Practice ..................................................380

The following prescribed courses constitute the minor in library science acceptable for part-time school library service in small schools:

Reading Interests of Children 202 or Reading Interests of Youth
Curriculum Enrichment
Selection of Reading Materials
Reference Service
Organization of Library Materials
Library Observation and Practice

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 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.

First semester, M. W. F. 10; second semester, M. W. F. 10. 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 sources for selection of such books.


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 the evaluation and effective use of sources for selection of books, periodicals and other materials.


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.

Second semester, Tu. Th. 10. 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.

First semester, M. W. F. 11; second semester, M. W. F. 1. Miss LeFevre. Three 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.

First semester, M. W. F. 1; second semester, M. W. F. 2. 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, Tu. Th. 9; second semester, Tu. Th. 11. Miss Hunt. Two semester hours.

361 Administration of School Libraries*
Consideration is given to 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.

First semester, Tu. Th. 11, Miss LeFevre; second semester, Tu. Th. 8, 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 in 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, Tu. Th. 9. 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.


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.

First semester, M. W. F. 8; second semester, M. W. F. 11. Miss Hunt. Three semester hours.

380 Library Observation and Practice
Opportunity will be given the student to observe various kinds of library service through a series of visits to well-organized school and community libraries. Supervised practice periods will be provided in selected co-operating libraries.

Hours to be arranged. Miss LeFevre. One, two, or three semester hours.

*Starred courses open only to Majors and Minors in the Department of Librarianship.

LIBRARY

LAWRENCE S. THOMPSON

Library Methods
A course of eight lessons in the use of the library.
A groups, first eight weeks of semester, Tu. 11, 1; W. 12; Th. 11, 3, 4;
B groups, last eight weeks of semester, Tu. 11, 1; W. 12; Th. 11, 3, 4.
Non-credit course required of all freshmen.

RURAL LIFE AND EDUCATION

WM. MCKINLEY ROBINSON ESTHER D. SCHROEDER

Additional information relating to the work of the Department of Rural Life and Education may be found on the following pages:
Opportunities in the field of rural life and education, page 53
Facilities for training for work in rural life and education available at Western Michigan College of Education, pages 113-114
Certificates granted and degrees conferred, page 97
Provision for training teachers of agriculture, page 54.
All courses except Curriculum 145, Introduction to Directed Teaching 240, and Directed Teaching 271 are offered in rotation each third summer session.
Advanced courses in the field of rural life and education are those numbered 345 and over.
Courses in Rural Economics, Rural Sociology and Rural Life count in Group III.
145 Curriculum

A study of the elementary-school child as a background for the examination of the various areas of the elementary-school curriculum; a survey of these areas, together with some reference to the research in the several fields and the present-day classroom practices in each; a detailed study of the Michigan Department of Public Instruction bulletins dealing with the curriculum; and a brief examination of the courses of study of other states.

First semester, M.W.F. 8, 1, S. 9-12; second semester, M.W.F. 1. Miss Schroeder. Three semester hours.

240 Introduction to Directed Teaching

A study of the general principles of teaching, with particular application to rural-school situations. Textbook discussions, supplementary reading, and observations in the training school are required. Prerequisite to directed teaching.

First semester, M.W.F. 9; second semester, M.W.F. 9, Tu. Th. S. 8. Miss Schroeder. Three semester hours.

241 Rural Economics

The fundamental principles of economics are considered in terms of rural life, both as they relate to the local community and to the national and international scene. Professional as well as economic interpretation is given those topics touched upon in the elementary and secondary school curricula; notably, conservation, agricultural extension services, co-operatives, insurance, consumer education, etc.

First semester, M.W.F. 8. Dr. Robinson. Three semester hours.

242 Rural Sociology

The sociology of life in the rural environment, with thought to the promotion of rural welfare, is dealt with in this course. Emphasis is placed upon those considerations most affecting or affected by the school and its program; such as, the community, population trends and movements, social institutions, health facilities, child labor, and isolation. A number of textbooks, current magazines, and pamphlets are used.

Second semester, M.W.F. 8, S. 12-3. Dr. Robinson. Three semester hours.

245 Rural Sociology

Through acquaintance with the wealth of material now available and being added to constantly by various research agencies, it is hoped to make for better rural-urban understandings and relationships, particularly within the profession of education. This course is also suited to the needs of those expecting to work in rural communities in the several service occupations and professions other than education. (Primarily for students in other than rural curricula.)

First semester, Tu. Th. S. 10. Dr. Robinson. Three semester hours.
271 Directed Teaching
The Hurd One-Teacher School and the Portage Rural Agricultural School provide directed-teaching facilities for students enrolled in the rural department. A selected group of rural students is permitted to do practice teaching while in residence for six weeks, each in a one-teacher school district in one of the several counties in the service area of the college. For this work five instead of four semester hours credit is given.

340 Rural Education
This course deals with the problems common to schools, particularly insofar as they are peculiar to rural schools; such as the community-centered school, public relations, support and control of schools, the county commissioner of schools, the state department of public instruction, compulsory attendance, consolidation and transportation, the school plant, school supplies and equipment, integration and articulation of the school system, professional relationships, and school law.
Second semester, Tu. Th. 8. Dr. Robinson. Two semester hours.

345 Rural Education (Seminar)
This seminar course is for advanced students. Reports by individual members on minor problems related to the curriculum, teaching, supervision, and administration of all types of rural schools and to pre-service and in-service education of teachers are studied. An abundance of resource material, as well as laboratory work in rural schools, is utilized. Prerequisite: consent of instructor.
Each semester, M. W. 3. Dr. Robinson, Miss Schroeder. Two semester hours.

346 Rural Education (Seminar)
Continuation of 345. Reports by individual members on major problems related to the curriculum, teaching, supervision, and administration of all types of rural schools and to pre-service and in-service education of teachers are studied. An abundance of resource material, as well as laboratory work in rural schools is utilized. Prerequisite: consent of instructor.
Each semester, M. W. 3. Dr. Robinson, Miss Schroeder. Two semester hours.

347 Rural Life (Seminar)
A critical study of a recent advanced textbook in rural sociology, supplemented with references including research studies presenting primarily the essentials in social life. Prerequisite: consent of instructor.
Each semester, Tu. Th. 3. Dr. Robinson. Two semester hours.

348 Rural Life (Seminar)
In this course social research, such as local, county, or regional planning of various services and agencies, is the subject of class discussion, members of the class devising forms and schedules for a rural community study. A
minor study within the scope of available time is undertaken. Prerequisite: consent of instructor.

Each semester, Tu. Th. 3. Dr. Robinson. Two semester hours.

349 Special Problems of Village and Consolidated Schools

Discussion of the following and other topics as related to village and consolidated schools; aims and functions of the school in relation to the community; school law; location and planning of buildings; transportation; selection of teachers; salaries; tenure; supervision; in-service education; classification of pupils; records and reports; the junior high school; curriculum; extra-curricular activities; publicity; and the Parent-Teacher Association. The course includes trips to nearby schools. Prerequisite: consent of instructor.

Second semester, M. W. 4. Two or three semester hours, depending on amount of field work done.
DIVISION OF VOCATIONAL AND PRACTICAL ARTS EDUCATION

Deyo B. Fox, Chairman

The Division includes the Departments of Business Education, Home Economics, Industrial Arts Education, and Trade and Industrial Education.

Major and Minor requirements are stated under the individual departments. The heads of the respective departments will advise students relative to their majors and minors.

BUSINESS EDUCATION

J. Marshall Hanna
Agnes E. Anderson
Homer Arnett
Charles B. Hicks
George A. Kirby
Lester R. Lindquist

Ralph Mathews
Thomas W. Null
Virginia Reva
Glen C. Rice
Opal Stamm
Edna Whitney

The Business Education Department provides work for students preparing to teach business subjects in the secondary school and for non-teacher training students who desire preparation for work in business.

Students who intend to take a major or minor in Business Education leading to a certificate to teach should confer with the advisor of the department as early as possible in their sophomore year.

I. Major Sequences in Business Education for Secondary Curriculum students desiring teaching certificate.

A. For students preparing to teach secretarial and related business courses

*Secretarial Science 130A, B
Secretarial Practice 230A
Coordinated Business Experience 200A
Accounting 210A, B or 211A, B
Business Correspondence and Report Writing 232
Filing Principles and Techniques 236

B. For students preparing to teach bookkeeping and related business courses

Accounting 210A, B
Accounting 310A, B or Accounting 311 and 312
Business Law 320A, B
**Secretarial Practice 230A, B
Business Correspondence and Report Writing 232

*Shorthand 100A, B and Typewriting 101A, B, or their high school equivalents, are prerequisites to Secretarial Science 130A and are not included as part of the minimum requirements for a major or minor.

**See course prerequisite.
C. For students preparing to teach retailing courses only
   Retail Records 111
   Fundamentals of Retailing 140A
   Retail Salesmanship 150
   Retail Publicity 240
   Retail Credit & Collections 241
   Store Organization 251A, B
   Accounting 210A, B

All students majoring in Business Education are required to obtain a minor in Economics.

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.

Students who plan to teach and desire a minor in the field of business education should take the following courses:
   Secretarial Science 130A
   Coordinated Business Experience 200A
   Accounting 210A, B
   Business Correspondence and Report Writing 232

II. Major Sequences in the Department of Business Education for General Degree Curriculum Students without a teaching certificate.

A. Accounting Major
   Accounting 210A, B
   Advanced Accounting 310A, B
   Cost Accounting 311
   Tax Accounting 312
   Business Law 320A, B

B. Secretarial Training Major
   Accounting 210A, B or Accounting 211A, B
   Secretarial Science 130A, B
   Secretarial Practice 230A, B
   Business Correspondence 232
   Office Organization and Management 239

C. Retailing Major
   Fundamentals of Retailing 140A
   Retail Credit and Collection 241
   Store Organization 251A, B
   Retail Publicity 240
   Accounting 210A, B
   Business Law 320A, B

ACCOUNTING COURSES

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. Particular attention is given to the
298 DESCRIPTION OF COURSES

effect of transactions on balance-sheet accounts and to the theory and practice of recording temporary changes of proprietorship in expense and revenue accounts. The importance of properly reporting from the records significant financial facts for purposes of control is emphasized. Problems and sets to be worked under the direct supervision of the instructor are assigned.

First semester, Lecture, M. W. F. S. 10; Second semester, Lecture M. W. F. 1, Laboratory Tu. 2-4. Dr. Hanna, Mr. Kirby. 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 among the topics considered. Prerequisite: Accounting 210A.


211A Secretarial Accounting
In this course the basic principles of accounting are considered from the viewpoint of the secretary. Training is obtained through a study of the accounts of private individuals, professional men, institutions, and small business firms of various types.

First semester, M. W. F. 8, 9. Mr. Hicks. Three semester hours.

211B Secretarial Accounting
A continuation of course 211A in which practical applications of the accounting principles developed in the previous semester will be applied in a large number of work situations. Prerequisite: Secretarial Accounting 211A.

Second semester, M. W. F. 8, 9. Mr. Hicks. Three semester hours.

212 Statistical and Financial Ratios
A study of various statistical and financial ratios as guides to efficient business management and the interpretation of financial data on charts and graphs. The course will include a study of stock turnover, capital turnover, stock-sales ratios, expense analysis and distribution, stock controls, and stock pricing. Prerequisite: Accounting 210A.

First semester, M. W. F. 9. Dr. Hanna. Three semester hours.

310A Advanced Accounting Principles
This course is to supplement Accounting 210A, B by a consideration of advanced principles of accounting theory and practice. The following topics are considered: evaluation of assets; temporary and permanent investments; depreciation, appraisal, and depletion of fixed assets; current, contingent, and fixed liabilities; capital stock; surplus and reserves. Prerequisite: Accounting 210A, B.

First semester, M. W. F. 2. Mr. Hicks. Three semester hours.
310B Advanced Accounting Principles
A continuation of Accounting 310A, including the following topics: consignments, installment sales, mergers, holding companies, receiverships, estates, and trusts. Prerequisite: Advanced Accounting Principles 310A.
Second semester, M. W. F. 2. Mr. Hicks. Three semester hours.

311 Cost Accounting
The relation of cost accounting to management for control; general principles involved in constructing a cost system; modern methods of distributing the three elements of cost—material, labor, and burden; cost records and operating reports; joint and by-product costs; budgetary control and the use of cost reports by executives and department heads. Class discussion is supplemented by many short illustrative problems, and a complete cost set is written up. Prerequisite: Accounting 210A, B.

312 Tax Accounting
A study of the accounting procedures and problems involved in the Federal Income Tax Laws, social security, and payroll tax regulations as they apply to old age benefits, state unemployment insurance, payroll records, and government reports. Special application will be made by means of practical individual and business case problems. Prerequisite: Accounting 210A, B or consent of instructor.
First semester, M. W. Evenings 7-9. Three semester hours.

320A Business Law
Organized to meet the particular need of teachers of business law in secondary schools, this course undertakes primarily to develop an appreciation and respect for law through a study of its sources, development, and social significance. The legal rules of ordinary business transactions are learned for the most part from a study of actual cases involving circumstances from which these rules have been developed and applied. Students who elect this course should plan to continue in the second semester with 320B.
First semester, Tu. Th. Evenings, 7-9. Mr. Arnett. Three semester hours.

320B Business Law
Continuation of Business Law 320A.
Second semester, Tu. Th. Evenings, 7-9. Mr. Arnett. Three semester hours.

RETAILING COURSES
Enrollment in all retailing courses is limited to students who have been admitted to the two-year cooperative program in retailing. Under this cooperative plan, classroom instruction is given at the college during the morning; in the afternoon and on Saturdays members of the class are employed in the local stores of Kalamazoo and vicinity. Such a plan enables a student to obtain valuable practical experience to supplement his technical training.
For further information regarding the program and admission requirements see page 134.

As only a limited number of students may be admitted, application for admission should be made at the earliest possible date. Address all inquiries to the Department of Business Education.

111 Retail Records
A study of the many and varied records essential to good retailing. A thorough review of percentages, decimals, fractions, interest, and discount, covering both the calculations and the use to which these are put. The records involved in store sales systems, credit transactions, stock control. An introduction to the mathematics of merchandising, such as mark-up, mark-downs, departmental, and expense calculations. The problem method is used.

Second semester, M. W. F. 11. Dr. Hanna. Three semester hours.

140A Fundamentals of Retailing
This is the introductory course in the retailing program. A survey of our distributive system is given in order to picture retailing in its place in the larger field. Opportunities in retailing, types of establishments, their advantages and disadvantages, store location, layout, organization, and management.

First semester, M. W. F. 10. Instructor to be announced. Three semester hours.

140B Fundamentals of Retailing
This course applies the fundamentals of retailing to the fashion field. An attempt will be made to analyze fashion and its significance in our lives today. It will include a background in fashion history, correlate the functions of the retail store with the growth of the fashion field, and give a brief survey of the careers of people chiefly responsible for our fashion trends.

Second semester, M. W. F. 10. Instructor to be announced. Three semester hours.

150 Retail Salesmanship
The accepted principles of good selling applied to the problems of the retailer in meeting the needs of consumers. What the sale is, customer reactions, how the seller can improve his practices, analysis of the steps in a sale. Sales demonstrations and practice.

First semester, M. W. F. 8. Mr. Rice. Three semester hours.

151A Merchandise and Job Analysis
This course is aimed especially at closely correlating the actual experience on a job with the classroom work, to improve the efficiency and productivity of the student's work by a detailed study of his job and the merchandise, either textile or non-textile, with which he is dealing. The development of merchandise manuals.

First semester, Tu. Th. 10-12. Mr. Rice, Miss Stamm. Three semester hours.
151B Merchandize and Job Analysis
A continuation of Merchandize and Job Analysis 151A.
Second semester, Tu. Th. 10-12. Mr. Rice, Miss Stamm. Three semester hours.

240 Retail Publicity
A study of the devices used by stores of various types and sizes to attract and hold customers' attention. Newspaper, radio, and direct mail advertising; window and interior display; plans and techniques of sales promotion. The publicity calendar and budget.
Second semester, M. W. F. 8. Instructor to be announced. Three semester hours.

241 Retail Credit and Collections
Consideration of the meaning and importance of credit. The extent of retail credit, types of credit transactions and their proper use, sources of credit information, legal aspects, policies and procedures. Problems of collections and methods of carrying on collections.
First semester, M. W. F. 8. Mr. Mathews. Three semester hours.

251A Store Organization
A study of the manner in which stores are organized, with attention to the great variety of types of work found in retail concerns. The course acquaints the student not only with such work as he is doing at present, but makes him familiar with those positions to which he aspires in the future and the steps through which he will probably pass, and with the preparation of job analysis.
First semester, Tu. Th. 8. Mr. Rice. Two semester hours.

251B Store Organization
Opportunity is given to each student to make a study of some particular phase of retailing in which he is especially interested. This may be further and more detailed investigation of something already studied or work along a line not as yet studied.
Second semester, Tu. Th. 8. Mr. Rice. Two semester hours.

SECRETARIAL COURSES

100A Shorthand
A presentation of the theory and principles of Gregg shorthand. No credit will be given for this course until the typewriting requirement, 101A or its equivalent, has been satisfied.

100B Shorthand
The discussion, application, and thorough review of the principles of Gregg shorthand as presented in 100A. The writing of shorthand notes under careful supervision from dictation at various rates of speed is developed, and extensive reading of expertly prepared shorthand plates is
encouraged. No credit will be given for this course until the typewriting requirement, 101B or its equivalent, has been satisfied. Prerequisite: Shorthand 100A and Typewriting 100A.


101A Elementary Typewriting

The mastery of the keyboard and the proper techniques of typewriting are developed in this course. Students are taught the various parts of the typewriter and the care of the machine. The form and content of business letters, addressing envelopes, centering, tabulation, and manifolding are emphasized. Remedial testing and drill form a part of this course. Not open to students with one year high school typewriting credit.

A fee of $1.50 will be charged for materials supplied in this course.


101B Intermediate Typewriting

Special stress is placed upon perfecting the techniques necessary for accuracy and speed in typewriting. Special attention will be given to punctuation, capitalization, footnotes and reference citations, bibliographies, proof-reading markings, filing, letter-writing techniques, and frequent remedial drills. This course should be taken concurrently with Shorthand 100B. A writing rate of 40 words net per minute is required for passing. Prerequisite: Elementary Typewriting 101A or its high school equivalent.

A fee of $1.50 will be charged for materials supplied in this course.


130A Secretarial Science

The first of a series of four courses designed for the development of those attitudes, knowledges, and skills essential for the occupational efficiency of a secretary. In this course special emphasis will be given to the development of accuracy and speed in shorthand and typewriting. This course is designed for the two-year secretarial students only.

A fee of $2.50 will be charged for materials supplied in this course.


130B Secretarial Science

A continuation of the development of speed and accuracy in shorthand and typewriting with special emphasis on punctuation, grammar, letter form, and transcribing procedure. Prerequisite: Secretarial Science 130A.

A fee of $2.50 will be charged for materials supplied in this course.

DIVISION OF VOCATIONAL EDUCATION

200A Coordinated Business Experience
The enrollment in this course is limited to those students who are admitted to the cooperative office or retail training programs and who are currently enrolled in Secretarial Practice 230A or in Store Organization 251A. The requirements for college credit will be: (1) a minimum of 200 clock hours of approved office or store work, (2) monthly reports from the employer and the coordinator made in writing to the head of the department, and (3) a term report by the student.
First semester, Mr. Null, Mr. Rice. One semester hour.

200B Coordinated Business Experience
A continuation of course 200A open to students currently enrolled in Secretarial Practice 230B or Store Organization 251B. The requirements for credit are the same as for course 200A.
Second semester, Mr. Null, Mr. Rice. One semester hour.

230A Secretarial Practice.
A course for the secretarial and business education student and, also, for the prospective teacher of office practice in the secondary school. The content of this course provides opportunity for acquiring an operating knowledge of such office machines as the adding-listing machines, comptometer, duplicating machines and techniques, rotary calculating machines, dictaphone, and other office appliances. A fee of $2.50 will be charged. Prerequisite: Typing speed of 40 words per minute.
Each semester, Tu. Th. 8, 10. Mr. Null. Two semester hours.

230B Secretarial Practice
A continuation of Secretarial Practice 230A. This course is intended primarily for the student preparing for office occupations. It is the aim of the course to equip the student with the necessary operating skills on the computing machines, transcribing machines, posting machines, and duplicating machines necessary for vocational competency. A fee of $2.50 will be charged. Prerequisite: Secretarial Practice 230A.
Each semester, Tu. Th. 10-12. Mr. Null. Two semester hours.

232 Business Correspondence and Report Writing
 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 such correspondence as credit and collection letters, letters of adjustment, sales letters, form letters, follow-up techniques, and statistical report writing and editing. Considerable attention will be given to the mechanics of styles, sentence structure, punctuation, spelling, vocabulary, and letter arrangement.

236 Filing Principles and Techniques
A study of the indexing and filing rules and their application to the following filing methods: card systems; direct name, Veridex, Triple-Check Automatic, Numeric, Geographic, Subject, and Soundex corres-
304 DESCRIPTION OF COURSES

Pondence filing. Other topics covered include cross reference, transfer, follow-up, filing equipment and supplies, and the organization and maintenance of a filing system for a particular type of filing situation. A fee of $1.50 will be charged for supplies.

Each semester, Tu. Th. 12. Mrs. Reva. Two semester hours.

239 Office Organization and Management

This is a course designed primarily for students of superior abilities who wish to train for the position of office supervisor. The topics covered in this course include: a study of the functions of the office; office systems and routines; correspondence; the mailing department; supervisory activities; personnel problems; selection and use of office furniture and business machines; office forms and supplies; office planning and layouts; and the construction and use of office manuals as a means of establishing standard practices. Prerequisite: all other courses in office training.


336 Personnel Administration

The principal emphasis in this course will be on the place of the personnel office in modern business and industry, and the duties and work of the personnel manager and his assistant in the selection, classification, and assignment of employees. A detailed study will be made of the records and reports that are used in carrying on the work of the personnel office. Other topics to be considered will include interviewing, counseling, adjustment of complaints, job analysis, job classification, in-service training, and upgrading of employees. Prerequisite or concurrent: Labor Problems 325B and Psychology of Personality 207.

Not offered in 1947-1948. Three semester hours.

339 Business Problems

Opportunity is provided for a first-hand study of an office problem in a selected business in Kalamazoo or vicinity. The problem will be chosen by the student and the office manager of the office concerned, with the advice of the instructor. A comprehensive analysis and report of the observation or study will be submitted as the principal work of the course. This course will require that the student spend a minimum of ten hours a week in the office selected for study and observation. Progress reports and conferences will be required each week. Prerequisite: Introduction to Statistics 211.

Not offered in 1947-1948. Three semester hours.

Open to Seniors and Graduates

501(E151) Principles and Problems in Business Education

Analysis of current trends and philosophies in business education and their implications for the classroom teacher of business subjects. The course is organized around units which include objectives, guidance, occupational research, extra-curricula activities, and the growth and status of business education in the United States.

First semester, S. 1-3. Dr. Hanna. Two semester hours.
502(E152) Curriculum Construction in Business Education
Principles, practices, and problems involved in the evaluation and recon-
struction of business curricula to meet the needs of a democratic society. It is possible through this course for each class member to study and evaluate his own immediate curriculum problems.
Second semester, S. 1-3. Dr. Hanna. Two semester hours.

503(E153) Improvement of Instruction in Business Subjects
This course is designed primarily for the experienced teacher of business subjects, providing an opportunity for the study of latest research findings, materials, teaching procedures, tests and measurements, and possible future developments in the various business subject-matter fields.
Not offered in 1947-1948. Dr. Hanna. 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.
Not offered in 1947-1948. Dr. Hanna. Two semester hours.

HOME ECONOMICS

SOPHIA REED
RACHEL ACREE

MARY A. MOORE
OPAL STAMM

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.

Major:
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, and Costume Design 209. 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.

Minor:
The minor consists of fifteen semester hours in home economics. It is planned for students of other curricula who wish to take home economics for personal or homemaking purposes.
Vocational Certificate:
Only persons who meet the requirements for a vocational certificate can teach in the vocational home-economics departments in Michigan. The required courses are listed below:


Social Science—At least one course each in economics and sociology.

Fine Arts—Elementary Design 105, Costume Design 209, Home Furnishings 221.

Home Economics—Problems in Home Living 100, Clothing Clinic 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.

Education—Human Growth and Development 251, and other courses in the Department of Education to fulfill the requirement for a secondary provisional certificate.

Dietetics:
The Department of Home Economics is working toward a four-year course for dietitians. If a student wishes to enter the department it is suggested that she take two years of chemistry (one year of inorganic, one semester of organic); one semester of biochemistry; one semester each of biology, bacteriology, physiology, and general psychology; and courses in sociology, besides courses in foods and nutrition.

Note.—The following courses are open to students not majoring or minoring in home economics: Home Economics 100, 103, 111, 120, 209, 218, 219, 222, 223, 320, 325. Students may enter other courses with the consent of the instructor.

In all food preparation courses there will be a fee: $1.00 for two semester hours credit; $1.50 for three semester hours credit. In other courses in which no text book is required there will be a fee of 50 cents for one semester hour credit; 75 cents for two or three semester hours of credit.

ORIENTATION COURSE FOR FRESHMEN

100 Problems in Home Living
The student studies her problems in adjustment to college. The course includes units on personality, food for health, housing, use of leisure, social relationships, management of time and money, and vocations.
First semester, Tu. 8; Second semester, Tu. 10. Miss Reed. One semester hour.
CLOTHING AND TEXTILES

103 Clothing Clinic and Textiles
This course is primarily for the purpose of studying the clothing needs of a college girl. Emphasis will be placed on getting the most in becomingness, appropriateness, and durability for each clothing dollar spent. In addition to class work there will be opportunity for individual conferences with the instructor to solve individual clothing problems. One construction problem, based on wardrobe needs of the individual, is included to give opportunity for learning the elementary technique of construction. Textiles is taught from the consumer point of view. Some testing of textile materials is required.

Each semester, M. W. F. 10. 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, Tu. Th. 10-12. Miss Siedschlag. Two semester hours.

203 Clothes and Personality
This course is to help the student who is interested in spending her clothing dollars more wisely. Factors affecting the choice of satisfactory clothes from the standpoint of becomingness, current fashion, and economy are studied. Laboratory work consists of making garments to develop a knowledge of construction. Emphasis is placed on selection of clothes to suit personality types.

First semester, M.W. 1-3. Miss Stamm or Miss Volle. Two semester hours.

205 Clothing
This course is planned to develop technical skill. A foundation pattern is developed from which flat-pattern designing is taught. A further study of selection, textiles, and construction technique is developed through making garments of various kinds of materials. Comparisons of quality, cost, and workmanship are made with similar ready-made dresses. Prerequisite: Clothing Clinic and Textiles 103.

Each semester, M. W. F. 8-10. 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, through a better understanding of the relation to selection of art principles, psychology, fashion, personality, and physical characteristics of individuals. Emphasis will be placed on the relation of wardrobe needs to social and economic status. Laboratory work will consist of an interpretation and adaptation of current fashion-magazine designs to individual needs and original designing. A brief study of historic costume is made as a basis for understanding recurring cycles in fashions. Prerequisite: Elementary Design 105.

Each semester, Tu. Th. 8. 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: Clothing 205 or consent of instructor.

305 Family Clothing
This course is flexible in content to meet the needs of advanced students preparing to teach clothing selection and construction to definite groups of persons. Each part of the wardrobe, including all garments and accessories, will be studied with reference to its cost and to its appropriateness in the wardrobe of specific individuals. Garments are made for persons of any age, from either new or old material. Prerequisite: Clothing Clinic and Textiles 103, Clothing 205, Costume Design 209.
First semester, Tu. Th. 2-4. 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. Emphasis is placed on the relation of texture of material to design of dress. A dress form is made and two garments are modeled and finished. Prerequisite: Clothing Clinic and Textiles 103, Clothing 205, Costume Design 209, Elective for majors.
Not offered in 1947-1948. Miss Volle. Two semester hours.

FOODS AND NUTRITION

111 Principles of Food Preparation
The course is planned to give a knowledge of basic principles underlying preparation of food. Laboratory experience includes the preparation of various classes of food and opportunity is given for planning, preparation and serving of simple meals at various cost levels.

211 Nutrition
A study of the essentials of adequate nutrition on food budgets of various income levels. Application of such knowledge to the feeding of individuals and family groups. Prerequisite: Chemistry 105A, B, Foods 111.

218 Food for the Family
Problems in the buying of foods and in the planning, preparing, and serving of family meals. Elective for non-majors.
Second semester, M. W. 2. Miss Acree or Miss Moore. Two semester hours.
219 Nutrition
A study of nutrition in relation to the health of the individual and of family groups; adequate nutrition on reduced food budgets; relation of individual to community nutrition problems. Elective for non-majors.

First semester, Lecture, M. 3, Laboratory, Tu. Th. 2-4. Miss Moore. Two semester hours.

311 Advanced Foods
A study of unusual methods of preparation of foods and various types of table service. The course includes experimental work on food problems of special interest to the individual student. A unit on food preservation is taught. Prerequisite: Nutrition 211.

First semester, M. W. F. 2-4. Miss Acree or Miss Moore. Three semester hours.

312 Quantity Food Management
This course includes a study of the buying, preparing, and serving of large amounts of food; the management of school lunches; the management of people, supplies, time, and equipment in large quantity cookery and serving. Some practical work is done in the college cafeteria and in the preparing and serving of teas, banquets, luncheons, and dinners. Prerequisite: Foods 111.

Each semester, Tu. S. 10-12. Miss Acree, Miss Moore. Two semester hours.

318 Food Demonstration
Emphasis on the purposes and techniques of demonstrations in relation to food preparation, with application to teaching, business and social service. Prerequisite: Advanced Foods 311.

Second semester, M. 1. Miss Acree or Miss Moore. One semester hour.

319 Experimental Food Study

Second semester, Tu. Th. 2-4. Miss Acree. Two semester hours.

HOME MANAGEMENT CHILD DEVELOPMENT, AND FAMILY RELATIONSHIPS

120 Personal and Social Problems
This general course is planned for those who do not intend to teach home economics. Consideration will be given to such units as selection and care of clothing, personal health and grooming, social usage, nutrition, the hot lunch, 4-H Club work, and applied art. The units taught will be selected on the basis of the interests and needs of the students.

First semester, Th. 9, 2; second semester, Th. 9. Miss Acree, Miss Moore, Miss Stamm. One semester hour.
220  Home Nursing (for Rural School Teachers)
A practical course, open to both men and women, in home hygiene and the care of the ill or injured; common ailments, diseases, and emergencies; medicines and home remedies; nutrition; and the promotion and conservation of individual and group health under conditions peculiar to the rural home, school, and community. This course meets the requirements for the Red Cross home nursing certificate. Prerequisite: consent of the instructor.

First semester, Tu. 7. Miss Acree and member of the Health Service Staff. One semester hour.

221  Home Furnishings
This course is planned especially for students of home economics for the purpose of developing taste and judgment in the selection and arrangement of home furnishings. Color, design, and historic furniture will be studied.

First semester, Tu. Th. 2. Miss Stamm. Two semester hours.

222  The Home and Its Management
This course will be adapted to the needs of the students. It includes units on budgeting of time, labor, and money; mechanics of the household; cost and purchase of foods and clothing for the family. Elective for non-majors.

Not offered in 1947-1948. Miss Acree, Miss Stamm. Two semester hours.

223  Home Nursing and Family Health
The prevention and care of illness in the home and a consideration of administrative problems and health procedures used in school health work furnish the material for this course. A study of the physiology of women and of maternity is included. This course meets the requirements for the Red Cross home nursing certificate.

First semester, Tu. Th. 10; second semester, M. W. 10. Miss Acree, Miss Buerger. Two 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 interest 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 and Principles of Sociology 241 or consent of instructor. Open to both men and women.

First semester, Tu. Th. 11. Miss Volle. Two semester hours.

322  Home Management
The course consists of a survey of the scientific principles underlying up-to-date homemaking, including a study of housing problems, home sanitation and safety, mechanics of the household, buying of equipment and furnishings, family finance, and an analysis of home management in vari-
ous types of family living. Prerequisite: Economics of Consumption 223, Advanced Foods 311.

First semester, M.W. 1. 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 three economic 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, Tu.Th.S. 4. 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 for changing age groups. It places emphasis on preparation for marriage and gives a perspective of the new tasks and obligations in urban and rural living as they affect social relationships, shared tasks, and legal problems. Prerequisite: General Psychology 200 or Principles of Sociology 241. Open to both men and women.

Each semester, Tu.Th. 1. 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.

Second semester, Tu.Th. 11. Miss Stamm. 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, and professional ethics; investigation of laboratory equipment; value of state and national associations. Prerequisite: Directed Teaching 371.

Second semester, M.W.F. 8. Miss Reed. Three semester hours.
The Industrial Arts Department offers shop and professional courses for the training of teachers, supervisors, and administrators of industrial arts in the high school.

Technical courses in industrial arts include the fields of metalwork, graphic art, drawing, woodwork, electricity, aviation, arts and crafts, and general shop.

The student who plans to qualify as an industrial arts teacher for the general shop as well as the unit shop should plan to take at least 35 hours in industrial arts.

All industrial arts students are required to take at least one course in each of the following: wood, metal, drawing, printing, electricity, and Introduction to Industrial Arts during their freshman and the first half of their sophomore year. No one will be exempt from fulfilling these requirements before taking advanced work in industrial arts. The student must
also take two professional courses in industrial arts during his junior and senior year.

While the Industrial Arts Department is primarily established to prepare industrial arts teachers, many courses are offered that meet the needs of other departments in the College. The Department offers courses for pre-professional groups, occupational therapy, rural education, and air transportation.

Laboratory Fee: All shop and laboratory courses in industrial arts carry a $3.00 per semester laboratory fee.

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 products will be covered.

Each semester, Tu. Th. 8-10. Mr. Nichols. Two semester hours.

106 Advanced Hand Woodwork
The object of this course is to give the student practice in the fundamental processes of bench work in wood. The course will include care and use of tools, grinding and sharpening, finishing, woodwork techniques and the construction of several small products.

Each semester, M. W. F. 8-10. Mr. Nichols. Three semester hours.

202 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, M. W. F. 10-12. Dr. Feirer. Three semester hours.

203A Arts and Crafts (Plastics)
An introductory course in the study of plastics, 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.

First semester, Tu. Th. 8-10. Dr. Feirer. Two semester hours.

203B Arts and Crafts
A general course in arts and crafts including leather work, hard metal, archery, lapidary, and other craft procedures suitable to leisure time activities. The making of artistic and practical projects will be emphasized.

Second semester, Tu. Th. 8-10. Dr. Feirer. Two 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, M. W. F. 10-12. Mr. Nichols. Three semester hours.

205B General Woodwork
This course provides experiences in several areas of woodwork; namely, wood turning, caning, upholstery, inlaying, and wood carving. The wood turning will include face plate and chuck turning.

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.
First semester, M. W. F. 2-4. Mr. Nichols. Three semester hours.

208 Special Education Shop
A basic course in shop fundamentals, including the use of hand tools, construction, design, fastening devices, and finishing. An introductory course for students of special education and prerequisite to advanced courses in occupational therapy.
First semester, M. W. F. 2-4. Mr. Nichols. Three semester hours.

212 Electricity
An introductory course in the design and construction of electrical equipment, a study of light and power applications, maintenance and repair of home appliances.
Each semester, Tu. Th. 10-12. Dr. Feirer. Two semester hours.

308 Special Education Shop
A treatment of specific problems for prospective teachers in the field of orthopedic—occupational therapy. Common tools, materials, and suitable shop processes are employed to demonstrate the rehabilitation of injured joints, torn muscles, twisted limbs, etc. Typical case studies of industrial as well as war casualties are considered.
Second semester, M. W. F. 2-4. Mr. Nichols. Two semester hours.

DRAWING
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, Tu. Th. 10-12. Mr. Beukema. Two semester hours.
121A Mechanical Drawing
A continuation of the principles emphasized in Mechanical Drawing 120. Lettering, sketching, drawing, tracing, and electric blueprinting of suitable shop projects. Prerequisite: General Mechanical Drawing or equivalent.

Each semester, M. W. F. 8-10. Mr. Huff. Three semester hours.

121B Mechanical Drawing
More advanced problems in mechanical drawing, detailing, design, theory and application, ranging from simple geometrical problems, through surface development to machine details, cams, gears, and some architectural drawing. Special emphasis on review of the fundamentals of drawing and discussions of practical problems. Prerequisite: Mechanical Drawing 121A.

Each semester, Tu. Th. 8-10, 10-12. Mr. Huff. Two semester hours.

221 Mechanical and Machine 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 College of Engineering, University of Michigan, and satisfies the requirements of engineering students. Prerequisite: General Mechanical Drawing 120 or equivalent.

First semester, M. W. F. 10. Mr. Huff. Three semester hours.

222 Descriptive Geometry
Instruction and exercises are given on combinations of the point line, and plane, intersections, developments, tangent planes, and warped surfaces. This course is the equivalent of Drawing II of the College of Engineering, University of Michigan.

First semester, M. W. F. 8-10. Mr. Huff. Three semester hours.

225A Architecture
Architectural details, plans, elevations, rendering, tracing, and blueprinting, and estimating of simple one- and two-story buildings. Outside reading for architectural appreciation. Prerequisite: General Mechanical Drawing 120.

Each semester, T. Th. 8-10, 10-12. 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. Prerequisite: Architecture 225A.

Each semester, Tu. Th. 8-10, 10-12. Mr. Huff. Two semester hours.
DESCRIPTION OF COURSES

METAL WORK

130A Metals
A survey course in the field of metal work. Special emphasis will be given to hand work techniques in bench metal, sheet metal, and art metal. A survey of the use of common machines found in the metal shop will also be covered.

Each semester, Tu. Th. 10-12. Mr. Weaver. Two semester hours.

130B General Metal
A continuation of course 130A in which the student has an opportunity to emphasize work in any particular unit. Advanced practices in sheet metal, art metal, forging, and welding are offered. No machine shop experience is available in this course.

Second semester, M. W. F. 8-10. Mr. Weaver. Three semester hours.

180 Arc and Acetylene Welding
A course in gas and arc welding for beginners. Safety precaution, care of an operation of welding equipment, selection of welding rod, selection of proper current settings, and temperature and various methods of welding will be stressed.

Each semester, M. W. F. 10-12. Mr. Plough. Three semester hours.

182A Sheet Metal
An introduction to the application of hand machine processes. Cutting, forming, seaming, burring, crimping, knotching, and wiring as applied to the making of sheet metal projects.

First semester, M. W. F. 2-4. Mr. Russell. Three semester hours.

182B Sheet Metal
An advanced course in sheet metal work involving practice in pattern drafting and shop work. Students will be required to draft irregular patterns by advanced methods. Shop projects include production of tin wear, building construction projects, and cabinet construction.

Second semester, M. W. F. 2-4. Mr. Russell. Three semester hours.

211 Metal Processing
A study of the manufacture, properties, and identification of carbon and alloy steels. The effects of mechanical working, heat treating, and welding of various steels are determined. Attention is given to design, equipment, and practices used in industry. About one-third of the course is devoted to the study of welding. One recitation and one three-hour laboratory period each week. Prerequisite: Engineering Materials 210. (See Department of Chemistry, page 229)

Each semester, Tu. Th. 10-12, 2-4. Mr. Weaver. Two 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, M. W. F. 8-10, 10-12. 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, M.W.F. 8-10, 10-12. Mr. Weaver. Three semester hours.

PRINTING

140A Printing
This course is for beginners and is intended to acquaint the student with the various tools and materials of a print shop and to teach him the fundamentals of plain type composition. Simple jobs are carried through the various stages, from composition to make-ready and presswork. Practical work is given in setting straight composition. This course is open to both men and women.

First semester, M.W.F. 8-10. Mr. Pullin. Three 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. Prerequisite: Printing 140A.

Second semester, M.W.F. 8-10. Mr. Pullin. Three semester hours.

141 Presswork
This is a beginning course in presswork, which includes simple lockup, make-ready, and feeding. Prerequisite: Printing 140A, B.

First semester, Tu. Th. 8-10. Mr. Pullin. Two 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. Prerequisite: Printing 140A, B, and Presswork 141.

Second semester, Tu. Th. 8-10. 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. Prerequisite: Presswork 141.

Second semester, Tu. Th. 10-12. Mr. Pullin. 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. Prerequisite: Printing 140A, B.

First semester, M.W.F. 10-12. 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 advertisements, newspaper-page layout, and cover designs. Principles of balance, art, color, copy-writing, copy-fitting, etc., as applied to such jobs will be studied. Prerequisite: Printing 140A.
Second semester, M.W.F. 10-12. Mr. Pullin. Three semester hours.

245A Linotype Composition
This course deals primarily with the operation of the linotype keyboard. Straight composition is emphasized. Prerequisite: Printing 140A, B.
Each semester, M.W.F. 10-12. Mr. Brink. Three semester hours.

245B Linotype Composition
This course considers the problems of job, advertisement, and newspaper composition. Prerequisite: Linotype Composition 245A.
Second semester, M.W.F. 8-10. 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. Prerequisite: Linotype Composition 245A, B.
First semester, Tu.Th. 8-10. Mr. Brink. Two semester hours.

345B Linotype Mechanism
This course gives the student practical experience in caring for the machines in operation. Prerequisite: Linotype Mechanism 345A.
Second Semester, Tu.Th. 8-10. Mr. Brink. Two semester hours.

PROFESSIONAL COURSES IN VOCATIONAL EDUCATION
Open to Graduates

570(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, shops, and students. This course offers a basis for understanding the place of vocational education in education as a whole.
Not offered in 1947-1948. Dr. Fox. Two semester hours.

571(E101) Principles and Techniques of Vocational Guidance
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.
First semester, Th. 7-9. Dr. Fox. 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.
   Second semester, S. 11-1. Dr. Fox. Two semester hours.

573(E103) 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 1947-1948. Mr. 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 1947-1948. Dr. Fox. 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 adapted to prospective coordinators.
   Not offered in 1947-1948. Dr. Fox. 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.
   Second semester, Th. 7-9. Dr. Fox. 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.
   Not offered in 1947-1948. Dr. Fox. 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.
   Not offered in 1947-1948. Dr. Fox. Two semester hours.
Applications for trade and industrial curricula are considered in the order received, but preference is given those presenting superior credentials.

Entrance requirements: graduation from high school, mechanical aptitude of high order, and recommendation of high-school principal or superintendent.

A transcript of high-school credits must be filed in advance with the registrar when application is made.

Laboratory Fee: In addition to the tuition and fees required of all students, a laboratory fee of $35.00 is charged each semester.

The departmental advisor reserves the right to dismiss, after a semester's tryout, any student who fails to exhibit the necessary skill or to maintain high standards in the various courses presented.

AIRCRAFT MECHANICS AND AIR TRANSPORTATION

All Aircraft Mechanics students are encouraged to take 294, Pilot Training and Flight Theory, which provides the necessary training for a private pilot's license.

A minimum of 35 hours of flight training leading to a private pilot's license is required of all students.

Entrance Requirements: Any high school graduate meeting regular college entrance requirements.

Laboratory Fee: In addition to the tuition and fees required of all students, a fee of $3.00 is charged for each shop course in the Air Transportation Curriculum.

150 Aircraft Electricity
A course covering the fundamentals of electricity, aircraft electrical systems, practical application of wiring and testing of aircraft circuits.

Each semester, Tu.Th. 9-11. Mr. Shellenbarger. Three semester hours.

152 Aircraft Structures
This course provides practical experience in repairing wooden components of aircraft, fabrication of steel fittings, splicing and swaging cables, covering, patching, and doping fabric surfaces.

153 Engine Assembly and Disassembly
Practical experience in disassembling, assembling, and proper handling of different types of aircraft engines.

154 Civil Air Regulations and Theory of Flight
Discussion of Civil Air Regulations pertaining to mechanics certificate requirements, airworthiness certificates, airplane, engine, propeller airworthiness, aircraft nomenclature, theory of flight, physical laws, airfoils, controls, stability and forces in flight.
First semester, Tu. Th. 8. Mr. Giachino. Two semester hours.

156 Aircraft Welding
Practice in the safe use of oxy-acetylene welding equipment, welding of steel sheet, tubing, stainless steel, Inconel, aluminum; electric welding, brazing and silver soldering, heat treatment of metals, replacing and repairing damaged steel tubing.
Each semester, M. W. F. 1-4. Mr. Russell. Three semester hours.

158 Aircraft Drawing
Principles of drafting, sketching and blueprint reading of various aircraft parts subject to alteration and repair as required by the Civil Aeronautics Administration.
Second semester, M. W. F. 8. Mr. Giachino. Two semester hours.

250 Aircraft Instruments and Radio
Nomenclature and practical work in the removal, testing, adjustment and installation of all flight and engine instruments, and aircraft radio.
First semester, M. Tu. W. Th. F. 8. Mr. Shellenbarger. Two semester hours.

251 Carburetion and Lubrication
Theory and principles of carburetion, disassembly, inspection, adjustment and assembly of single and double-barrel float-type carburetors, air cleaners, heaters, strainers, diffusers, blowers, superchargers, injection carburetors; theory and purpose of lubrication, types, grades and specifications of various lubricants, lubrication systems, removal, disassembly, inspection, and assembly of pumps, valves, and filters.
Each semester, M. Tu. W. Th. F. 11. Mr. Amerpohl. Two semester hours.

252 Aircraft Hydraulics and Brakes
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.
Each semester, M. W. F. 9-11. Mr. Shellenbarger. Two semester hours.
253 Ignition and Accessories
Theory of operation and practical experience in the removal, inspection, servicing, testing, and installation of starters, generators, solenoids, switches, relays, control boxes, boosters, batteries, spark plugs, ignition harness, and magnetos.


254 Aircraft Sheetmetal
A study of the properties and types of aluminum alloys, practice in laying out, fabricating, and heat treating aircraft sheetmetal parts.

Each semester, Tu. Th. 1-4. Mr. Russell. Four semester hours.

255 Engine Overhaul
Practical work in refacing valves, valve seats, fitting piston rings, valve timing, valve clearance adjustment, magnaflux inspection, overhaul of cylinder, crankcase, power section, crankshaft, rods, pins, bushings, bearings, cam mechanism, blower section, oil and fuel pumps.


256 Engine Operation
Installation of engine in aircraft making all connections; test stand operation, trouble shooting, servicing and inspection of different types of operating aircraft engines.


257 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.


261 Propellers
Theory of propellers, types, repairs, maintenance, removal, disassembly, inspection, assembly and installation of controllable, constant speed, hydromatic, and electric propellers.

Each semester, M. W. F. 8. Mr. Ellinger. Two semester hours.

294 Pilot Training and Flight Theory
A flight training course consisting of 35 to 40 hours of flight instruction leading to a private pilot’s license. In connection with the flight training, 30 hours of classroom study is given to prepare the student for the written part of the private pilot’s examination. The subject matter includes fundamentals of navigation, civil air regulations, meteorology and general service of aircraft.

Each semester, Tu. Th. 8 (hours to be arranged for flight training at airport). Two semester hours. Laboratory fee: $360 plus $21.00 for ground school instruction.
336. Meteorology and Navigation
The first phase deals with a study of the weather elements, such as clouds, cloud formation, 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.
First semester, Tu. Th. 8. Mr. Amerpohl. Two semester hours.

351 Airport Selection and Layout
A detailed study of the selection and layout of airports, including buildings, classification of fields, CAA airport regulations, runways, lighting equipment, maintenance equipment, etc.
First semester, Tu. Th. 11. Mr. Giachino. Two semester hours.

352 Air Traffic and Cargo
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.
Second semester, Tu. Th. 9. Mr. Amerpohl. Two semester hours.

353 Airport Management
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, M. W. F. 3. Mr. Giachino. Two semester hours.

355 Link Operation
Actual flight instruction in a Link Trainer covering basic flight maneuvers, radio range orientation, navigation and airway traffic control procedures.
Second semester, Tu. Th. 8-10. Mr. Ellinger. Two semester hours.

356 Air Transportation Economics
Historical background and economic aspects of air transportation, nature of routes and services. Interrelationships of air, railroad, highway, and ocean transportation. Airline operating costs in relation to types of equipment and ground facilities. Economic principles of rate-making. Government control and assistance to airline operations.
Second semester, Tu. Th. 1. Mr. Giachino. Two semester hours.

357 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.
Second semester, M. W. 10-12. Mr. Russell. Two semester hours.
387 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.

First semester, M. W. F. 1-3. Mr. Amerpohl. Three semester hours.

AIR CONDITIONING AND REFRIGERATION

158A 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.


158B Air Conditioning

A continuation of course 158A.


159A Refrigeration Service

This course covers refrigeration theory and function, types of refrigerants and the basic laws applying. Installation techniques.


159B Refrigeration Service

This course covers refrigeration units of standard design and construction, installation, service operations, testing and factory-recommended repair procedures.


VOCATIONAL LINOTYPE

142A Elementary Hand Composition

This course is for beginners and is intended to acquaint the student with the various tools and materials of a print shop and to teach him the fundamentals of straight type composition.

First semester, M. Tu. W. Th. F. 8-10. Mr. Brink. Four semester hours.

142B Advanced Hand Composition

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.

Second semester, M. Tu. W. Th. F. 8-10. Mr. Brink. Four semester hours.
146A Elementary Linotype Composition
While considering such related material as the history of line-casting machines, type metal alloys, copy markings, etc., this course deals primarily with straight composition. The student is expected to become thoroughly familiar with the touch system of operating the keyboard with a reasonable amount of speed.


146B Linotype Newspaper Composition
The first part of this course deals with the problems of straight composition as applied to newspaper work. The last part of the course considers the composition of headlines, advertisements, box scores, market reports, etc.


178A Mathematics for Printers
This course begins with a review of fundamentals of arithmetic and includes problems in figuring stock requirements and costs, computations of typesetting costs, etc.

First semester, M. Tu. W. Th. F. 10. Mr. Schofield. Three semester hours.

178B Mathematics for Printers
Continuation of 178A.


179A English for Printers
A careful study will be made of punctuation, abbreviations, division of words, etc., as applied to printing.

First semester, M. Tu. W. Th. F. 11. Mr. Schofield. Three semester hours.

179B English for Printers
Continuation of 179A.


244 History of Printing
A study of the beginnings and development of printing is undertaken in order to better understand the place of the printing industry in the world today.


246A Linotype Job Composition
The composition of jobs such as are ordinarily encountered in commercial printing plants will be studied. The composition of programs, menus, letterheads, invitations, etc., is undertaken.

246B Linotype Book Composition
The complete setting of a book will be the essential part of this course. The students will become thoroughly familiar with the methods of composing title pages, folios, running heads, etc., in book work.

247A Linotype Maintenance
While not intended to train specialized linotype mechanics, this course will prepare the students to care for machines in operation. Various adjustments, oiling, making repairs, etc., will be undertaken. Practical experience will be gained in caring for the machines in use.
First semester, M. Tu. W. Th. F. 8-10. Mr. Brink. Four semester hours.

247B Linotype Maintenance
Continuation of 247A.

248A Layout and Design
Students will undertake the complete layout and design of such jobs as tickets, name cards, letterheads, programs, newspaper advertisements, newspaper-page layout, and cover designs. Principles of balance, art, color, copy-writing, copy-fitting, etc., as applied to such jobs will be studied.

248B Layout and Design
Continuation of 248A.

249A Proofreading
This is a course dealing with the principles of good proofreading and involves practice in applying these principles.

MACHINE SHOP

163 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.

163A Lathe Operation
Basic lathe operation is taught in this course covering care of the lathe, safe practices, production methods and set ups involving turning, boring, facing, drilling, reaming, tapping, inside and outside threading, and angle turning on chuck and bar work. The use of lathe accessories and measuring tools and other related information will be given at the machine
when needed. Safety precautions will be stressed at the time of each operation.


163B Drill Press Operation
Practical experience is given in the use of the single spindle, multiple spindle, and radical drills, using drill jigs and other holding devices to perform tapping, drilling, spot facing, counter-boring, reaming, and other operations to production limits. The selection of proper speeds and feeds and the use of proper coolants for the jobs are given special attention. Some layout work prior to drilling operations is included along with safety precautions to observe in each operation. Training includes the proper grinding of drills suited to the various metals encountered.


163C Milling Machine Operation
Practical experience is given in a wide variety of modern tool set ups on the plain, universal, and vertical milling machines, using special fixtures adapted to the various types of milling operations. Special care of milling machines and safe operation are stressed. The use of measuring tools for checking production tolerances is given along with proper selection of cutting speeds, feeds, and selection of coolants. Simple indexing, precision drilling, and boring are a few of the operations performed.


163D Shaper and Planer Operation
This course covers the finishing of various metal parts to blueprint specifications. The grinding of tools and the set up procedures for holding work to prevent distortion are given special attention. In addition to the finishing of flat surfaces, instruction is given to the layout of work necessary to machine formed parts, to cut keyways and splines, to perform slotting and radius cutting operations.


263 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.


263A Grinder Operation
This is a combination course requiring the set up and operation procedures on the cylindrical grinder, surface grinder, and the tool and cutter grinder. Production grinding procedures will be followed, including the
mounting and truing of grinding wheels. It will include the use of measuring tools and indicators, the selection of coolants, the uses of special driving and holding devices. Careful attention is given to selection of grinding wheels, cutting speeds, and feeds to secure commercial grade finish on a variety of different metals.


263B Screw Machine Operation
This course offers basic training which is essential for set up men on the screw machine. Standard set ups include drilling, turning, shoulder turning, threading and cutoff. The set ups are made from blueprint specifications of machine parts and include all operations from tool grinding through inspection of parts completed. Special attention is given to use of special attachments and their use in modern production.


263C Bench Work and Assembly
This course is based on the selection and proper use of hand tools used by the machinist. Operations in hand reaming, tapping, filling, and scraping are given to familiarize the student with the various types of “fits” used in machine assembly. Balancing of parts, “running in”, and final adjustment of machines built in the shops give a well-rounded experience.


263D Layout and Inspection
A basic course dealing with methods and tools used in layout work on machine parts. Practice in use of the Machinery Handbook for formulae and mathematical short cuts is included. In inspection, special instruments and the various types of gauges used in checking to close tolerances. Some material testing experience is included, using the Rockwell and the Riehle Testing machines.


TOOL AND DIE MAKING

363A Tool Making
A course leading to the development of superior skills in the precision operation of machine tools. Considerable time is spent in the machining and heat treat of alloy steels. Special tools are designed and fabricated in the shop and their efficiency determined when used in production operations. Includes the design and construction of jigs and fixtures for holding in drilling, planing, and milling operations, that speed up production and assure the exact duplication of parts in quantity.

363B Die Making

A course in the design of dies used to blank, bend, form, or mould duplicate metal parts. The selection and characteristics of tool steels used for die construction and their heat treat are given special attention.


**TRADE DRAFTING**

174A Elementary Trade Drafting

Practical work assignments are given at the start, involving the sketching of machine parts. Blueprints are examined and explained to acquaint the student rapidly with the conventions and symbols used in machine drafting. The Machinery Handbook is used for reference to familiarize the student with materials, specifications, and tolerance, limits, and standards common to production work. When advisable, this course is a prerequisite to courses 175A and B.


174B Elementary Trade Drafting

Continuation of Course 174A.


274A Trade Drafting

Use of drafting instruments in the production of high-grade machine drawings and tracings of machine parts and assemblies. The beginning elements of machine design are introduced, a study is made of metals and their properties and adaptability for use in machine parts, and observation in the machine shop gives an insight into the machinability of various metals and the design of parts that facilitate machining operations.


274B Trade Drafting

Advanced drafting procedures, short cuts and kinks in drafting procedures. Detail design from assembly sketches of small machines, giving a consideration of the production cost in overhead, labor, and materials.


**RADIO COMMUNICATIONS**

188A Introductory Radio Communications

This course is open to all beginning radio students and covers the field of elementary radio theory, related mathematics, use of radio servicing instruments, Morse code training and preparation for obtaining an FCC third class radio operator's permit. Students enrolling in this course are not presumed to have had any previous radio experience. However, high school graduation is prerequisite and a major in science or physics is highly desirable.

Each semester, M. Tu. W. Th. F. 8-11, 1-4. Mr. Kuiper, Mr. Jones. Fifteen semester hours.
188B Introductory Radio Communications
Continuation of 188A.
Each semester, M. Tu. W. Th. F. 8-11, 1-4. Mr. Kuiper, Mr. Jones.
Fifteen semester hours.

288A Advanced Radio Communications
This course is prescribed for students completing course 188A and 188B, or those having considerable experience in the radio field. This course provides supervised study of advanced radio theory together with a knowledge of related mathematics, high-speed Morse code operation, and operating practices in the radio broadcasting industry. Upon completion of this course, the student will be able to obtain the standard FCC radio operator’s licenses.
Each semester, M. Tu. W. Th. F. 8-11, 1-4. Mr. Kuiper, Mr. Jones.
Fifteen semester hours.

288B Advanced Radio Communications
Continuation of 288A.
Each semester, M. Tu. W. Th. F. 8-11, 1-4. Mr. Kuiper, Mr. Jones.
Fifteen semester hours.

SHEET METAL*

Note.—*Related trade science and trade mathematics are elected with the sheet metal course.

182A Sheet Metal
An introduction to the application of hand and machine processes in cutting, forming, seaming, burring, crimping, notching, and writing as applied to the making of tinware, sprouts, gutters, and large containers.

182B Sheet Metal
A continuation of course 182A, with emphasis on vocational objectives.

TRANSPORTATION MAINTENANCE

192 Industrial Maintenance
Practical experience is given in a variety of service operations in plumbing and heating, sheet metal, concrete, carpentry, light and power, wiring, motor and machine repair.
Not offered in 1947-1948. Six semester hours.

193A Transportation Maintenance
Practical experience is given in a variety of service operations in automobile, truck, and bus repair, including lubrication, ignition, carburetion, starters and generators, engine tune-up, engine, clutch, transmission, universals, rear axle, brakes, wheel and chassis alignment, tire inspection, metal finishing and painting.
Not offered in 1947-1948. Six semester hours.
193B Transportation Maintenance
A continuation of course 193A, with an opportunity for specialization in a selected service area, such as engine rebuilding, brake service, metal finishing, etc.
Not offered in 1947-1948.
Six semester hours.

WELDING*

Note:—*Related trade science, trade mathematics, trade English, and trade drafting are elected with either welding course.

169 Oxy-Acetylene Welding
A course to train gas welding operators to fabricate sheet steel products. Safety precautions, care and operation of welding equipment, selection of the tips and welding rods for the various types of welding materials. Leads to the qualifying tests for certified welders.

170 Arc Welding
A course to train arc welding operators to fabricate sheet steel and other materials. Selection of welding rods and current setting for various types of welding horizontal, vertical, and overhead welding and the related techniques are stressed. Leads to qualifying tests for the certified arc welder.

RELATED TRADE SUBJECTS

176A Related Drawing
A course in mechanical drawing as related to the particular trade instruction that the student is pursuing.
Each semester, M. Tu. W. Th. F. 8. Mr. Plough, Mr. Schofield. Three semester hours.

176B Related Drawing
Continuation of 176A.
Each semester, M. Tu. W. Th. F. 8. Mr. Plough, Mr. Schofield. Three semester hours.

276A Related Drawing
Continuation of 176.
Each semester, M. Tu. W. Th. F. 8. Mr. Plough, Mr. Schofield. Three semester hours.

276B Related Drawing
Continuation of 176.
Each semester, M. Tu. W. Th. F. 8. Mr. Plough, Mr. Schofield. Three semester hours.
177A Related Science
A course in simple mechanics of forces and motions applicable to trade practices and processes that are common in the handling of tools, and materials in the shop. Especially related to the particular trade instruction that the student is pursuing.
Each semester, M. Tu. W. Th. F. 9. Mr. Plough, Mr. Schofield. Three semester hours.

177B Related Science
Continuation of 177A.
Each semester, M. Tu. W. Th. F. 9. Mr. Plough, Mr. Schofield. Three semester hours.

277A Related Science
Continuation of 177.
Each semester, M. Tu. W. Th. F. 9. Mr. Plough, Mr. Schofield. Three semester hours.

277B Related Science
Continuation of 177.
Each semester, M. Tu. W. Th. F. 9. Mr. Plough, Mr. Schofield. Three semester hours.

178A Related Mathematics
A course presenting the mathematics needed in solving typical shop problems using arithmetic, algebra, and trigonometry as may be needed. Short cuts are pointed out in using the Machinery Handbook for simple formulae that help in the solution of problems that arise in connection with machine tools and materials. Especially related to the shop instruction.
Each semester, M. Tu. W. Th. F. 10. Mr. Plough, Mr. Schofield. Three semester hours.

178B Related Mathematics
Continuation of 178A.
Each semester, M. Tu. W. Th. F. 10. Mr. Plough, Mr. Schofield. Three semester hours.

278A Related Mathematics
Continuation of 178.
Each semester, M. Tu. W. Th. F. 10. Mr. Plough, Mr. Schofield. Three semester hours.

278B Related Mathematics
Continuation of 178.
Each semester, M. Tu. W. Th. F. 10. Mr. Plough, Mr. Schofield. Three semester hours.
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