FORTY-FOURTH CATALOG
1947-1948

WITH

ANNOUNCEMENTS
FOR 1948-1949

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.

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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) If entering as a freshman, 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
1948-1949

I. 1948 Summer Session (6 weeks)
   June 28, Monday .......................................... Begins
   August 6, Friday .......................................... Ends

II. Semester I (18 weeks)
   September 13, Monday, to September 16, Thursday... Freshman Days
   September 15, Wednesday ... Registration and Enrollment of Freshmen
   September 16, Thursday ..... Registration and Enrollment of Upper-
   classmen
   September 20, Monday ................... Recitations Begin
   November 24, Wednesday (12:00 noon) to Monday, November 29
   ........................................... Thanksgiving Recess
   December 17, Friday (4:00 p.m.) to Monday, January 3 ...... Holiday
   Vacation
   January 29, Saturday .. Semester I Ends

III. Semester II (18 weeks)
   February 7 and 8, Monday and Tuesday .. Registration and Enrollment
   February 9, Wednesday .................. Recitations Begin
   April 15, Friday (noon) to April 25, Monday ...... Spring Vacation
   (April 17 is Easter Sunday)
   May 30, Monday .................. Memorial Day Holiday
   June 12, Sunday .................. Baccalaureate Services
   June 18, Saturday .................. Commencement Exercises
   June 18, Saturday .................. Semester II Ends

IV. 1949 Summer Session (6 weeks)
   June 27, Monday .................. Begins
   August 5, Friday .................. Ends
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1948-1949

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HOMER G. KUIPER  
Industrial Education

ANNA E. LINDBLOM, A.M.  
Speech  
A.B., A.M., Iowa State University.

MARGUERITE LOGAN, M.S.  
Geography and Geology  
A.B., Iowa State Teachers College; M.S., The University of Chicago.

MINNIE D. LOUTZENHISER, A.M.  
English  
B.S., Northwestern State Teachers College; A.M., University of Washington.

DONALD M. MARTIN, A.M.  
English  
A.B., Hope College; A.M., University of Michigan.

KATHERINE A. MASON, A.M.  
Education  
B.S., A.M., Teachers College, Columbia University.

HELEN E. MASTER, A.M.  
English  
A.B., A.M., University of Michigan.

CORNELIA D. MATTHEWS, A.M.  
English  
A.B., Kalamazoo College; A.M., University of Michigan.

CLAYTON J. MAUS, M.S.  
Physical Education for Men  
B.S., Ashland College; M.S., University of Wisconsin.

ELIZABETH C. MUSSELMAN, A.M.  
Business Education  
A.B., Western Michigan College of Education; A.M., University of Michigan.

LUCILLE A. NOBBS, A.M.  
English  
A.B., Kalamazoo College; A.M., University of Michigan.
HAZEL I. PADEN, A.M.  
ART  
B.S., Massachusetts School of Arts; A.M., University of Syracuse.

JOSEPH K. PETERSON, A.M.  
MATHEMATICS  
A.B., Vanderbilt University; A.M., Harvard University.

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

JOHN H. PLOUGH, B.S.  
INDUSTRIAL EDUCATION  
B.S., Western Michigan College of Education.

EDWARD E. REYNOLDS, M.S.  
BIOLOGY  
A.B., Olivet College; M.S., University of Iowa.

FREDERICK J. ROGERS, A.M.  
ENGLISH  
A.B., Western Michigan College of Education; A.M., Columbia University.

CONWAY C. SAMS, A.M.  
MATHEMATICS  
B.S., Carson-Newman College; A.M., University of Michigan.

CARL SANTORO, A.M.  
POLITICAL SCIENCE  
A.B., Ursinus College; A.M., University of Pennsylvania.

NEIL L. SCHONHALS, B.S.  
INDUSTRIAL EDUCATION  
B.S., Western Michigan College of Education.

RAYMOND J. SCHOFIELD, B.S.  
INDUSTRIAL EDUCATION  
B.S., Armour Institute of Technology.

DONALD N. SCOTT, A.M.  
PHYSICAL EDUCATION FOR MEN  
B.S., University of Illinois; A.M., Columbia University.

DOROTHEA S. SNYDER, A.M.  
MUSIC  
A.B., Western Michigan College of Education; A.M., University of Michigan.

OPAL STAMM, A.M.  
HOME ECONOMICS  
A.B., Berea College; A.M., Teachers College, Columbia University.

ELAINE L. STEVENSON, A.M.  
ART  
A.B., Western Michigan College of Education; B.A.E., The Art Institute of Chicago; A.M., Ohio State University.

DORA G. THOMPSON, O.T.R., B.S.  
OCCUPATIONAL THERAPY  
B.S., Michigan State College.

MARION TAMIN, A.M.  
LANGUAGES  
Ph.B., The University of Chicago; A.M., Teachers College, Columbia University.
FACULTY

BETTY TAYLOR, A.M.  Home Economics
B.S., Iowa State College; A.M., Teachers College, Columbia University.

RUTH VAN HORN, A.M.  English
A.B., A.M., University of Michigan.

DOROTHY VESTAL, B.S.  Physical Education for Women
B.S., University of Michigan.

LOUISE J. WALKER, A.M.  English
A.B., Alma College; A.M., Columbia University.

RUTH C. WALMSLEY, B.Ed.  Business Education
B. Ed., National College of Education.

DeForrest P. WALTON, A.B.  English
A.B., Western Michigan College of Education.

Edna Whitney, A.M.  Business Education
B.S., Western Michigan College of Education; A.M., University of Michigan.

Myrtle Windsor, A.M.  Languages
A.B., A.M., University of Michigan.

Zack L. York, A.B.  Speech
A.B., Western Michigan College of Education.

INSTRUCTORS

John D. Amey, Jr., A.B.  Economics and Business Education
A.B., Western Michigan College of Education.

Clark H. Bouwman, B.S.  Sociology
A.B., Kalamazoo College; B.S., Western Michigan College of Education.

Clara N. Bush, A.B.  Speech
A.B., Western Michigan College of Education.

Harriet Clegern, M.S.  Biology
B.S., Central (Oklahoma) State College; M.S., University of Oklahoma.

Gordan H. French, M.S.  Chemistry
B.S., Western Michigan College of Education; M.S., University of Michigan.

Daniel A. Kysers, M.M.  Music
B.P.S.M., Oberlin College; M.M., University of Michigan.

Dorothy J. McGinnis, B.S.  Psychology
B.S., Western Michigan College of Education.
ROBERT E. MILLER, B.S.  INDUSTRIAL EDUCATION
B.S., Parks Air College.

NELLIE N. REID, A.M.  SOCIOLOGY
A.B., State University of Iowa; A.M., The University of Chi-
cago.

HELEN G. SELLERS, A.B.  ENGLISH
A.B., Michigan State College.

JEAN A. SMITH, M.S.  PHYSICAL EDUCATION FOR WOMEN
B.S., M.S., MacMurray College.

JANE B. THOMAS, O.T.R., A.M.  OCCUPATIONAL THERAPY
B.S., Western Michigan College of Education; O.T.R., Kalamazoo School of Occupational Therapy; A.M., University of Mich-
igan.

HEALTH SERVICE

GAYLE POND, A.M., Director
Presbyterian Hospital, Chicago; B.S., Northwestern Univer-
sity; A.M., Columbia University.

WALLACE BORGMAN, M.D., Medical Director
A.B., Kalamazoo College; M.D., Northwestern University Med-
ical School.

RICHARD A. WALKER, D.D.S., Dental Specialist
B.S., Kalamazoo College; D.D.S., University of Michigan.

ISABEL BEELER, R.N., Nurse
Ford General Hospital, Detroit; B.S., University of Michigan.

*EVELYN L. BUERGER, R.N., Nurse
Deaconess Hospital, Milwaukee, Wisconsin; B.S., Western Michigan College of Education.

HELEN ELIZABETH GIBBENS, R.N., Nurse
Borgess Hospital, Kalamazoo; B.S., Nazareth College.

GLADYS SHEPHERD, R.N., Nurse
Hackley Hospital, Muskegon, Michigan.

ROMAINE SMITH, R.N., Nurse
B.S., Teachers College, Columbia University.

*Resigned, February 1, 1948.
LIBRARY SERVICE

The General Library

LAWRENCE S. THOMPSON, PH.D., Librarian
A.B., University of North Carolina; A.B.L.S., University of Michigan; A.M., The University of Chicago; Ph.D., University of North Carolina.

ADA E. BERKEY, A.M., Reference Librarian
A.B., Mount Holyoke; A.B.L.S., University of Michigan; A.M., University of Iowa.

EDITH E. CLARK, A.B., Circulation Librarian
A.B., Western Michigan College of Education; A.B.L.S., University of Michigan.

HAZEL E. CLEVELAND, A.B., Circulation Librarian
A.B., Western Michigan College of Education; A.B.L.S., University of Michigan.

HAZEL M. DEMEYER, B.S., Order Librarian
A.B., Western Michigan College of Education; B.S., School of Library Service, Columbia University.

PHOEBE LUMAREE, M.S., Cataloging Librarian
A.B., Western Michigan College of Education; B.S., School of Library Science, Simmons College; M.S., School of Library Service, Columbia University.

TAISTO JOHN NIEMI, B.S., Cataloging Librarian
A.A., Virginia Junior College, Virginia, Minnesota; B.S., A.B.L.S., University of Minnesota.

PAUL L. RANDALL, B.S., Circulation Librarian
A.B., Western Michigan College of Education; B.S.L.S., University of Illinois.

The Educational Service Library

WINIFRED CONGDON MACFEE, A.M.
B.S., Western Michigan College of Education; A.M., University of Michigan.

ADULT EDUCATION AND EXTENSION SERVICE

OTTO YNTEMA, A.M., Director
A.B., A.M., Hope College.

DONALD DOLAN, A.B., Assistant Director
A.B., University of Michigan.
ALUMNI SERVICE

CARL R. COOPER, A.M., Alumni Secretary
A.B., Western Michigan College of Education; A.M., Teachers College, Columbia University.

CAMPUS LABORATORY SCHOOLS

ROY C. BRYAN, PH.D., Director
A.B., Monmouth College; A.M., Teachers College, Columbia University; B.Ed., Teachers College, University of Cincinnati; Ph.D., Teachers College, Columbia University.

Western State High School

RACHEL ACREE, A.M.
B.S., University of Kentucky; A.M., Teachers College, Columbia University.

ELMER R. BELOOF, A.M.
B.S., University of Illinois; A.M., Teachers College, Columbia University.

LEOTI C. BRITTON, M.S.
B.S., Western Michigan College of Education; M.S., Northwestern University.

HELEN BROWN, A.M.
B.S., A.M., Northwestern University.

ELLEN BURNS, A.M.
Ph.B., A.M., Denison University.

GOLDA L. CRISMAN, A.M.
A.B., Western Michigan College of Education; A.M., University of Michigan.

RAYMOND C. DEUR, A.M.
B.S., Western Michigan College of Education; A.M., University of Michigan.

FRANK F. FLEISS

*JULIAN GREENLEE, M.S.
B.Ed., Southern Illinois State Teachers College; M.S., University of Illinois.

LAWRENCE O. HAABY, A.M.
B.E., Teachers College, Moorhead; A.M., Teachers College, Columbia University.

ELIZABETH JONES, A.M.
A.B., A.M., Northwestern University.

EUNICE E. KRAFT, A.M.
A.B., A.M., University of Michigan.

LESTER R. LINDQUIST, A.M.
B.S., A.M., University of Michigan.

GEORGE E. MILLS, A.M.
A.B., Western Michigan College of Education; A.M., University of Michigan.

ELIZABETH E. MUSSELMAN, A.M.
A.B., Western Michigan College of Education; A.M., University of Michigan.

SHELDON S. MYERS, M.Ed.

GERTRUDE P. O'CONNOR, A.M.
A.B., Ohio State University; A.M., Northwestern University; B.S.L.S., University of Illinois.

HAZEL I. PADEN, A.M.
B.S., Massachusetts School of Art; A.M., University of Syracuse.

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

NEIL L. SCHOENHALS, B.S.
B.S., Western Michigan College of Education.

AVIS L. SEBALY, A.M.
A.B., Western Michigan College of Education; A.M., University of Michigan.

CARL B. SNOW, A.M.
B.S., Western Michigan College of Education; A.M., Columbia University.

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

EVELYN STEKETEE, A.M.
A.B., Hope College; A.M., University of Illinois.

FRED STEVENS, B.S.
B.S., Western Michigan College of Education.

MURIEL RIX VINCENT, A.M.
A.B., Kalamazoo College; A.M., University of Michigan.

ERNEST WEBER, A.M.
A.B., Western Michigan College of Education; A.M., Teachers College, Columbia University.
RACHEL ACREE, A.M.
B.S., University of Kentucky; A.M., Teachers College, Columbia University.

ELSIE L. BENDER, A.M.
B.S., A.M., Iowa State University.

MARY P. DOTY, A.M.
B.Mus., University of Michigan; A.M., Teachers College, Columbia University.

ELIZABETH HATHAWAY DEUR, A.M.
A.B., Western Michigan College of Education; A.M., University of Michigan.

CORA EBERT, A.M.
A.B., Iowa State Teachers College; A.M., Columbia University.

GRACE I. GISH, A.M.
B.S., Kansas State College; A.M., The University of Chicago.

RITA KOHN, B.S.
B.S., Western Michigan College of Education.

EMELINE J. McCOWEN, A.M.
A.B., National College of Education; A.M., Teachers College, Columbia University.

JOHN J. PRUIS, B.S.
B.S., Western Michigan College of Education.

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

*DOROTHY E. SHAFFER, B.S.
B.S., Miami University.

ETHEL SHIMMEL, A.M.
A.B., Western Michigan College of Education; A.M., Teachers College, Columbia University.

MARCIA SHOOP, B.S.
B.S., Western Michigan College of Education.

BESS L. STINSON, A.M.
B.S., A.M., George Peabody College for Teachers.

LOUISE F. STRUBLE, A.M.
B.S., Western Michigan College of Education; A.M., The University of Chicago.

*Resigned, February 1, 1948.
PAW PAW TRAINING SCHOOL

HUBERT G. ARCHER, A.M., Superintendent
A.B., Central Michigan College of Education; A.M., University of Michigan.

MAUDE W. ARTHUR, A.M.
M.Pd., Colorado State Teachers College; A.B., Iowa State Teachers College; A.M., Teachers College, Columbia University.

W. RUTH BANDEEN, A.B.
A.B., North Central College.

AMELIA BAUCH, A.M.
B.S., A.M., Columbia University.

EDITH CARLSON BEALS, B.M.
B.M., MacPhail School of Music, Minneapolis.

ANNA CARLIN, A.M.
Ph.B., The University of Chicago; A.M., Columbia University.

GLENN A. COLLINS, M.M.

HARRIET G. DEHAAN, A.M.
A.B., Western Michigan College of Education; A.M., Northwestern University.

BRYAN EMMERT, A.M.
Ph.B., A.M., The University of Chicago.

RITA I. FLEMING, B.S.
B.S., Western Michigan College of Education.

GWENDOLYN FREER, A.M.
A.B., Lombard College; A.M., University of Michigan.

MARIE T. GUDDE, B.S.
B.S., Kansas State Teachers College of Emporia.

CLARENCE W. HACKNEY, A.M.
A.B., Western Michigan College of Education; A.M., University of Michigan.

R. ELIZABETH HANSEN, A.M.
A.B., Michigan State College; A.M., University of Michigan.

HILDA MARY HAZZARD, A.M.
A.B., Western Michigan College of Education; A.M., University of Michigan.

ARLENE E. HOLLINGER, A.M.
A.B., Western Michigan College of Education; A.M., Northwestern University.
RUTH YATES KIRBY, A.M.
A.B., University of Washington; A.M., University of Illinois.

CARL V. LINDEMAN, M.S.
B.S.E.E., Highland Park College; A.B., Des Moines University; M.S., Iowa State College of Agriculture and Mechanical Arts.

ELIZABETH L. McQUIGG, A.M.
B.S., A.M., Teachers College, Columbia University.

ARTHUR MICHMERHUIZEN, A.M.
A.B., A.M., Hope College.

LOUISE C. MYERS, A.M.
B.S., A.M., Teachers College, Columbia University.

REYNOLD G. OAS, A.M.
B.S., Michigan State College; A.M., University of Michigan.

HELEN I. ROTH, A.M.
B.S., Western Michigan College of Education; A.M., Teachers College, Columbia University.

WILBUR H. SCHENK, B.S.
B.S., Northern Michigan College of Education.

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

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

CLELLA STUFFT, A.M.
A.B., University of Nebraska; A.M., Teachers College, Columbia University.

EULALIA TOMS, B.S.
B.S., Michigan State College.

EDWIN O. VAUGHN, A.M.

JEAN VIS, A.M.
A.B., Michigan State Normal College; A.M., University of Michigan.

D. GERALDINE WERNER, M.S.
B.S., Kent State University; M.S., Western Reserve University.
PORTAGE CONSOLIDATED TRAINING SCHOOL

VARL O. WILKINSON, A.M., Superintendent
  B.S., Western Michigan College of Education; A.M., University of Michigan.

MARION I. HALL, A.M.
  Ph.B., The University of Chicago; A.M., University of Michigan.

ELOISE MCCORKLE, A.M.
  B.S., A.M., George Peabody College for Teachers.

LELA M. McDOWELL, A.M.
  Ph.B., The University of Chicago, A.M., Teachers College, Columbia University.

ANN S. PEARSON, M.Ed.
  Ph.B., The University of Chicago; M.Ed., Duke University.

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

LENA REXINGER, A.M.
  B.S., George Peabody College for Teachers; A.M., Teachers College, Columbia University.

EMMA I. RICHARDS, A.M.
  B.S., University of Minnesota; A.M., University of Michigan.

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

MICHIGAN VETERANS VOCATIONAL SCHOOL

COMDR. HARRY W. LAWSON, B.S., Director
  B.S., Massachusetts Institute of Technology.

WILLIAM A. ALBER

JAMES Y. BUCHANAN

HOWARD N. CHAMPLIN

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

ANN W. DOBBYN, R.N.
    R.N., Harper Hospital.

BERNARD H. GILLILAND

G. AUBREY HANSEN, B.S.
    B.S., Central State Teachers College.

CLAUDE A. HARRINGTON

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

MALCOLM G. MONNIER

MAURICE PRINCE, A.B., A.M.
    A.B., Calvin College; A.M., University of Michigan.

KENNETH L. ROSS, B.S.
    B.S., Western Michigan College of Education.

R. J. SELKIRK

DOROTHY SONQUIST

HENRY A. SONSMITH, M.S.
    B.S., Western Michigan College of Education; M.S., University of Detroit.
FACULTY COMMITTEES
1948-1949

In each case the name of the chairman appears first.

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

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

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

BULLETINS—Wilds, Brink, Hoekje, Frederick, Kemper, Wichers.


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

EXTENSION AND ADULT EDUCATION—Yntema, Dolan, Ellis, D. Fox, Garneau, Joyce, F. Moore, Schneider, Wichers, Wilds.

FACULTY MEETINGS—Wichers, Eicher, Giachino, Meyer, Rood, Sams, Walmsley, Yntema.

FINAL EXAMINATIONS—Hoekje, Blackburn, Huff, Steckelberg.

FRIENDSHIP—Cooper, Butler, Master, Purdy, Rynberg, Stinson, Stout, Stulberg, Vincent.

GRADUATE COUNCIL—Wilds, Berry, Brown, D. Fox, Kercher, Osborn, Shilling, Steckelberg.

HEALTH EDUCATION—Crane, Buerger, Hyames, Joyce, Maus, Pond, Schroeder, Taylor.

HONORARY DEGREE—Wichers, Brown, Hoekje.


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

PUBLIC RELATIONS—Wichers, Amey, Cooper, Dunham, D. Fox, Garneau, Hyames, MacDonald, Stout.


*Deceased, February 15, 1948.
Faculty Council


Social Life (Faculty Functions)—Lichty, Greenwall, Hoekje, Hoyt, Mac-Donald, MacFee, Pellett, Volle, York.

Student Activities and Welfare—Hoekje, Lichty, Matthews, MacDonald, Osborn, Pellett, and five students chosen by the Student Council by ballot.

Student Loan Funds—Hoekje, Lichty, Pellett.

Student Social and Group Activities—Lichty, Crane, Hoyt, Pellett, D. Scott, L. Thompson, and six students chosen by the Student Council.

Summer Session—Wilds, H. Carter, Hoekje, Kraft, Lichty, Meretta, Steele, Wichers.

The Faculty Council

I. Members Elected
   Terms expire 1951
   Cora Ebert
   Margaret Macmillan
   Charles R. Starring
   Terms expire 1950
   Floyd W. Moore
   Gerald Osborn
   Russell H. Seibert
   Terms expire 1949
   Leonard Gernant
   Frank C. Householder
   Roxana A. Steele

II. Members Appointed
   Terms expire 1948
   Elizabeth McQuigg
   Leonard V. Meretta
   Lawrence S. Thompson

III. Members Ex Officio
   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, 1946—JUNE 30, 1947

Students Enrolled for Undergraduate Work:

Regular Summer (six weeks) ........ 1,334
Post-Summer (four weeks) ........ 884
Fall ........................................ 4,299
Spring ...................................... 4,130

Students Enrolled for Graduate Work:

Summer ................................. 181
Fall ........................................ 112
Spring ...................................... 128

Number of Different Students .............. 6,948
Western Michigan College of Education is located at Kalamazoo, Michigan, a city of 60,000 people situated midway between Chicago and Detroit on the Michigan Central Railroad. Other railroads and three major highways make the College readily accessible from all points in the Middle West. The city offers students many cultural advantages such as strong churches, community concerts and lectures, a civic orchestra, and a civic theatre.

The campus comprises more than two hundred acres. The site is rolling and beautiful. The grounds are spacious enough, not only for the present facilities, but also for the new classroom buildings and dormitories now under construction. One of the unusual features of the campus is a nine-hole golf course available to students. Another is the Kleinstueck Wild Life Preserve deeded to the State Board of Education by the late Mrs. Caroline Hubbard Kleinstueck. This preserve of 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 and the Director of the Division of Personnel and Guidance. In addition there are quarters for the Psycho-Educational and the Speech Correction Clinics as well as the Educational Service Library 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 designs conform to the contour of the hill on which it is located. It has a most attractive lobby, three reception rooms, a large dining room, and special facilities such as recreation rooms, music practice rooms, a laundry, three kitchenettes, two sunrooms, and an infirmary.

WALWOOD 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 twofold purpose in the field of secondary education. One major function of the school is to offer a broad curriculum in which teaching procedures designed by the leaders in the field of secondary education are put into practice. Another function is to offer an effective laboratory situation for training prospective teachers for secondary schools.
THE HURD ONE-TEACHER RURAL SCHOOL is housed in a modern building, equipped with electric lights, running water, an extra room for directed teaching and a basement community room with a stage, which may be used for indoor play.

THE PAW PAW LARGE-VILLAGE SCHOOL, organized on the six-three-three plan, is one of the best of its kind. Western Michigan College of Education and the Paw Paw Board of Education unite to make this school a progressive one in every particular.

THE PORTAGE CENTER CONSOLIDATED SCHOOL, a twenty-three teacher school, organized on the eight-four plan, includes a kindergarten, all the elementary grades, and a high school.

THE ATHLETIC PLANT—The Athletic Plant comprises the following:

Hyames Baseball Field has concrete stands seating 2500 spectators.

The Men's Gymnasium has adequate facilities for all indoor sports and for the programs in Physical Education. About 4000 can be seated around the basketball court.

For their work in physical education the women of the college have the exclusive use of a gymnasium with a floor space of 119 feet by 68 feet. In the basement are lockers, shower bath, and a swimming pool.

Ten tennis courts are available.

Around the football field runs an eight-lane quarter-mile cinder track. The straightaway is 220 yards.

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

NEW BUILDINGS—The College is now engaged in an extensive building program. The facilities recently completed are the following:

An office unit connecting the Administration and Training School buildings.

A substantial two-story Maintenance building.

Faculty Apartment buildings, containing thirty-two modern faculty apartments.

Faculty Club House containing faculty lounge and cafeteria.

Under construction to be completed in 1948-1949 are:

A Classroom 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 building.

Burnham Hall, a dormitory to house 450 residents.

During the year construction will begin on a Music building and a Chapel.
TEMPORARY BUILDING—The Federal Government has provided six buildings for instructional purposes with 45,000 sq. ft. of floor space. These buildings provide facilities for:
- Freshmen English classes
- Business Education
- Music
- Speech and Dramatics
- Industrial and Vocational Training
- Intramural and Recreation

KLEINSTUECK WILD-LIFE PRESERVE

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

A 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.

MICHIGAN VETERANS VOCATIONAL SCHOOL

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

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.
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.

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.

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.

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.
STUDENT SERVICE FACILITIES

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.
SERVICE TO FOREIGN STUDENTS

Walwood Hall Residence
and
Lavina Spindler Hall for Women

Request for reservation should be addressed to Dr. Elizabeth E. Lichty, 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 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 rates for room and board in Walwood Hall Residence and Lavina Spindler Hall are $12.00 per week. Room and board payments must be made in advance, but may be paid in quarters with experience. 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 .......................... 11:15 A.M. to 1:15 P.M.
Saturday ........................................ 11:30 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 needed 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. Thirty-two citizens from France, Luxembourg, Norway, China, Bolivia, Puerto Rico, Guatemala, Nigeria, Poland, Tunisia, Costa
Rica, Honduras, and Canada were enrolled in 1947-1948, 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

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

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

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

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

The clinic is open for consultation and treatments from 8:00 A.M. until 4:30 P.M., from Monday through Friday, and from 9:00 A.M. until 12:00 Noon on 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, and a dermatologist holds a special skin clinic twice a month.

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 over 70,000 volumes, fully catalogued and available. Over 500 periodicals are currently received, and of these more than 300 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 6:45 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 facsimiles, and etchings was presented to Western Michigan College of Education in the summer of 1939. This teaching and reference material has been carefully selected with a view to enriching a college library with books and illustrations not ordinarily afforded by colleges. The collection consists of 831 large, well-mounted photographs and 125 books, together with 30 colored reproductions, and portfolios containing illustrations of prints. This collection is housed in 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.

**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 Psycho-Educational Clinic, the Health Service, the Placement Bureau for teachers, Personnel and Guidance Counselors, 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 consist 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 non-teaching 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 busses.

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.

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.

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

RURAL DIVISION

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

SPECIAL EDUCATION

There are curricula at Western Michigan College of Education in 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.

AVIATION TEACHER EDUCATION

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

**ALPHA MU OMEGA**

This music organization for men proposes to advance the cause of music in America and to foster the future welfare and brotherhood of students in music.

**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.

**COLOPHON CLUB**

The Colophon Club aims to widen the professional interests of students in library work and to open new horizons of knowledge in books and related materials.

**COUNTRY LIFE CLUB (NATIONAL AFFILIATION)**

The Country Life Club is open to students in the Department of Rural Life and Education and all others interested in rural life. The meetings, held 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.

GEOGRAPHERS CLUB

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

HOME ECONOMICS CLUB

The Home Economics Club is organized for the purpose of promoting professional interest and good fellowship among the students. Membership is open to any student of the department who is interested, upon the pay-
ment 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 twofold purpose: to present programs and discussions of professional value in the field of occupational therapy and to promote better acquaintance among the students. Anyone who has been admitted to the Department of Occupational Therapy is eligible for membership. Several meetings a year will be open to freshmen who are prospective students, and to others in related studies.

CIRCULUS PRE MEDICUS

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.

PHILOSOPHICAL FORUM

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

PSI CHI

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

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 biweekly. 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.

III. SPECIAL INTEREST GROUPS

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.

SWIMMING CLUB

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

FOREIGN STUDENTS' CLUB

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

OMEGA CHI GAMMA

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

MUSIC CLUB

This honorary women's organization functions to raise the standards of productive musical work, to influence a more wholesome attitude toward music, to give moral and material aid to women participating in it, and to promote and dignify the musical profession.

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.
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.
STUDENT ORGANIZATIONS AND ACTIVITIES

THETA PI ALPHA

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

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

VI. RELIGIOUS ORGANIZATIONS

CANTERBURY CLUB

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

GAMMA DELTA

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

HILLEL COUNSELORSHIP

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

INTER-VARSITY CHRISTIAN FELLOWSHIP

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

NEWMAN CLUB

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

RELIGIOUS COUNCIL

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

INTER-CHURCH STUDENT FELLOWSHIP

The Inter-Church Student Fellowship is an inter-denominational student group sponsored by four of Kalamazoo's churches: the First Methodist Church, the First Presbyterian Church, the First Baptist Church, and the First Congregational Church. Programs are educational and social, and in-clude worship services on Sunday evenings during the supper hours. Meet-ings 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-dents and to help them apply their religious beliefs to world and commu-nity problems.

STUDENT ACTIVITIES

MUSIC

The Band meets twice a week for practice and furnishes music at ath-letic 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 nor minors in the department, and intramural athletics which are open to all.

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

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

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

All men students must complete fifteen class hours of physical education beginning with the first semester 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, horseshoe pitching, golf, and swimming. Any sport in which a sufficient number
of students indicate an interest and for which facilities are available may be set up in the intramural schedule.

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-curricular 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 chair-
manship. 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 handling to a co-chairman of the Joint Student-Faculty Committee, on such date or dates to be designated each semester by the Committee, the names of officers and chairmen of standing committees and general chairmen in their respective organizations.

D. Checking the eligibility of persons participating in activities will be done within the rules set forth above in such manner as will be determined by the Joint Student-Faculty Committee. All names of persons holding chief positions as defined above must be filed within three days after their appointment or election. In cases of infraction of the regulations, the student concerned as well as the head officer and adviser of the organization will be informed. If the situation is not promptly corrected, the Joint Student-Faculty Committee may recommend to the Dean of Administration the suspension of the activities of the organization until such time as the situation is remedied.

IV. Exceptions and Appeals

A. In cases where an organization and/or a student feels justified in requesting an exception to the general regulations outlined above, such petition may be made in person at a meeting of the Joint Student-Faculty Committee.

B. Appeals arising from action of the Committee, both in regard to permitting certain participation and to deny certain participation, may be brought directly to the Dean of Administration, whose decision on such appeal shall be regarded as final.

C. Nothing in the above regulations shall be construed to deny any organization the right to set higher standards of membership than those herein described.
D. Questions of interpretation of the regulations as stated shall be referred to the Joint Student-Faculty Committee on Eligibility for Student Participation in Extra-curricular Activities. An appeal may be taken to the Dean of Administration.

V. Enforcement and Operation

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

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

C. The co-chairmen shall have the following duties:
   1. Taking the initiative in seeing to it that proper filing of names occurs within three days after election or appointment of officers for positions described above.
   2. Reporting infractions of the regulations to the standing Committee on Eligibility for Participation in Extra-curricular Activities.
   3. Arranging to set up in cooperation with the office of the Dean of Administration the necessary machinery to handle checking of eligibility for participation.
   4. In cases of persistent lack of cooperation in compliance with the regulations, reporting to the Dean of Administration so that proper steps may be taken to suspend the individuals and/or activities of the organization.

Note.—The plan above was designed to go into effect at the opening of the Fall Semester, 1947.
The Student Awards and Scholarships

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 $750. The student receiving this fellowship is recommended by Western Michigan College of Education as having met the qualifications described in the preceding paragraph. Graduate fellowships and scholarships are available at many other leading universities; applicants for scholarships recommended by Western Michigan College of Education will receive consideration by the Scholarship Councils of such universities. Interested students should confer with the Committee on Scholarships, of which the registrar is chairman.

STATE BOARD OF EDUCATION SCHOLARSHIPS

At its meeting on March 23, 1948, the Michigan State Board of Education approved a plan by which approximately 600 scholarships will be granted annually to high school graduates in Michigan to enter the profession of teaching. These scholarships will be awarded through the office of the State Board of Education in Lansing and the student will be permitted to select the college of education he wishes to attend. The scholarship involves the waiving of state tuition and a certain portion of the local fees. Although the scholarships will be available for students wishing to enter any branch of teaching, the emphasis will be placed upon those interested in teaching in the elementary schools. It is anticipated also that a reasonable portion of these scholarships will be granted to students at the beginning of the junior year in college. The scholarship will be good for two years, provided the student maintains a satisfactory record in the college he selects.

For more complete details and application blanks, write to the Secretary of the Michigan State Board of Education, Lansing, Michigan.
UNDERGRADUATE SCHOLARSHIPS

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

The 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 available 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 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 $4,000 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 1948 classes of the Junior Colleges of Michigan. The scholarships will cover the cost of tuition and a portion of the students' fees. They will be available only to candidates who qualify for a major in librarianship as evidenced by academic record, health, and personality. Candidates must have maintained a B average or better during their first two years of college work. Written application must be made on official blanks to the Dean of Administration or to the Department of Librarianship by April 1. A personal interview will be required. Appointments for interviews should be arranged with the Director of the Department before May 20. These scholarships are valid for one college year of two semesters; and are renewable for a second year, provided the students' records prove satisfactory.

The 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 stringed instruments, two in brass instruments, and two in woodwind instruments. These scholarships, which cover the cost of the student's comprehensive tuition fee, are available only to candidates for the Bachelor of Music degree. The need for the assistance of such a scholarship must be established. These applied music scholarships are awarded on a competitive basis, the applicants performing before the Committee on Music Scholarships.

Ten scholarships in band, ten in orchestra, and ten in choir are also offered. These ensemble scholarships cover the cost of the student's regular tuition and a portion of the student's activity fees. No student may hold more than one scholarship at one time. All scholarships are for one year's duration, but may be renewed upon re-examination.
Address all applications for scholarships on regular blanks to the registrar or to the head of the Department of Music, not later than April first, preceding the September in which the student wishes to enroll.

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 County Commissioner concerned or to the Director of the Department of Rural Life and Education.

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 to 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 $175 is made; to the one scoring second highest, an award of $125; to the one scoring third highest, an award of $100. Each award is renewed automatically annually during a period of three years, provided the student's record proves satisfactory.

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 Dean of Administration 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. 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 $\frac{1}{2}$ or 1 unit, Solid Geometry $\frac{1}{2}$ unit, Trigonometry $\frac{1}{2}$ 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.
   $^{1}$Physics 1 unit  Zooloogy 1 unit
   Chemistry 1 unit  Biology (Botany $\frac{1}{2}$ unit and Botany 1 unit  Zooloogy $\frac{1}{2}$ unit) 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
   $^{2}$European History 1, 1$\frac{1}{2}$ units, or 2 units
   $^{3}$American History $\frac{1}{2}$ or 1 unit
   $^{3}$American Government $\frac{1}{2}$ unit
   $^{3}$Economics $\frac{1}{2}$ 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
\(^4\)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.
\(^5\)Music
\(^6\)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, \(\frac{1}{2}\) or 1 unit
Elementary Business Training, 1 unit
Bookkeeping, 1 or 2 units
Shorthand, 1 or 2 units
Commercial Arithmetic, \(\frac{1}{2}\) unit
Commercial Law, \(\frac{1}{2}\) unit
Office Practice, \(\frac{1}{4}\) unit
Commercial Geography, \(\frac{1}{4}\) to 1 unit

\(^5\) Music subjects will be accepted as follows:
Band, 1 unit
Orchestra, 1 unit
Choir, 1 unit
Glee Club, \(\frac{1}{2}\) unit
Theory Class, 1 unit
History and Appreciation, 1 unit

\(^6\) Art subjects will be accepted as follows:
General Art, 1 to 2 units
School Art Activities, \(\frac{1}{2}\) 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.

4. Admission under the College Agreement Plan

The College agrees to admit the graduates of accredited high schools who have accepted the College Agreement of April 8, 1947, between the Michigan College Association and the Michigan Secondary School Association without reference to the pattern of subjects which they have pursued, provided they are recommended by the school from among the more able students in the graduating class.

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 scholarship and conduct.

TRANSFERRING STUDENTS

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

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

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

Inquiries concerning admission from other institutions of higher education should be addressed to Mr. John 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 to graduates who have received a life certificate. A student who desires to earn a provisional certificate in the college and then complete the work for a degree in some other college or university should plan his work with the requirements of the particular institution in mind.

Admission to graduate schools is granted to students completing a four-year curriculum who have made their elections of courses conform to the requirements of such schools. Western Michigan College of Education is fully accredited by the American Association of Teachers Colleges and by the North Central Association. The college is also on the approved list of the Association of American Universities.

TRANSCRIPTS

A student desiring a transcript of his record in this college should write to the registrar, giving dates of attendance and, if a graduate, the date of graduation. He should give the full name under which he was enrolled. Each student is entitled to one transcript of his record without charge, but all additional copies are charged for at the rate of one dollar a copy.

Schools and boards of education desiring transcripts of records of students of Western Michigan College of Education should furnish, together with their request, as much of the information indicated as possible.
IDENTIFICATION PHOTOGRAPH

When a student enrolls for the first time, he is required to have taken an identification photograph of which three copies are made. One copy becomes part of the student's permanent record, another copy is given to the student to serve to identify him at college functions, while a third copy is filed in the Dean's Office. The charge for the three is thirty-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 upperclassmen as well. The results of these tests are not used as a part of the entrance qualifications, but are of service in advising students regarding their scholastic work. 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 work for college credit 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 maximum load for a given student is regulated 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.
Page 77 missing from original
Page 78 missing from original
HIGH SCHOLARSHIP LIST

<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>0</td>
</tr>
<tr>
<td>W</td>
<td>Withdrawn</td>
<td>0</td>
</tr>
</tbody>
</table>

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

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

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.
LOW SCHOLARSHIP LIST

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

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

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

4. No student may be granted a third consecutive semester of probation.

5. Any student who receives E in 75 per cent of the work attempted during a semester shall be automatically dropped from college.

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

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

CREDIT FOR BAND, GLEE CLUB, AND ORCHESTRA WORK

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

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

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

4. Participation in Band may be substituted for physical-education credit. 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.

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

II. Explanation of numbering

1. All consecutive, coherent courses are numbered similarly and lettered sequentially.

2. All fundamental, consecutive, coherent courses are numbered as follows:
   a. The number 100 is reserved for fundamental courses having no high-school prerequisite.
   b. The number 101 is reserved for fundamental courses having as 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 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

Residences 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

Schedule of local fees effective Semester I, 1947-1948.

<table>
<thead>
<tr>
<th>Hours</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-3</td>
<td>$10.00</td>
</tr>
<tr>
<td>4-9</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.

Departmental Fees

Art ..................................$ 1.00 per semester for advanced design, crafts and industrial art.

Business Education ..............$ 2.00 per semester for students pursuing typing and secretarial practice.
<table>
<thead>
<tr>
<th>Subject</th>
<th>Fee Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Education</td>
<td>$2.00 per semester for laboratory courses.</td>
</tr>
<tr>
<td>Biology</td>
<td>$1.00 per semester for laboratory courses.</td>
</tr>
<tr>
<td>Chemistry</td>
<td>$2.00 per semester deposit for general chemistry, $5.00 per semester deposit</td>
</tr>
<tr>
<td></td>
<td>for advanced chemistry, all of which is to be refunded, except $1.00 per</td>
</tr>
<tr>
<td></td>
<td>semester which will become a laboratory fee.</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>$5.00 per student for entire period of attendance, to be paid in advance.</td>
</tr>
<tr>
<td>Home Economics</td>
<td>$0.50 per semester hour for students pursuing personal and social problems,</td>
</tr>
<tr>
<td></td>
<td>clothing, and foods.</td>
</tr>
<tr>
<td>Industrial Arts</td>
<td>$1.00 per semester hour for students pursuing shop or laboratory courses.</td>
</tr>
<tr>
<td>Air Transportation</td>
<td>$1.00 per semester hour for students pursuing shop or laboratory courses.</td>
</tr>
<tr>
<td>Trades</td>
<td>$20.00 per semester in addition to regular tuition and fees.</td>
</tr>
<tr>
<td>Music</td>
<td>$60.00 per semester for one hour per week, or $30.00 per semester for one</td>
</tr>
<tr>
<td></td>
<td>half-hour per week for individual instruction in applied music.</td>
</tr>
<tr>
<td></td>
<td>$5.00 per semester for instrument deposit.</td>
</tr>
<tr>
<td>Physical Education (women)</td>
<td>$1.25 per semester for swimming for two class hours a week.</td>
</tr>
<tr>
<td></td>
<td>$1.50 per semester for swimming for three class hours a week.</td>
</tr>
<tr>
<td></td>
<td>$0.50 per semester for locker fee.</td>
</tr>
<tr>
<td>Physical Education (men)</td>
<td>$5.00 per semester deposit for laundry, towel, and locker deposit, with $2.00</td>
</tr>
<tr>
<td></td>
<td>refund at end of semester.</td>
</tr>
</tbody>
</table>

**Graduation Fees**

- State Limited Certificate curriculum: $2.00
- Provisional Certificate curricula: 3.00
- Degree curricula: 3.00
- Alumni fee (paid by all graduates): 1.00
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 two weeks after registration will be entitled to a refund of the entire fee.
3. A student who withdraws more than two weeks and less than four weeks after the beginning of the session shall be entitled to a refund of one-half the fee.
4. A student who withdraws more than four weeks and not later than eight weeks after the beginning of the session will be entitled to a refund of forty per cent of the fee.
5. No refunds will be made for withdrawal after the eighth week of a session.

Estimate of Expenses

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

<table>
<thead>
<tr>
<th>Description</th>
<th>Estimate</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>Incidents</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 literature, modern language and literature, certain courses as indicated in the Departments of Librarianship and Speech

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

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

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

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

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

**Group VII. Physical Education and Health**
Health, physical education

**DEGREES DEFINED**

**BACHELOR OF ARTS (AND TEACHING CERTIFICATE)**

The student who regularly completes a curriculum conforming to the degree 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 examination 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 general degree requirements, the degree of Bachelor of Arts or Bachelor of Science may be granted without the teaching certificate.

SECOND BACHELOR'S DEGREE

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

RESTRICTIONS

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

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

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

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

REQUIREMENTS FOR GRADUATION

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

I. BACHELOR'S DEGREES

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

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

1. Credits satisfying a prescribed curriculum for a total of 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. PROVISIONAL 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.
   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
ADDITIONAL REGULATIONS

State Provisional Certificate curriculum at the institution where the candidate intends to qualify for either certificate, the candidate should arrange in advance in each case to have his course selections approved by that institution. Also all credits wherever earned should be submitted to that institution for evaluation and by it transmitted to the State Board of Education with recommendations.

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

ADDITIONAL REGULATIONS

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

2. At the end of the sophomore year all men students except those enrolled in the two year curricula must have had at least 10 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 CURRICA

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

<table>
<thead>
<tr>
<th>I. General Degree Curriculum</th>
<th>Pages</th>
</tr>
</thead>
<tbody>
<tr>
<td>II. Curricula for Teachers</td>
<td>98-113</td>
</tr>
<tr>
<td>Elementary Curriculum</td>
<td>98</td>
</tr>
<tr>
<td>Secondary Curriculum</td>
<td>99</td>
</tr>
<tr>
<td>Special Education Curricula</td>
<td>100-104</td>
</tr>
<tr>
<td>Deaf and Hard of Hearing</td>
<td>100</td>
</tr>
<tr>
<td>Mentally Retarded</td>
<td>101</td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td>102</td>
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<tr>
<td>Speech Correction</td>
<td>103</td>
</tr>
<tr>
<td>Music Curricula</td>
<td>105</td>
</tr>
<tr>
<td>Librarianship Curriculum</td>
<td>107</td>
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<tr>
<td>Vocational Business Curriculum</td>
<td>109</td>
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<tr>
<td>Vocational Industrial Curriculum</td>
<td>110</td>
</tr>
<tr>
<td>Rural Elementary Curriculum</td>
<td>112</td>
</tr>
<tr>
<td>III. Pre-Professional, Non-Teaching Professional, and Combined Curricula</td>
<td>114-129</td>
</tr>
<tr>
<td>Agriculture</td>
<td>114</td>
</tr>
<tr>
<td>Business Administration</td>
<td>115</td>
</tr>
<tr>
<td>Dentistry; Engineering</td>
<td>116</td>
</tr>
<tr>
<td>Forestry; Journalism</td>
<td>118</td>
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<tr>
<td>Law</td>
<td>119</td>
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<tr>
<td>Medicine</td>
<td>120</td>
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<tr>
<td>Medical Technology</td>
<td>121</td>
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<td>Nursing</td>
<td>122</td>
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<tr>
<td>Occupational Therapy</td>
<td>123</td>
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<tr>
<td>Social Work</td>
<td>124</td>
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<tr>
<td>Music</td>
<td>125</td>
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<tr>
<td>Librarianship</td>
<td>128</td>
</tr>
<tr>
<td>IV. Vocational and Practical Arts Education Curricula</td>
<td>130-147</td>
</tr>
<tr>
<td>Business Administration</td>
<td>131</td>
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<td>Technical Business</td>
<td>133</td>
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<tr>
<td>Retailing</td>
<td>134</td>
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<tr>
<td>Secretarial Training</td>
<td>135</td>
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<tr>
<td>Homemaking</td>
<td>136</td>
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<tr>
<td>Airline Hostess</td>
<td>137</td>
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<tr>
<td>Air Transportation</td>
<td>138</td>
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<tr>
<td>Aircraft and Aviation Mechanics</td>
<td>140</td>
</tr>
<tr>
<td>Air Conditioning and Refrigeration</td>
<td>141</td>
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<tr>
<td>Drafting</td>
<td>142</td>
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<tr>
<td>Linotype; Machine Shop</td>
<td>143</td>
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<tr>
<td>Radio</td>
<td>144</td>
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<tr>
<td>Sheetmetal</td>
<td>145</td>
</tr>
<tr>
<td>Tool and Die; Welding</td>
<td>146</td>
</tr>
</tbody>
</table>
REQUIREMENTS OF THE VARIOUS CURRICULA

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

I. THE GENERAL DEGREE CURRICULUM

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

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

GENERAL DEGREE CURRICULUM

A.B. or B.S. Degree

(For liberal and pre-professional education)

Group Requirements

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

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

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

| 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 complete 15 class hours of Physical Education beginning with the first semester of residence. | |

Elective | 78
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

<table>
<thead>
<tr>
<th>Group</th>
<th>Requirements</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Language and Literature</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Rhetoric (in addition)</td>
<td>6</td>
</tr>
<tr>
<td>II</td>
<td>Science</td>
<td>12</td>
</tr>
<tr>
<td>III</td>
<td>Social Science</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Including two semester hours of political science</td>
<td></td>
</tr>
</tbody>
</table>

Group IV. Education

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

Group V. Fine Arts (Art, Music) | 6 |

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 complete 15 class hours of Physical Education beginning with the first semester of residence.

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

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

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

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 Requirements

<table>
<thead>
<tr>
<th>Group</th>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group I.</td>
<td>Language and Literature</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Rhetoric (in addition)</td>
<td>6</td>
</tr>
<tr>
<td>Group II.</td>
<td>Science</td>
<td>12</td>
</tr>
<tr>
<td>Group III.</td>
<td>Social Science</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Including two semester hours of political science</td>
<td></td>
</tr>
<tr>
<td>Group IV.</td>
<td>Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to Special Education 351</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Directed Teaching, Laboratory in Education, and General Educational Problems 370 A, B, C</td>
<td>15</td>
</tr>
<tr>
<td>Group VII.</td>
<td>Physical Education and Health</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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 complete 15 class hours of Physical Education beginning with the first semester of residence.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>57</td>
</tr>
</tbody>
</table>

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

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

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

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.

---

**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)

<table>
<thead>
<tr>
<th>Group I.</th>
<th>Language and Literature</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rhetoric (in addition)</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Fundamentals of Speech 105 A, B</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Principles of Speech Correction 231</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Phonetics 318</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Basic Voice and Speech Science 319</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group II.</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Biology 101 A, B</td>
</tr>
<tr>
<td></td>
<td>General Psychology 200</td>
</tr>
<tr>
<td></td>
<td>Abnormal Psychology 305</td>
</tr>
<tr>
<td></td>
<td>Mental Testing 307</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group III.</th>
<th>Social Science</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Principles of Sociology 241</td>
</tr>
<tr>
<td></td>
<td>Modern Social Problems 242</td>
</tr>
<tr>
<td></td>
<td>Political Science</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group IV.</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Problems of the Deaf and Hard of Hearing 234</td>
</tr>
<tr>
<td></td>
<td>Introduction to Lip Reading 235</td>
</tr>
<tr>
<td></td>
<td>Advanced Lipreading 236</td>
</tr>
<tr>
<td></td>
<td>Audiometry and Hearing Aids 237</td>
</tr>
<tr>
<td></td>
<td>Human Growth and Development 251</td>
</tr>
<tr>
<td></td>
<td>Applied Speech Correction 300</td>
</tr>
<tr>
<td></td>
<td>Introduction to Special Education 331</td>
</tr>
<tr>
<td></td>
<td>Mental Hygiene 335</td>
</tr>
<tr>
<td></td>
<td>Introduction to Directed Teaching 351</td>
</tr>
<tr>
<td></td>
<td>Directed Teaching, Laboratory in Education, and General Educational Problems 370 A, B, C</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group VII.</th>
<th>Physical Education and Health</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>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</td>
</tr>
</tbody>
</table>
one semester.) Men must complete 15 class hours of Physical Edu-
cation beginning with the first semester of residence.

Elective ......................................................... 26

Suggested electives: Anatomy 211A, Genetic Psychology 205,
Clinical Psychology 309, Interpretive Reading 210, Social Work Prac-

### SPECIAL EDUCATION CURRICULUM—MENTALLY RETARDED

**B.S. Degree**

State Elementary Provisional Certificate

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

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Group I.</th>
<th>Language and Literature</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rhetoric (in addition)</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group II.</th>
<th>Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Biology 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>Hygiene 112 (or Health Education 285)</td>
<td>2</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Abnormal Psychology 305</td>
<td>3</td>
</tr>
<tr>
<td>Mental Testing 307</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group III.</th>
<th>Social Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>Modern Social Problems 242</td>
<td>3</td>
</tr>
<tr>
<td>Political Science</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group IV.</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Special Education 331</td>
<td>2</td>
</tr>
<tr>
<td>Mental Deficiency 332</td>
<td>2</td>
</tr>
<tr>
<td>Introduction to Mental Hygiene 335</td>
<td>3</td>
</tr>
<tr>
<td>Methods of Teaching Subnormal Children 337</td>
<td>2</td>
</tr>
<tr>
<td>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
<tr>
<td>Directed Teaching, Laboratory in Education, and General Educational Problems 370 A, B, C</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group V.</th>
<th>Fine Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Illustrative Handwork 107</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group VI.</th>
<th>Practical Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Special Education Shop 208</td>
<td>2</td>
</tr>
</tbody>
</table>
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 complete 15 class hours of Physical Education beginning with the first semester of residence.

Elective .......................................................... 39

Note.—1. The academic training shall include a major in Special Education (mentally retarded) 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.

<table>
<thead>
<tr>
<th>Semester:</th>
<th>Group I. Language and Literature</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>Elective</td>
<td>..................... 9</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester:</th>
<th>Group II. Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Biology 100A, B</td>
<td>..................... 8</td>
</tr>
<tr>
<td>Anatomy and Physiology (for Occupational Therapists) 215</td>
<td>..................... 4</td>
</tr>
<tr>
<td>Kinesiology 216A, B</td>
<td>..................... 4</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>..................... 3</td>
</tr>
<tr>
<td>*Neurology and Psychiatry 330</td>
<td>..................... 3</td>
</tr>
<tr>
<td>*Clinical Subjects 332</td>
<td>..................... 4</td>
</tr>
<tr>
<td>*Clinical Observations 334</td>
<td>..................... 4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester:</th>
<th>Group III. Social Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Science</td>
<td>..................... 2-3</td>
</tr>
<tr>
<td>Sociology 241</td>
<td>..................... 3</td>
</tr>
<tr>
<td>*Social Service in Hospitals 351</td>
<td>..................... 3</td>
</tr>
<tr>
<td>*Hospital Case Studies 352</td>
<td>..................... 3-4</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Semester:</th>
<th>Group V. Fine Arts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Design 215</td>
<td>..................... 3</td>
</tr>
<tr>
<td>Ceramics and Jewelry 225</td>
<td>..................... 3</td>
</tr>
</tbody>
</table>
Group VI. Practical Arts

- Weaving 328 .................................................. 4
- Bookbinding 329 .............................................. 2
- Elective ..................................................... 5

- Printing 140A .................................................. 3
- Special Education Shop 208 .................................. 3
- Therapeutic Crafts 220 or 221 or 222 ..................... 2
- Stitchery 223 .................................................. 4
- Rug Making 224 ................................................ 1
- Basketry 226 ................................................... 1
- Leatherwork 227 .............................................. 1

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

Note.—1. Thirty semester hours of college credit 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)

<table>
<thead>
<tr>
<th>Group I. Language and Literature</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric (in addition)</td>
<td>6</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A, B</td>
<td>6</td>
</tr>
<tr>
<td>Introduction to Speech Correction 230</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Speech Correction 231</td>
<td>3</td>
</tr>
<tr>
<td>Phonetics 318</td>
<td>3</td>
</tr>
<tr>
<td>Basic Voice and Speech Science 319</td>
<td>3</td>
</tr>
<tr>
<td>Stuttering and Allied Disorders 331</td>
<td>3</td>
</tr>
</tbody>
</table>

Semester Hours

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SPECIAL EDUCATION CURRICULUM

103
Group II. Science
General Biology 101A, B ........................................... 8
or
Hygiene 112 ............................................................ 2
and
Physical Science 100A, B ........................................... 6
General Psychology 200 ............................................. 3
Abnormal Psychology 305 ........................................... 3
Mental Testing 307 ...................................................... 2

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

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

Group VII. Physical Education and Health
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 complete 15 class hours of Physical Education beginning with the first semester of residence.
Elective ............................................................... 26

Note.—1. The student, in conference with his counselor, should choose courses on the basis of his special needs and interests.
2. The student must present a major in special education (speech correction). Two minors are also required and are usually in social science, science, languages, or psychology.
3. Certain courses in some departments may not be counted toward satisfying the minimum group requirements. See course descriptions.
4. 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>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Major Performance</td>
<td>4</td>
</tr>
<tr>
<td>English Diction and Song Literature 122A, B</td>
<td>0</td>
</tr>
<tr>
<td>Freshman Theory 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Music Appreciation 107A, B</td>
<td>4</td>
</tr>
<tr>
<td>Elementary Acoustics 110</td>
<td>2</td>
</tr>
<tr>
<td>String Class 118A, 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>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, B</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>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 French Diction and Song Literature 322A, B</td>
<td>0</td>
</tr>
<tr>
<td>or Junior and Senior High School Methods and Materials 301A, BT</td>
<td>6</td>
</tr>
<tr>
<td>or Style and Structure 310A*</td>
<td>3</td>
</tr>
<tr>
<td>or Contemporary Music 310B*</td>
<td>3</td>
</tr>
<tr>
<td>or 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
or
American State and Local Government 231 ................................ 3
or
Survey of American Government 234 ......................................... 3
Elective (non-music) .......................................................... 2
Physical Education or Band

Fourth Year

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

*M 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

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Major Performance*</td>
<td>4</td>
</tr>
<tr>
<td>Freshman Theory 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Music Appreciation 107A, B</td>
<td>4</td>
</tr>
<tr>
<td>Elementary Acoustics</td>
<td>2</td>
</tr>
<tr>
<td>String Class 118A, B</td>
<td>2</td>
</tr>
<tr>
<td>English Diction and Song Literature 122A, B**</td>
<td>0</td>
</tr>
<tr>
<td>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>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Performance</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>Elementary School Methods and Materials 208A, B</td>
<td>6</td>
</tr>
<tr>
<td>Woodwind Class 219A, B</td>
<td>2</td>
</tr>
<tr>
<td>Italian Diction and Song Literature 222A, B**</td>
<td>0</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</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

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

Fourth Year

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

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.
Modern Language ........................................ 8
Electives .................................................. 2
Physical Education
(Suggested electives, Fundamentals of Speech, Music or Art Appreciation.)

Second Year

General Psychology 200 ................................... 3
Sociology 241 .................................................. 3
Human Growth and Development 251 .......................... 3
State and Local Government 231 .............................. 3
History ........................................................ 3
Literature for Children 203 .................................. 3
English Electives ............................................. 6
Electives ..................................................... 6
(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

Reading Interests of Children 202 ........................... 3
or
Reading Interests of Youth 302 ............................... 3
Selection of Reading Materials 303 ............................ 3
Organization of Library Materials 360 ......................... 2
Reference Service 311 ....................................... 3
Cataloging and Classification 370 ............................ 3
Introduction to Directed Teaching 351 ........................ 3
English Electives ............................................. 5
History or Economics ......................................... 3-6
Electives ..................................................... 8

Physical Education

Fourth Year

First Semester

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

Second Semester

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

State Temporary Vocational Coordinator’s 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 to 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>
</tr>
<tr>
<td>Elective (Group III)</td>
<td>7</td>
</tr>
</tbody>
</table>

### 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, Merchandising and Job Analysis 151A, and Retail Salesmanship 150; 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.
VOCATIONAL INDUSTRIAL CURRICULUM

B.S. Degree

State Secondary Provisional Certificate, and
State Trade and Industrial Certificate

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

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

**First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A and B</td>
<td>6</td>
</tr>
<tr>
<td>Speech 105A and B</td>
<td>6</td>
</tr>
<tr>
<td>Physical Science 100A and B</td>
<td>6</td>
</tr>
<tr>
<td>Mechanical Drawing 120</td>
<td>2</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>2</td>
</tr>
<tr>
<td>Coordinated Industry 150 and 152</td>
<td>6</td>
</tr>
<tr>
<td>†Electives (non-shop)</td>
<td>4</td>
</tr>
<tr>
<td>*Physical Education</td>
<td></td>
</tr>
<tr>
<td>††Library Methods</td>
<td></td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Vocational Education 200</td>
<td>2</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>Principles of Economics 220A and B</td>
<td>6</td>
</tr>
<tr>
<td>Coordinated Industry 250 and 252</td>
<td>6</td>
</tr>
<tr>
<td>**Electives (shop)</td>
<td>6</td>
</tr>
<tr>
<td>†Electives (non-shop)</td>
<td>6</td>
</tr>
<tr>
<td>*Physical Education</td>
<td></td>
</tr>
</tbody>
</table>

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The total semester hours for the first year is 32.
<table>
<thead>
<tr>
<th>Third Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan and Organization of a School Shop 347</td>
<td>2</td>
</tr>
<tr>
<td>Course Making in Vocational Industrial Education 351</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Labor Problems 325A</td>
<td>2</td>
</tr>
<tr>
<td>American National Government 230, or American State and Local Government 231</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>Coordinated Industry 350 and 352</td>
<td>6</td>
</tr>
<tr>
<td>**Electives (shop)</td>
<td>6</td>
</tr>
<tr>
<td>†Electives (non-shop)</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>33</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fourth Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Teaching of Vocational Industrial Education 352</td>
<td>2</td>
</tr>
<tr>
<td>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
<tr>
<td>Basic Elements of a Guidance Program 323A</td>
<td>2</td>
</tr>
<tr>
<td>**Electives (shop)</td>
<td>3</td>
</tr>
<tr>
<td>†Electives (non-shop)</td>
<td>6</td>
</tr>
<tr>
<td>Integrated Professional Education 370 A, B, and C</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>31</td>
</tr>
</tbody>
</table>

Total of 128 Semester Hours for Graduation.

*Twelve class hours of physical education are required.

**Students are encouraged and requested to elect at least six hours of mechanical drawing.

†Students are urged to use some of the non-shop electives in the study of mathematics, the number of hours depending on high school preparation.

††A course in library methods is required.
RURAL ELEMENTARY CURRICULUM (Two Years)†

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." This curriculum includes the 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.

<table>
<thead>
<tr>
<th>Group I. English1</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A (in addition)</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group II. Science2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Sociology 220</td>
<td>3</td>
</tr>
<tr>
<td>Rural Economics 230</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group III. Social Science3</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Sociology 220</td>
<td>3</td>
</tr>
<tr>
<td>Rural Economics 230</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group IV. Education4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum 140</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Directed Teaching 240</td>
<td>3</td>
</tr>
<tr>
<td>Directed Teaching 241</td>
<td>4</td>
</tr>
<tr>
<td>Rural Education 340</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Groups V and VI. Fine and Practical Arts5</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal and Social Problems 120 or equivalent</td>
<td>1</td>
</tr>
<tr>
<td>Elective</td>
<td>5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group VII. Physical Education and Health6</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Men must complete eight class hours Physical Education weekly during four semesters of residence.</td>
<td></td>
</tr>
<tr>
<td>Women: Physical Education 100, Rural School Physical Education 233, and an elective.</td>
<td></td>
</tr>
</tbody>
</table>

Library Methods Non-credit

Electives7

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

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

1. Fundamentals of Speech 105A; Chief American Poets 121; American Prose 122; Reading Interests of Children 202; Literature for Children 203.
2. Rural School Agriculture 105 or Nature Study 231A, or Nature Study 231B; Introductory Geography 105A; Health Education 265 or Hygiene 112.
3. United States History 201B and "... a course of six one hour lectures or the equivalent shall be given in political science. ..."—Michigan School Laws, Section 898, Revision of 1940.
4. Arithmetic 101; Psychology of Reading 212; Human Growth and Development 251. Those selected students permitted to do Directed Teaching 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...
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.
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.
BUSINESS ADMINISTRATION

First Year

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

Second Year

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

BUSINESS ADMINISTRATION

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

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

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>Trigonometry and College Algebra 103A, College Algebra and Analytic Geometry 103B</td>
<td>10</td>
</tr>
<tr>
<td>or College Algebra and Analytic Geometry 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>Language or Literature</td>
<td>6–8</td>
</tr>
<tr>
<td>Ancient and Medieval Civilization 105A, B</td>
<td>6</td>
</tr>
<tr>
<td>or Modern Europe, 108A, B</td>
<td>6</td>
</tr>
<tr>
<td>or English History 109A, B</td>
<td>6</td>
</tr>
<tr>
<td>Elective</td>
<td>4–0</td>
</tr>
</tbody>
</table>
Second Year

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

DENTISTRY

(Combined Curriculum in Letters and Dentistry)

First Year

Semester Hours
Rhetoric 106A, B ........................................ 6
General Biology 100A, B .................................. 8
Elective* .................................................. 2

Second Year

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

Third Year

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

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

ENGINEERING

(Combined Curriculum in Letters and Engineering)

University of Michigan

First Year

Semester Hours
Rhetoric 106A, B ........................................ 6
Trigonometry and College Algebra 103A, College Algebra and Analytic Geometry 103B ......................... 10
or
College Algebra and Analytic Geometry 104A, B ........................................ 8
General Chemistry 100A, B, or 101A, B .................. 8
Mechanical and Machine Drawing 221 .......................... 2
Descriptive Geometry 222 ................................ 3
Elective .................................................. 2–4
### Second Year

**Chemical and Metallurgical**

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

### Third Year

**Chemical and Metallurgical**

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

### Second Year

**Aeronautical, Civil, Electrical, Marine, and Mechanical**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus 205A, B</td>
<td>8</td>
</tr>
<tr>
<td>Mechanics, Heat, and Sound 203A, Electricity and Light 203B</td>
<td>8</td>
</tr>
<tr>
<td>Problems 204A, B</td>
<td>2</td>
</tr>
<tr>
<td>Engineering Materials 210</td>
<td>3</td>
</tr>
<tr>
<td>Metal Processing 211</td>
<td>2</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A</td>
<td>3</td>
</tr>
<tr>
<td>Group I elective</td>
<td>6–8</td>
</tr>
</tbody>
</table>

### Third Year

**Aeronautical, Civil, Electrical, Marine, and Mechanical**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>8</td>
</tr>
<tr>
<td>or Group III elective</td>
<td>6</td>
</tr>
<tr>
<td>Differential Equations 321 or elective</td>
<td>3</td>
</tr>
<tr>
<td>Statics 320 or elective</td>
<td>3</td>
</tr>
<tr>
<td>Theoretical Mechanics 425 or elective</td>
<td>3</td>
</tr>
<tr>
<td>Elective to total</td>
<td>6–8</td>
</tr>
</tbody>
</table>

**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

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>General Biology 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Trigonometry and College Algebra 103A, B, or College Algebra and Analytic Geometry 104A, B</td>
<td>8–10</td>
</tr>
<tr>
<td>General Mechanical Drawing 120</td>
<td>2</td>
</tr>
<tr>
<td>Elective (to be selected from literature or language)</td>
<td>4–6</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry 100A, B, or 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>Botany 221A, B</td>
<td>8</td>
</tr>
<tr>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Elective (to be selected from physics; Botany 222; Speech 105A, B; Sociology 241, 242; literature or language)</td>
<td>8</td>
</tr>
</tbody>
</table>

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Geology 230</td>
<td>3</td>
</tr>
<tr>
<td>Surveying 210</td>
<td>3</td>
</tr>
<tr>
<td>Elective (to be selected from American Government 230, American State and Local Government 231; Geology 230A, B; Organic Chemistry 306A, B; Zoology 242; Botany 335; Geography 312 or 325)</td>
<td>24</td>
</tr>
</tbody>
</table>

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

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>General Biology 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>or General Chemistry 100A, B, or 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>United States History 201A, B</td>
<td>6</td>
</tr>
<tr>
<td>French, German, or Spanish 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Elective</td>
<td>2–3</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief American Poets 121 or American Prose 122</td>
<td>3</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Sociology 241</td>
<td>3</td>
</tr>
</tbody>
</table>
LAW

Modern Social Problems 242 .............................................. 3
American National Government 230 ..................................... 3
American State and Local Government 231 ........................... 3
Principles of Economics 220A, B ......................................... 6
Economic History of the United States 312 ............................. 3
Elective ................................................................. 3-4

Note.—1. Since journalists are using the typewriter constantly, it is of great advantage to the student to acquire facility in typing. It is strongly recommended that the student who is not already a proficient typist take a course in typewriting.

2. Northwestern University requires a reading knowledge of a modern language or two years of college work in one language.

---

LAW
(Combined Curriculum in Letters and Law)
University of Michigan Law School
College of Law, University of Illinois

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Trigonometry and College Algebra 103A, College Algebra and Analytic Geometry 103B</td>
<td>10</td>
</tr>
<tr>
<td>or College Algebra and Analytic Geometry 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>General Chemistry 100A, B, or 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>or Physical Science 100A, B</td>
<td>6</td>
</tr>
<tr>
<td>or General Biology 100A, B</td>
<td>6</td>
</tr>
<tr>
<td>English History 109A, B</td>
<td>8</td>
</tr>
<tr>
<td>Latin, French, German, or Spanish 100A, B (Latin preferred)</td>
<td>8</td>
</tr>
</tbody>
</table>

Second Year

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

Third Year

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

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 include the following:

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>English</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chemistry</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Physics</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Biology</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>French, German, or Spanish</td>
<td>12-16</td>
</tr>
<tr>
<td></td>
<td>Elective to total</td>
<td>90</td>
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</tbody>
</table>

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.*

<table>
<thead>
<tr>
<th>First Year Semester Hours</th>
<th>Rhetoric 106A, B .................</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Biology 100A, B ..........</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>General Chemistry 100A, B, or 101A, B</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>French or German ................</td>
<td>8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Year Semester Hours</th>
<th>English Literature 107A ..........</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mechanics, Sound, and Heat 203A, Electricity and Light 203B</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Qualitative Analysis 201, Quantitative Analysis 202</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>French or German ................</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Elective ..........................</td>
<td>2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th>English Literature 107B ..........</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Organic Chemistry 306A, B ........</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
</tbody>
</table>
Principles of Sociology 241 .................................................. 3
General Psychology 200 ..................................................... 3
Anatomy 211A ................................................................. 4

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>Semester 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>or Trigonometry and College Algebra 103A, College Algebra and Analytic Geometry 103B</td>
<td>10</td>
</tr>
<tr>
<td>or College Algebra and Analytic Geometry 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>General Chemistry 100A, B, or 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>General Biology 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Group I elective</td>
<td>4-6</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester 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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</tbody>
</table>

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</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>
</tr>
<tr>
<td>Elective</td>
<td>2</td>
</tr>
</tbody>
</table>
Fourth Year

Medical Technology 335 (400) .................................................. 30

During the fourth year, the student registers for Medical Technology 335 (400), a twelve months' course given in the laboratory training school of the Michigan Department of Health and/or approved hospital training schools.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>General Biology 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Modern European History 108A, B</td>
<td>6</td>
</tr>
<tr>
<td>Elective*</td>
<td>12</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy and Physiology (for Nurses) 213</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry (for Nurses) 106</td>
<td>3</td>
</tr>
<tr>
<td>Bacteriology (for Nurses) 214</td>
<td>3</td>
</tr>
<tr>
<td>Sociology (for Nurses) 244</td>
<td>2</td>
</tr>
<tr>
<td>Nutrition 219</td>
<td>2</td>
</tr>
<tr>
<td>General Psychology (for Nurses) 202</td>
<td>2</td>
</tr>
</tbody>
</table>

Third and Fourth Years at Bronson Hospital

Fifth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English or foreign language</td>
<td>12</td>
</tr>
<tr>
<td>Survey of American Government 234</td>
<td>2</td>
</tr>
<tr>
<td>Modern Social Problems 242</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>15</td>
</tr>
</tbody>
</table>

Note.—1. *General Chemistry 100A, B is required unless high-school chemistry was presented for entrance.
2. In addition to the 80 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.

<table>
<thead>
<tr>
<th></th>
<th>First Year</th>
<th>Second Year</th>
<th>Third and Fourth Year</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fundamentals of Speech 105A</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Biology 100A, B</td>
<td>8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elementary Design 215</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ceramics and Jewelry 225</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Printing 140A</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Electives from Group I</td>
<td>4 or 7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anatomy and Physiology (for Occupational Therapists) 215</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinesiology 216A</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theory of Occupational Therapy 210A, B</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Special Education Shop 208</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Therapeutic Crafts 220, 221 or 222</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stitchery 223</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rug Making 224</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Basketry 226</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leatherwork 227</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Elective</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kinesiology 216B</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Political Science</td>
<td>2-3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weaving 228</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Training (at affiliating hospitals)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neurology and Psychiatry 330</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Subjects 332</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clinical Observations 334</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Service in Hospitals 351</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hospital Case Studies 352</td>
<td>3-4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Undifferentiated Credit</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theory of Occupational Therapy 310</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bookbinding 229</td>
<td>2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Elective from Group I** .......................................................... 5
**Elective** .................................................................................. 9

**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>
</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>Psychology of Personality 209 or Introduction to Mental Hygiene 235</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>
</tr>
</tbody>
</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 three 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-group Group 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>
</tbody>
</table>
Fourth Year

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

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

2. The required courses in this curriculum provide for a social science major of 34 or 35 semester hours and a minor in social work of 18 semester hours. Some 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 elections from such tool subjects as the following may well be considered. Elementary Typewriting 101A, Home and Its Management 222, Economics of Consumption 223, Community Recreation, Scouting, and Campfire 276, Laboratory and Psychological Testing 302, Clinical Psychology 309, Human Genetics 306, and Labor Problems 325A, B. Some students in their senior year may find it advisable also to elect some of the more specialized courses in social work offered in the Graduate Division.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Voice 45A, B</td>
<td>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>Piano Class 117A, B</td>
<td>2</td>
</tr>
<tr>
<td>English Diction and Song Literature 122A, B</td>
<td>0</td>
</tr>
<tr>
<td>Elective</td>
<td>12</td>
</tr>
</tbody>
</table>

Library Methods

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice 46A, 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>Italian Diction and Song Literature 222A, B</td>
<td>0</td>
</tr>
<tr>
<td>English Literature 107A, B</td>
<td>6</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>General Literature 124A, B</td>
<td>6</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Nineteenth Century Prose 205A, B</td>
<td>4</td>
</tr>
<tr>
<td>Elective</td>
<td>6</td>
</tr>
</tbody>
</table>
### Third Year

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

### Fourth Year

- Voice, 48A, B .................................................. 6
- Orchestration 355A, B ..................................... 6
- History of Music 357A, B ................................... 6
- Advanced Conducting 351A, B ................................. 2
- German Diction and Song Literature 324A, B ............ 0
- Elective ....................................................... 12

---

**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.

### MUSIC

**B.M. Degree with an Instrumental Major***

#### First Year

| Rhetoric 106A, B | 6 |
| Major Performance, level 5, A, B | 4 |
| Freshman Theory 106A, B | 6 |
| Elementary Acoustics 110 | 2 |
| Elective | 14 |

**Library Methods**

#### Second Year

| Major Performance, level 6, A, B | 4 |
| Advanced Sight-Singing and Ear-Training 205A, B | 4 |
| Advanced Harmony 206A, B | 6 |
| Music Literature 207A, B | 6 |
| Elective | 12 |

#### Third Year

| Major Performance, level 7, A, B | 6 |
| Counterpoint 305A, B | 6 |
| Composition 306A, B | 6 |
| Style and Structure 310A | 3 |
## MUSIC

### Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>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.

## MUSIC

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

### 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 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>
<tr>
<td>Library Methods</td>
<td></td>
</tr>
</tbody>
</table>

### Second Year

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

### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Music</td>
<td>6</td>
</tr>
<tr>
<td>Counterpoint 305A, B</td>
<td>6</td>
</tr>
<tr>
<td>Composition 306A, B</td>
<td>6</td>
</tr>
<tr>
<td>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>Elective</td>
<td>10</td>
</tr>
</tbody>
</table>
**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>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>General Biology 100A, B or General Chemistry 100A, B</td>
<td>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>Physical Education</td>
<td></td>
</tr>
</tbody>
</table>

**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>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>
</tbody>
</table>

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

**Third Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reading Interests of Youth 302</td>
<td>3</td>
</tr>
<tr>
<td>or 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>Course</td>
<td>Credits</td>
</tr>
<tr>
<td>-------------------------------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>Cataloging and Classification</td>
<td>3</td>
</tr>
<tr>
<td>Rural Economics</td>
<td>3</td>
</tr>
<tr>
<td>Rural Sociology</td>
<td>3</td>
</tr>
<tr>
<td>American Rural Government</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>5</td>
</tr>
<tr>
<td><strong>Fourth Year</strong></td>
<td></td>
</tr>
<tr>
<td>Library in the Modern Community</td>
<td>2</td>
</tr>
<tr>
<td>Administration of County Libraries</td>
<td>3</td>
</tr>
<tr>
<td>Public Speaking</td>
<td>2</td>
</tr>
<tr>
<td>Curriculum Enrichment</td>
<td>3</td>
</tr>
<tr>
<td>Reading Interest of Adults</td>
<td>2</td>
</tr>
<tr>
<td>Library Observation and Practice</td>
<td>3</td>
</tr>
<tr>
<td>Electives (English or History)</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
</tr>
</tbody>
</table>

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

Western Michigan College of Education accepts as one of its functions the training, on a pre-service as well as in-service basis, of teachers and other persons interested in acquiring technical instruction of a highly specialized character. At present there is a fairly wide range of instructional programs offered in Business 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, and recommendation of the high school principal.

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 administrative 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 TECHNICAL 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.

Students can begin courses on the first day of any calendar week following proper enrollment and payment of tuition and fees. Regular college entrance requirements need not be met, but high school graduation, recommendation of high school principal, and approval of the Department of Industrial Education are necessary.

BUSINESS ADMINISTRATION

B.S. Degree

General Requirements for all majors in Business Administration

First and Second Years

Semester Hours

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>*Statistical and Financial Ratios 235</td>
<td>3</td>
</tr>
<tr>
<td>*Description of Industry 120A, B</td>
<td>4</td>
</tr>
<tr>
<td>Accounting Principles 210A, B</td>
<td>6</td>
</tr>
<tr>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>**Business Insurance and Taxes 222</td>
<td>3</td>
</tr>
<tr>
<td>Business Correspondence 232</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A, B</td>
<td>6</td>
</tr>
<tr>
<td>Language or Literature</td>
<td>6</td>
</tr>
<tr>
<td>***Math. sequence A, B, or C (See Major requirements)</td>
<td>8</td>
</tr>
<tr>
<td>Library Methods</td>
<td>0</td>
</tr>
<tr>
<td>Electives (See Major requirements)</td>
<td>6-16</td>
</tr>
</tbody>
</table>

Third and Fourth Years

**Economic Geography 218 or 318                              | 3     |
| General Psychology 200                                      | 3     |
| ***Math. Sequence A, B, or C                                | 3-7   |
| **American National Government 230                          | 3     |
| **American State and Local Government 231                   | 3     |
| **Economic History of the United States 312                 | 3     |
| Business Law 330A, B                                        | 6     |
| Business Problems 339                                       | 3     |
| Electives (See Major requirements)                          | 29-32 |

*May be waived with consent of adviser or department concerned.

**Not required of secretarial science or office management majors.

***Accounting Majors are required to take Math. Sequence A or B. Other majors in Business Administration may elect Math. Sequence A or B but are required to take only Math. Sequence C.

1. Math. Sequence A is based upon one and one halfl year year of highschool algebra and one year of highschool geometry and consists of (a) Trigonometry and College
Algebra 103A, B, ten hours, or College Algebra and Analytic Geometry 104A, B, eight hours; (b) Mathematics of Finance 227, three hours; (c) Mathematics of Insurance 228, two hours; (d) Statistics 209 or 211, three hours. Note: This sequence will provide a minor in mathematics.

2. Math. Sequence B is for those students who present at least one year of highschool mathematics, but less than two and one-half years of highschool mathematics, and consists of (a) Introduction to College Mathematics 105A, B, eight hours; (b) Mathematics of Finance 227, three hours; (c) Mathematics of Insurance 228, two hours; (d) Statistics 209 or 211, three hours.

3. Math. Sequence C consists of (a) Business Mathematics 120; (b) Statistical and Financial Ratios 212.

Majors in Business Administration

I. Accounting: Accounting 210A, B; 310A, B; Cost 311, Tax 312 (18 hours plus 6 hours in Law 320A, B.) Math. Sequence A or B.

II. Air Transportation: See adviser for fulfilling Business Administration major requirements while pursuing the Air Transportation curriculum.

III. General Business: Money and Credit 221A, B; Business Administration 321; Corporations 322; Marketing 323; Transportation 324; Labor Problems 325A, B and Business and Government 326. Or select 12 hours from Accounting 310A, B, 311, 312; Personnel Administration 336, Office Machines 230A, B; Office Organization and Management 239 or other Business studies courses upon consent of adviser. Select 12 hours.

IV. Office Management: Accounting 310A, B or 311, 312; *Office Machines 230A, B; *Office Organization and Management 239; *Personnel Administration 336; *Psychology of Personality 207; Filing Principles and Techniques 236; Proficiency in Typewriting or 101A and 101B; Applied Psychology 204; Psychology of Personnel Methods 407. Select 24 hours. Starred courses required.

V. Secretarial Science: *Secretarial Science 130A, B; *Office Machines 230A, B; *Office Organization and Management 239; *Filing Techniques 236; *Personnel Administration 336; *Psychology of Personality 207; Applied Psychology 204; Psychology of Personnel Methods 407. Select 24 hours. Starred courses required.

VI. Retailing: Fundamentals of Retailing 140; Retail Credit and Collections 241; Store Organization 251; Retail Publicity 240; Retail Salesmanship 150; Merchandise and Job Analysis 151A, B; Retail Merchandise Math. 111; Interior Window Display 224; Selling Home Furnishings 242. Select 12 hours.

1. It is possible for the Business Administration Major to prepare for specific business and industrial openings by a judicious selection of courses for his minors. A specific example would be preparation for office or sales work with a pharmaceutical firm. Courses in chemistry and related sciences would be valuable background. Proper sequence of courses can be worked out with major and minor advisors.

2. Minors in each of the above major areas will be composed of 15 hours in each specific major field as approved by the minor advisor.

3. Physical education: Women are requested 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.

4. A course in library methods is required.
The terminal programs are divided into two major areas: The cooperative work-and-study programs now found in the Retailing and in the Secretarial Curricula, and the regular college classroom programs. Although the enrollment in the cooperative curricula is limited, the student is urged to qualify for these fields whenever possible.

Any high school graduate is eligible for admission to the Terminal Business Curricula provided he has been recommended by his high school principal. Students who wish to qualify for the cooperative program must meet certain standards as established by the Division of Vocational Education. Course credit work taken on the Terminal program, whether it is cooperative or non-cooperative, may be applied toward degree requirements provided regular college entrance requirements are met.

All graduates of the two-year Business Terminal Programs receive a certificate and diploma indicating the field of specialization they have completed.

General Requirements for all Enrollees on the Regular (Non-cooperative) Terminal Business Curricula

<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>Description of Industry 120A, B</td>
<td>4</td>
</tr>
<tr>
<td>Business Mathematics 120</td>
<td>2</td>
</tr>
<tr>
<td>Statistical and Financial Ratios 212</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>15</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Accounting 210A, B</td>
<td>6</td>
</tr>
<tr>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Business Insurance and Taxes 222</td>
<td>3</td>
</tr>
<tr>
<td>Business Correspondence 232</td>
<td>3</td>
</tr>
<tr>
<td>Business Problems 329</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
</tr>
</tbody>
</table>

Fields of Specialization in Technical Business Curricula

The student, with the aid of his counselor, may use his electives to specialize in one of the several fields of business training available on the terminal level. The areas of specialization are listed below:

1. Clerical Accounting: On this program Accounting 210A, B must be taken during freshman year. Electives: Typewriting 101A, B; Accounting 310A, B or Cost 311; Secretarial Practice 230A, B; Business Law 320A, B; Money and Credit 221A, B; Office Management 239 or other Business studies on consent of adviser.
2. General Business: Select from Personnel Administration 336; Office Management and Organization 239; Business Law 320A, B; Money and Credit 221A, B; Labor Problems 325A, B; Business and Government 326; Typewriting 101A, B; Psychology of Personality 207; Applied Psychology 204.

3. *Secretarial Training: Secretarial Science 130A, B; Secretarial Practice 230A, B; Filing Techniques 236; Office Organization and Management 239; General Psychology 200.

4. *Retailing: Select from Retailing Courses with consent of advisor.

5. General Clerical: Office Machines 230A, B; Typewriting 101A, B; Filing Techniques 236; Office Organization and Management 239; Cost Accounting 311.

*Students who wish to elect the Secretarial Training or Retailing Terminal Curricula must, at the present time, qualify for the Cooperative Work-Study curricula described below. Since the enrollment in the work-study curricula are definitely limited, students should make application at least thirty days before the date of actual matriculation.

**COOPERATIVE PROGRAM IN RETAILING (Two Years)**

The work-study program in retailing embraces a two-year course which combines classroom instruction at the college in the morning, and, with the cooperation of the merchants of Kalamazoo, employment for actual experience in the local stores during the afternoon and Saturday.

Students enrolled in this 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 as their schedules, abilities, and work programs will permit.

**First Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Merchandise Mathematics 111</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Retailing 140</td>
<td>3</td>
</tr>
<tr>
<td>Retail Salesmanship 150</td>
<td>3</td>
</tr>
<tr>
<td>Merchandise and Job Analysis 151A, B</td>
<td>4</td>
</tr>
<tr>
<td>Personal and Social Problems 120</td>
<td>1</td>
</tr>
<tr>
<td>Rhetoric</td>
<td>3</td>
</tr>
<tr>
<td>Business Mathematics 120</td>
<td>3</td>
</tr>
<tr>
<td>Business Correspondence 232</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>8</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior and Window Display 224</td>
<td>2</td>
</tr>
<tr>
<td>Retail Credit and Collections 241</td>
<td>3</td>
</tr>
<tr>
<td>Store Organization 251A, B</td>
<td>4</td>
</tr>
<tr>
<td>Retail Advertising 240</td>
<td>2</td>
</tr>
<tr>
<td>Coordinated Business Experience 200A, B</td>
<td>2</td>
</tr>
<tr>
<td>Retail Personnel Management 252</td>
<td>2</td>
</tr>
<tr>
<td>Electives—Recommended</td>
<td>15</td>
</tr>
</tbody>
</table>
COOPERATIVE PROGRAM IN SECRETARIAL TRAINING (Two Years)

The work-study program in Secretarial Training embraces a two-year course which combines classroom instruction at the college in the morning and employment for actual on-the-job experience in local offices during the afternoon of the student's sophomore year.

Students enrolled in this course will have the opportunity to elect such other college courses as will fit their needs and as their schedules, abilities, and work programs will permit. The advantages of social and cultural contacts of regular college students are open to all students on this program. The college and departmental placement offices are available in aiding the students to secure suitable full-time positions upon graduation.

### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Description of Industry 120A, B</td>
<td>4</td>
</tr>
<tr>
<td>Business Mathematics 120</td>
<td>2</td>
</tr>
<tr>
<td>*Secretarial Science 130A, B</td>
<td>10</td>
</tr>
<tr>
<td>Personal and Social Problems 120</td>
<td>1</td>
</tr>
<tr>
<td>Elective</td>
<td>7</td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Secretarial and Accounting 211A, B</td>
<td>6</td>
</tr>
<tr>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Office Machines 230A, B</td>
<td>4</td>
</tr>
<tr>
<td>Filing Principles and Techniques 236</td>
<td>2</td>
</tr>
<tr>
<td>Coordinating Business Experience 200A, B</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>10</td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
</tbody>
</table>

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 advisor before making their selections for electives.
3. Physical education for students in Secretarial Training and Retailing: Women are required to take four class hours, including Physical Education 100 and one individual sport. Men are required to take three class hours and may elect three class hours in addition.
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 |
| Clothing Clinic and Textiles 103 | .................. | 3 |
| Elementary Design 105 | .................. | 2 |
| Foods 111 | .................. | 3 |
| Hygiene 112 | .................. | 2 |
| Rhetoric 106A | .................. | 3 |
| General Biology 100A | .................. | 4 |
| Elective (to be selected from history, English, or speech) | .................. | 3 |

Second Semester

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

Second Year

First Semester

| Clothing 205 | .................. | 3 |
| Nutrition 222 | .................. | 2 |
| Costume Design 209 | .................. | 2 |
| Home Furnishings 221 | .................. | 2 |
| Home Nursing 223 | .................. | 2 |
| American State and Local Government 231 | .................. | 3 |
| Elective (to be selected from economics or sociology) | .................. | 3 |
| Elective (to be selected from English, speech, history, or science) | .................. | 5 |

Physical Education
AIRLINE HOSTESS CURRICULUM

Second Semester

Clothing 205 ......................................................... 3
or
Nutrition 222 ......................................................... 2
Costume Design 209 .................................................. 2
or
Home Furnishings 221 .............................................. 2
Human Growth and Development 251 ............................. 3
Household Physics 202 ............................................ 2
Elective (to be selected from economics or sociology) ........ 3
Elective (to be selected from English, speech, history, or science) 3
Physical Education

AIRLINE HOSTESS CURRICULUM (Three Years)

A program for women desiring a practical educational background to qualify for airline hostess employment with commercial airlines. In addition to being a high school graduate, candidates for this curriculum must meet special airline physical requirements pertaining to height, eyesight, voice, and appearance.

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhetoric 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Speech 105A, B</td>
<td>6</td>
</tr>
<tr>
<td>Hygiene 112</td>
<td>2</td>
</tr>
<tr>
<td>Business Mathematics 120</td>
<td>2</td>
</tr>
<tr>
<td>Introductory Geography 105A</td>
<td>3</td>
</tr>
<tr>
<td>Elementary Aviation 110</td>
<td>3</td>
</tr>
<tr>
<td>*Typing 101A, B</td>
<td>2-4</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
</tbody>
</table>

*Students who have had one or more years of typewriting in high school will not register for Typing 101A.

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Psychology (for nurses) 202</td>
<td>3</td>
</tr>
<tr>
<td>Psychology of Personality 207</td>
<td>3</td>
</tr>
<tr>
<td>Secretarial Accounting 211A, B</td>
<td>6</td>
</tr>
<tr>
<td>Secretarial Practice 230A, B</td>
<td>4</td>
</tr>
<tr>
<td>First Aid 171A, B</td>
<td>2</td>
</tr>
<tr>
<td>Principles of Food Preparation 111</td>
<td>3</td>
</tr>
<tr>
<td>Meteorology &amp; Navigation 302</td>
<td>3</td>
</tr>
<tr>
<td>Personality Development 224</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
</tbody>
</table>
### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociology (for nurses) 244</td>
<td>2</td>
</tr>
<tr>
<td>American National Government 230</td>
<td>3</td>
</tr>
<tr>
<td>Anatomy and Physiology (for nurses) 213</td>
<td>4</td>
</tr>
<tr>
<td>Business Correspondence and Report Writing 232</td>
<td>3</td>
</tr>
<tr>
<td>*Business Law 320A, B</td>
<td>6</td>
</tr>
<tr>
<td>Radio Communication 301</td>
<td>2</td>
</tr>
<tr>
<td>Air Traffic and Cargo 304</td>
<td>2</td>
</tr>
<tr>
<td>Control Tower Operation 307</td>
<td>2</td>
</tr>
<tr>
<td>Air Transportation Economics 306</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
</tbody>
</table>

Students interested in taking stenography training may substitute Shorthand 101A, B, and Secretarial Science 130A, B for the starred courses.

Note.—Whenever practicable, students are urged to select Pilot Training and Flight Theory 214A or 214D and one foreign language.

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### AIR TRANSPORTATION CURRICULUM

**B.S. Degree**

The Air Transportation Curriculum is a four-year course leading to a B.S. degree. It is designed to train students to manage and operate airports and for various administrative, supervisory, and sales positions in the business field of aviation. In addition to meeting the necessary requirements for a Bachelor of Science degree, the curriculum requires concentration in four areas—mechanics, pilot training, business administration, and airport operation. Sufficient work is given in mechanics to meet the requirements for a CAA airplane and engine mechanics license. A minimum of 35 hours of flight training leading to a private pilot's license is required of all students.

#### First Year

<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 106A</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics of Buying and Investment 200</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Structures 103</td>
<td>2</td>
</tr>
<tr>
<td>Elementary Aviation 110</td>
<td>3</td>
</tr>
<tr>
<td>Aircraft Electricity and Instruments 201</td>
<td>2</td>
</tr>
<tr>
<td>Engine Assembly and Disassembly 106</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>10</td>
</tr>
<tr>
<td>Physical Education</td>
<td>32</td>
</tr>
<tr>
<td>Second Year</td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>Principles of Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Accounting 210A</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 214A</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Sheetmetal 202</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Welding 102</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Hydraulics and Brakes 200</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>32</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Third Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Office Organization and Management 239</td>
<td>3</td>
</tr>
<tr>
<td>Cost Accounting 311</td>
<td>3</td>
</tr>
<tr>
<td>Labor Problems 325A, B</td>
<td>4</td>
</tr>
<tr>
<td>Business Correspondence and Report Writing 232</td>
<td>3</td>
</tr>
<tr>
<td>Tax Accounting 312</td>
<td>3</td>
</tr>
<tr>
<td>Radio Communications 301</td>
<td>3</td>
</tr>
<tr>
<td>Meteorology and Navigation 302</td>
<td>3</td>
</tr>
<tr>
<td>Carburetion and Lubrication 104</td>
<td>2</td>
</tr>
<tr>
<td>Engine Overhaul 206</td>
<td>2</td>
</tr>
<tr>
<td>Ignition and Accessories 105</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>32</td>
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</table>

<table>
<thead>
<tr>
<th>Fourth Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Administration 336</td>
<td>3</td>
</tr>
<tr>
<td>Business Administration 321</td>
<td>3</td>
</tr>
<tr>
<td>Business Law 320</td>
<td>3</td>
</tr>
<tr>
<td>Airport Selection and Layout 303</td>
<td>2</td>
</tr>
<tr>
<td>Air Traffic and Cargo 304</td>
<td>2</td>
</tr>
<tr>
<td>Airport Management 305</td>
<td>2</td>
</tr>
<tr>
<td>Air Transportation Economics 306</td>
<td>2</td>
</tr>
<tr>
<td>Control Tower Operation 307</td>
<td>2</td>
</tr>
<tr>
<td>Engine Operation 204</td>
<td>2</td>
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<tr>
<td>Aircraft Maintenance 303</td>
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<td>Elective</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>32</td>
</tr>
</tbody>
</table>

Note.—Minimum of 128 semester hours. Major of at least 40 semester hours in aviation. Two minors of 16 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 V, VI, and VII. Group requirements must be met.
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.

A student who is recommended may write the government-sponsored examinations for the airplane mechanic's or the airplane-engine mechanic's license. A diploma is granted upon successful completion of the course. Whenever practical students are advised to complete one semester of Pilot Training. (Course 214 A, B, C, or D.)

First Year—Aircraft

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Aviation 110</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 171</td>
<td>3</td>
</tr>
<tr>
<td>Aircraft Drawing 101</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Welding 102</td>
<td>3</td>
</tr>
<tr>
<td>Aircraft Structures 103</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft Hydraulics and Brakes 200</td>
<td>3</td>
</tr>
<tr>
<td>Aircraft Electricity and Instruments 201</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Sheetmetal 202</td>
<td>4</td>
</tr>
<tr>
<td>Aircraft Maintenance 203</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>15</td>
</tr>
</tbody>
</table>

Second Year—Engine

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carburetion and Lubrication 104</td>
<td>2</td>
</tr>
<tr>
<td>Ignition and Accessories 105</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 173A</td>
<td>3</td>
</tr>
<tr>
<td>Engine Assembly and Disassembly 106</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>14</td>
</tr>
</tbody>
</table>
AIR CONDITIONING AND REFRIGERATION CURRICULUM

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine Operation 204</td>
<td>4</td>
</tr>
<tr>
<td>Propellers 205</td>
<td>2</td>
</tr>
<tr>
<td>Shop English 278</td>
<td>4</td>
</tr>
<tr>
<td>Engine Overhaul 206</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>16</td>
</tr>
</tbody>
</table>

Summer Session

(one summer session required)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft Servicing 300</td>
<td>6</td>
</tr>
</tbody>
</table>

Note.—Pilot training is available to any student wishing to secure some flight experience or a private, commercial or instructor's license. All students enrolled in one of the curriculums offered by the college is eligible for flight training. For a description of flight course see page 299.

AIR CONDITIONING AND REFRIGERATION CURRICULUM (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.

First Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Conditioning 115A</td>
<td>6</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 171</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 173A</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Air Conditioning 115B</td>
<td>6</td>
</tr>
<tr>
<td>Drawing 170B</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 172</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 173B</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigeration Service 215A</td>
<td>6</td>
</tr>
<tr>
<td>Shop Mathematics 271</td>
<td>3</td>
</tr>
<tr>
<td>Sheetmetal 275</td>
<td>3</td>
</tr>
<tr>
<td>Welding 274</td>
<td>3</td>
</tr>
</tbody>
</table>
Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refrigeration Service 215B</td>
<td>6</td>
</tr>
<tr>
<td>Machine Shop 176A</td>
<td>3</td>
</tr>
<tr>
<td>Shop English 278</td>
<td>3</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
</tbody>
</table>

**DRAFTING CURRICULUM (Two Years)**

A two-year curriculum offered to students wishing to become industrial draftsmen. The curriculum embodies work in machine, tool, and die design fields of the industrial drafting trade.

**First Year**

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Drafting 120A</td>
<td>6</td>
</tr>
<tr>
<td>Machine Shop 176A</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 171</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 173A</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Drafting 120B</td>
<td>6</td>
</tr>
<tr>
<td>Machine Shop 176B</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 172</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 173B</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Year**

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Drafting 220A</td>
<td>6</td>
</tr>
<tr>
<td>Welding 274</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 271</td>
<td>3</td>
</tr>
<tr>
<td>Shop English 278</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Drafting 220B</td>
<td>6</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 272</td>
<td>3</td>
</tr>
<tr>
<td>Sheetmetal 275</td>
<td>3</td>
</tr>
</tbody>
</table>
LINOTYPE CURRICULUM (Two Years)

This two-year curriculum is designed specifically for those who wish to become linotype operators. Practical work experience and essential technical related knowledge is provided to master the necessary skills to operate a linotype for all types of composition.

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elementary Linotype Composition 125</td>
<td>6</td>
</tr>
<tr>
<td>Elementary Hand Composition 126A</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 171</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 173A</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Semester

| Linotype Newspaper Composition 127 | 6 |
| Advanced Hand Composition 126B | 3 |
| Shop Mathematics 172 | 3 |
| Shop English 278 | 3 |

Second Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Linotype Job Composition 225</td>
<td>6</td>
</tr>
<tr>
<td>Linotype Maintenance 226A</td>
<td>3</td>
</tr>
<tr>
<td>Proofreading 227</td>
<td>3</td>
</tr>
<tr>
<td>Layout and Design 228A</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Semester

| Linotype Book Composition 229 | 6 |
| Linotype Maintenance 226B | 3 |
| Layout and Design 228B | 3 |
| Personnel Relations 279 | 3 |

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 practical work experience based upon the training needs of machine tool operators and tradesmen.

First Year

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Machine Shop 130A</td>
<td>6</td>
</tr>
<tr>
<td>Shop Mathematics 171</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 173A</td>
<td>3</td>
</tr>
</tbody>
</table>
Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Machine Shop 130B</td>
<td>6</td>
</tr>
<tr>
<td>Shop Mathematics 172</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 170B</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 173B</td>
<td>3</td>
</tr>
</tbody>
</table>
### SHEETMETAL CURRICULUM

#### Second Year

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio 235A</td>
<td>6</td>
</tr>
<tr>
<td>Shop Mathematics 271</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 273A</td>
<td>3</td>
</tr>
<tr>
<td>Radio Code 236</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio 235B</td>
<td>6</td>
</tr>
<tr>
<td>Shop Mathematics 272</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 273B</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>3</td>
</tr>
</tbody>
</table>

#### Third Year

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Radio 335A</td>
<td>6</td>
</tr>
<tr>
<td>Shop English 278</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Radio Theory 336A</td>
<td>3</td>
</tr>
<tr>
<td>Sheetmetal 275</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Radio 335B</td>
<td>6</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Radio Theory 336B</td>
<td>3</td>
</tr>
<tr>
<td>Machine Shop 176A</td>
<td>3</td>
</tr>
</tbody>
</table>

---

### SHEETMETAL CURRICULUM (One Year)

The sheetmetal curriculum is intended for those interested in entering the sheetmetal trade. Practical experience is provided in most phases of sheetmetal layout, construction of small production parts, heat and ventilating duct work and fabrication of sheetmetal cabinets.

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Sheetmetal 145</td>
<td>6</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 171</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 173A</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Sheetmetal 146</td>
<td>6</td>
</tr>
<tr>
<td>Drawing 170B</td>
<td>3</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
<tr>
<td>Welding 274</td>
<td>3</td>
</tr>
</tbody>
</table>
**TOOL AND DIE CURRICULUM (Two Years)**

The tool and die curriculum is designed for those intending to enter the tool and die trade. Practical experience is provided in designing and fabricating, tools, jigs, fixtures, and dies.

**First Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool Fabrication 150A</td>
<td>6</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 173A</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 171</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool Fabrication 150B</td>
<td>6</td>
</tr>
<tr>
<td>Drawing 170B</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 173B</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 172</td>
<td>3</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Die Making 250A</td>
<td>6</td>
</tr>
<tr>
<td>Drawing 270</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 271</td>
<td>3</td>
</tr>
<tr>
<td>Heat Treatment 231</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Second Semester</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Die Making 250B</td>
<td>6</td>
</tr>
<tr>
<td>Shop English 278</td>
<td>3</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
<tr>
<td>Welding 274</td>
<td>3</td>
</tr>
</tbody>
</table>

*Students enrolling in this curriculum must have had one year machine shop experience.

**WELDING CURRICULUM (One Year)**

A course intended specifically for those wishing to become certified gas and arc welders.

<table>
<thead>
<tr>
<th>First Semester</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Oxy-Acetylene Welding 165</td>
<td>6</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>3</td>
</tr>
<tr>
<td>Shop Mathematics 171</td>
<td>3</td>
</tr>
<tr>
<td>Shop Science 173A</td>
<td>3</td>
</tr>
</tbody>
</table>
Second Semester

Trade Arc Welding 166 ........................................... 6
Drawing 170B ..................................................... 3
Personnel Relations 279 ......................................... 3
Machine Shop 276A .............................................. 3
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

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WILLIAM R. BROWN
DEYO B. FOX
LEONARD C. KERCHER

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

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WILLIAM R. BROWN, Ph.D., Professor of English
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CHARLES H. BUTLER, Ph.D., Professor of Mathematics
MANLEY M. ELLIS, Ph.D., Professor of Education
DEYO B. FOX, Ph.D., Professor of Vocational and Practical Arts Education
ORIE I. FREDERICK, Ph.D., Professor of Education
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CHARLES C. GIBBONS, Ph.D., Professor of Psychology
GEORGE H. HILLIARD, Ph.D., Professor of Education
FRANK J. HINDS, A.M., Professor of Biology
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ROBERT M. LIMPUS, Ph.D., Professor of English
ARTHUR J. MANSKE, Ph.D., Professor of Education
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 NORRIS, Ph.D., Professor of Educational Administration
ROBERT R. RUSSEL, Ph.D., Professor of History
ARNOLD E. SCHNEIDER, Ph.D., Professor of Business Education
NANCY E. SCOTT, Ph.D., Professor of History
RUSSELL H. SEIBERT, Ph.D., Professor of History
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ALFRED R. THEA, A.M., Professor of Education
ADRIAN TRIMPE, A.M., Professor of Distributive Education
WILLIAM V. WEBER, PH.D., Professor of Political Science
WILBUR D. WEST, PH.D., Professor of Physical 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 undoubtedly 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 18, 1948, from 9 to 12 A.M. and from 1 to 4 P.M. Registration for the second semester will be on Saturday, February 5, 1949, 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 25, and will continue through Saturday, January 29. All Saturday classes for the second semester will begin on Saturday, February 12, and continue through Saturday, June 4. 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>Nonresidents</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>$65</td>
</tr>
<tr>
<td>2 Four hours</td>
<td>35</td>
<td>90</td>
</tr>
<tr>
<td>3 Five hours</td>
<td>40</td>
<td>100</td>
</tr>
<tr>
<td>4 Six hours</td>
<td>45</td>
<td>115</td>
</tr>
<tr>
<td>5 Seven hours</td>
<td>50</td>
<td>125</td>
</tr>
<tr>
<td>6 Eight hours</td>
<td>55</td>
<td>135</td>
</tr>
<tr>
<td>7 Nine hours</td>
<td>60</td>
<td>145</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 Division during the first semester or summer session there. These students must register for such work at the Graduate Division Office.

Undergraduate students who wish to carry graduate courses for undergraduate credit (numbered in the 400 group) must secure written permission from Dr. Elmer H. Wilds, Director of the Graduate Division, but enrollment should follow the regular plan for undergraduates.

For students who are within six hours of graduation and who enroll in a combination program of graduate and undergraduate work, the fees are as follows:

1. Undergraduate students who elect six or more hours in the Graduate Division shall pay the announced fee of $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 six hours in the Graduate Division shall pay the usual part-time undergraduate enrollment fees and the part-time graduate fees covering the work they elect.

**OTHER INFORMATION**

For details concerning other information, see the *Announcement* of the Graduate Division, Western Michigan College, and the *Announcements* of the Graduate School and of the School of Education, University of Michigan, and the booklet, *Advanced Study in Education*, prepared by the School of Education, University of Michigan.

Questions not answered by these sources should be addressed to Dr. Elmer H. Wilds, Director of the Graduate Division, Western Michigan College of Education, Kalamazoo, Michigan.

**COURSES OFFERED**

**1948-1949**

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
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<th>Instructor</th>
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</thead>
<tbody>
<tr>
<td>Economics 193*</td>
<td>Consumption and Standards of Living......Bigelow</td>
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<tr>
<td>Education B120</td>
<td>Improvement of Teaching in Secondary Schools  ..........Bryan</td>
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<tr>
<td>B151</td>
<td>Administration and Supervision of Elementary Schools ..........Hilliard</td>
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<tr>
<td>B192</td>
<td>Methods of Research in Education.........West</td>
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<tr>
<td>B227a</td>
<td>Seminar in Secondary School Curriculum ..Frederick</td>
<td></td>
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<tr>
<td>B228</td>
<td>Seminar in Secondary School Administration ..........Wilds</td>
<td></td>
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<tr>
<td>B250</td>
<td>Principles of School Administration.......Norrix</td>
<td></td>
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<tr>
<td>C102</td>
<td>Educational Psychology ....................Ellis</td>
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<tr>
<td>C119</td>
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<tr>
<td>D235*</td>
<td>Teaching of Mathematics...................Butler</td>
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<tr>
<td>E100</td>
<td>Principles of Vocational Education ......Fox</td>
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<td>E151</td>
<td>Principles of Business Education ..........Schneider</td>
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<tr>
<td>E201</td>
<td>Seminar in Vocational Education ..........Fox, Schneider, Trimpe</td>
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<thead>
<tr>
<th>Course</th>
<th>Title</th>
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<td>English 127**</td>
<td>Victorian Literature ......................Martin</td>
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<td>153**</td>
<td>Creative Writing ........................Van Horn</td>
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<td>Geography</td>
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<td>History</td>
<td>182* United States History ................Russel</td>
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<td>186**</td>
<td>American Economic History ................Russel</td>
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<tr>
<td>Political Science</td>
<td>121** Constitutional Law .................Weber</td>
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<td></td>
<td>163* Foreign Policy of the United States.....Shilling</td>
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<tr>
<td>Course</td>
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<tr>
<td>Psychology</td>
<td>130* Psychology of Personnel Methods</td>
<td>Gibbons</td>
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<td>Sociology</td>
<td>159* Juvenile Delinquency</td>
<td>Kercher</td>
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<td>258 Psychiatric Information for Social Workers</td>
<td>Williamson</td>
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<td>Speech</td>
<td>151* Fundamentals of Broadcasting</td>
<td>Garneau</td>
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<tr>
<td>Economics</td>
<td>152* Price Theories and Policies</td>
<td>Moore</td>
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<td>197** Comparative Economic Systems</td>
<td>Bowers</td>
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<tr>
<td>Education</td>
<td>A125* Philosophy of Education</td>
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<td>B124 Administration of Secondary Schools</td>
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<td>B227b Seminar in Secondary School Curriculum</td>
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<td>B255 Public School Interpretation</td>
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<td>C107a Psychology of Elementary School Subjects</td>
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<td>C120b* Mental Hygiene of Childhood</td>
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<td>C130 Education of Exceptional Children</td>
<td>Thea</td>
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<td>C220 Seminar in Guidance</td>
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<td>E114 Curriculum Construction in Vocational Education</td>
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<td>E157 The Curriculum in Business Education</td>
<td>Schneider</td>
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<td>F213 Curriculum Problems in Physical Education and School Health</td>
<td>West</td>
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<td>English</td>
<td>128** Victorian Literature</td>
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<td>152* Modern English Grammar</td>
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<td>178* English Literature</td>
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<td>Health</td>
<td>171* Public Health Practice</td>
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<td>History</td>
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<td>Political</td>
<td>Science 141* Municipal Government</td>
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<tr>
<td>Speech</td>
<td>152** Utilization of Radio in Education</td>
<td>Garneau</td>
</tr>
</tbody>
</table>

*Graduate courses open to seniors.
**Senior courses open to graduates.

Full descriptions of these courses with hours of credit and time scheduled will be found under the various departments' Descriptions of Courses.
DATES OF SATURDAY CLASS MEETINGS

First Semester

September 18, 1948—Registration
September 25—*Saturday Classes Begin
October 2
October 9
October 16
October 23
October 30
November 6
November 13
November 20
November 27—Thanksgiving Holiday
December 4
December 11
December 18, 25, Jan. 1—Christmas Holiday
January 8
January 15
January 22
January 29—Examinations

Second Semester

February 5, 1949—Registration
February 12—*Saturday Classes Begin
February 19
February 26
March 5
March 12
March 19
March 26
April 2
April 9
April 16, 23—Easter Holiday
April 30
May 7
May 14
May 21
May 28
June 4—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, 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, 169, 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; Health Practice 171; Geography 120, 130, 135, 145; Psychology 130; or any course in History, Geography, or English.

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

C117 Vocational and Aptitude Tests
C119 Educational Guidance and Adjustment
C217 Techniques of Guidance
C120 Mental Hygiene
B192 Methods of Research in Education
C220 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, E101.

Cognate Courses, 8 hours

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

INDUSTRIAL EDUCATION

Required Courses, 12 hours

E100 Principles of Vocational Education
E101 Principles and Techniques of Vocational Guidance
E102 Legal and Industrial Relations Aspects of Vocational Education
E106 Coordination in Vocational Education
B192 Methods of Research in Education
E201 Seminar in Vocational Education

Elective Courses in Education, 4 hours

Any Education course counting for graduate credit may be elected. The following are suggested: B124, B250, B255, C119, E103, E113, E114.

Cognate Courses, 8 hours

Economics 121, 141, 152, 255; Psychology 131, 132; Political Science 184; Sociology 158, 160, 162.
BUSINESS EDUCATION

Required Courses, 12 hours
D265 The Teaching of Business Subjects
E151 Principles of Business Education
E157 The Curriculum of Business Education
E106 Coordination of Vocational Education
B192 Methods of Research in Education
E201 Seminar in Vocational Education

Elective Courses in Education, 4 hours
Any Education course counting for graduate credit may be elected. The following are suggested, B124, B250, C117, C119, D103, E101, E102, E103, E105, E109, E113.

Cognate Courses, 8 hours
Economics 121, 141, 152, 255; Psychology 130, 132; Political Science, 141, 184; Geography 145; Sociology 158, 160, 162.

Many other curricula in additional fields are available. Schedules of Study for such curricula may be planned in consultation with the Director of the Graduate Division.
**DESCRIPTION OF COURSES***

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<td>Biology</td>
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<td>Business Education</td>
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<td>Chemistry</td>
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<td>Economics</td>
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<td>Geography and Geology</td>
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<td>History</td>
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<td>Home Economics</td>
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<td>Industrial Education</td>
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<td>Physical Education for Men</td>
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<td>Physical Education for Women</td>
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<td>Physics</td>
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<td>Psychology</td>
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<td>Rural Life and Education</td>
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<td>Sociology</td>
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<tr>
<td>Speech</td>
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</table>

Note—*For information regarding the significance of course numbers and credit for courses see pages 81 and 82.*
DIVISION OF FINE ARTS

Lydia Siedschlag, Chairman

The Division includes the Departments of Art, Music, and Occupational Therapy. It functions through a committee consisting of the respective heads of these departments. The heads of the departments and the departmental counselors will advise students relative to requirements for majors or minors in these departments and concerning any special requirements set up by the departments. In certain cases, where a group major or minor is possible and advisable, the chairman of the Division should be consulted.

<table>
<thead>
<tr>
<th>LYDIA SIEDSCHLAG</th>
<th>HAZEL I. PADEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>HARRY S. HEFNER</td>
<td>OPAL STAMM</td>
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<tr>
<td>JOHN G. KEMPER</td>
<td>ELAINE L. STEVENSON</td>
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</tbody>
</table>

Many courses in the Department of Art are designed for students not particularly talented in art, but interested in finding a field of art in which they may do well. Suggested courses which require no prerequisite other than a marked desire to participate in art experiences are: Elementary Design 105, Art Structure 106, Illustrative Handwork 107, Lettering and Poster Making 108, Industrial Art 110, Modeling 111, and Art Appreciation 113A, B.

A minor in art consists of: Art Structure 106, Elementary Design 105, Art Appreciation 113A, B or History of Art 213A, B, and art electives to complete 15 semester hours of credit.

A major in art consists of: Elementary Design 105, Art Structure 106, Industrial Art 110, Figure Drawing 205, Art Composition 208, Commercial Art 214, History of Art 213A, History of Art 213B, and Demonstration Drawing 306.

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

105 Elementary Design
A fundamental course in art developing design and color theory through problems in various media.
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
A course giving drawing experience, lettering, figure, color, and design.
First semester, M. W. F. 9, 11, 1; second semester, M. W. F. 9, 11, 1. Miss Stevenson. Three semester hours.

107 Illustrative Handwork
An elementary craft course with manual problems related to interests in the primary grades.
Each semester, M. W. F. 2-4. Mr. Hefner. Three semester hours.
108 Lettering and Poster Making
Emphasis is on lettering and poster making for school and commercial use.
Second semester, Tu. Th. 10-12. Mr. Kemper. Two semester hours.

110 Industrial Art
A studio course in crafts, designed to meet the needs of groups with varied interests. Weaving, bookbinding, blockprinting, etc.
Each semester, Tu. Th. 10-12, 2-4. Miss Stevenson. Three semester hours.

111 Modeling
Modeling in clay, cutting in stone, and carving in wood. Prerequisite: Elementary Design 105 or consent of the instructor.
Second semester, M. W. F. 8-10. Mr. Hefner. Three semester hours.

113A Art Appreciation
This course aims to develop aesthetic judgment. A brief survey of the history of painting is given.
First semester, Tu. 12, W. 12; second semester, W. 12, Th. 12. Each semester, Tu. 7 p. m. Mr. Kemper, Miss Siedschlag. One semester hour.

113B Art Appreciation
A brief survey of the history of sculpture, architecture, and minor arts is given.
First semester, M. 12, Tu. 12; second semester, M 12. Mr. Kemper. One semester hour.

201 Free Brush
A method of free and spontaneous drawing and designing with ink and poster paint.
Second semester, Tu. Th. 1. Mr. Hefner. Two semester hours.

205 Figure Drawing
Rapid memory sketches and line drawings are made after which the work progresses from gesture lines, shadow edges, planing, and contour to finished drawings. Prerequisite: Art Structure 106 or consent of the instructor.
Not offered in 1948-1949. Mr. Kemper. Three semester hours.

208 Art Composition
A study of the principles of geometric rhythms which compose the basic areas in all forms of organization. Geometric shapes are so manipulated as to build up arrangements of balanced line, mass, and color which are applied to designs for murals, stained glass windows, Christmas cards, etc. Media used are pen and ink, tempera and oil.

212 Handicraft
Advanced craft problems in variety of materials. Wood, metal, plastics, glass, etc. Prerequisite: Art Structure 106 and Elementary Design 105 or consent of the instructor.
First semester, M. W. F. 10-12. Mr. Hefner. Three semester hours.
213A History of Art
Study of primitive, Egyptian, Chaldean, Greek, and Roman architecture, sculpture, and painting.
First semester, M. W. F. 1. Mr. Kemper. Three semester hours.

213B History of Art
Study of the art of the Renaissance in Europe and of modern art in Europe and America. Prerequisite: History of Art 213A or consent of the instructor.
Second semester, M. W. F. 1. Mr. Kemper. Three semester hours.

214 Commercial Art
This course is designed to offer special work in the study of advertising art. Posters for school, for business activities, lettering, typography, package designing, and other related subjects are done. Various techniques and media, as well as technical methods used in the reproduction of art work are discussed. Prerequisite: Elementary Design 105 and Art Structure 106.
First semester, 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, and the Art Department.
Note:—This course may not be counted toward a major or minor.
Each semester, Th. 10. Mr. Beloof, Mr. Kemper, Miss Loutzenhiser. One semester hour.

220 Stage Design
A course for art and speech majors. Class makes practical use of knowledge of scene painting, lighting, and mechanics of staging, in connection with the midwinter play.
Note:—This course may be counted for credit in speech.
Not offered in 1948-1949. Mr. Kemper. Two semester hours.

221 Home Furnishing
Color, design, historic furniture and modern furniture are studied; and models for room arrangement are made.
Each semester, M. W. 2. Miss Stamm. Two semester hours.

224 Interior and Window Display
A studio course for art and cooperative retailing students. Window and store display art is studied with emphasis upon color, design, and lettering as related to displays. Attention is given to sources for display materials and services.
First semester, Tu. Th. 7-9 p. m. Mr. Kemper. Three semester hours.
305 Advanced Figure Drawing
A continuation of Figure Drawing 205, developing skill and imagination. Prerequisite: Figure Drawing 205.
Not offered in 1948-1949. Mr. Kemper. Two semester hours.

309 Advanced Design
Applied art problems in various media with special reference to possibility and limitation of materials. Prerequisite: Elementary Design 105.
Not offered in 1948-1949. Mr. Hefner. Three semester hours.

310 Painting
Painting of still life and landscape, in the studio and outdoors. Water color is used. Prerequisite: Art Structure 106, Elementary Design 105, Art Composition 208, or consent of the instructor.
Second semester, M. W. 1-3. Miss Paden. Two semester hours.

314 Advanced Commercial Art
Continuation of Commercial Art 214 with emphasis on typographic layout, booklet design, letterheads, mailing pieces, packaging and display design and construction. This course will acquaint students with technical methods essential to commercial art such as photo prints and their uses, pasteups, photostats, and methods of color separation for workings.
Second semester, M. W. F. 8-10. Mr. Kemper. Three semester hours.

MUSIC

ELWYN F. CARTER
SAM B. ADAMS
ELMER R. BELOOF
MARGARET F. BELOOF
OWEN L. BERGER
LEOTI C. BRITTON

MARY P. DOTY
ETHEL M. GREEN
H. GLENN HENDERSON
DANIEL A. KYSER
LEONARD V. MERETTA
DOROTHEA S. SNYDER

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 87-88 as to both purposes and requirements. The Bachelor of Music degree is different in that it is very highly professional in its requirement aims and permits the student to do much more of his work in the field of music. Detailed information relative to the Bachelor of Music degree may be had by writing for a Music Supplement Catalog.

Those students who want a music major with teaching certification should work for the Bachelor of Science degree. Such music majors must complete Freshman Theory 106A, B; Advanced Sight-Singing and Ear-Training 205A, B; Music Literature 207A, B; Elementary School Methods and Materials 208A, B or Junior and Senior High School Methods and Materials 301A, B; and 12 semester hours in one area of Applied Music.

Those students who want a group music major without teaching certification may work for the Bachelor of Arts degree. Such music majors
must complete Freshman Theory 106A, B; History of Music 357A, B; and 20 semester hours in one area of Applied Music.

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.

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.

**MUSIC COURSES**

100A  **Music for Classroom Teachers**

Designed for the classroom teacher, this course deals with the foundations of music, some work in sight-singing, place of music in the education of children, relationship of music to other subject areas, and classroom problems in music education, e.g., listening, singing activities, place of performance, and use of radio and music of the movies.


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.

110 Elementary Acoustics
Designed for music majors to acquaint them with the science of sound. No science prerequisite.
First semester, Tu. Th. 1. Dr. McGonnagle. 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
The study of a stringed instrument to the extent that the student can demonstrate a knowledge of the basic fundamentals on that instrument. The study of a limited repertoire for that instrument.
First semester, 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 and ear-training based on the principal and secondary triads and seventh chords. Further work in sight-singing and ear-training by use of modulation to both closely and distantly related keys. Further work in melodic, harmonic, and rhythmic diction and aural analysis.
Prerequisite: Freshman Theory 105A, B or 106A, B.
First semester, 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 are 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 the first six grades, development of independent sight-singing (syllables and words), two- and three-part singing, introduction of tonal and rhythmic problems found in music designed for these grades, introduction of notation, creative music for children, the child voice, and directed listening.
First semester, M. W. F. 1. Miss Doty. 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 achievements
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 instru-
ments. The study of a limited repertoire for these instruments.
First semester, M. W. F. 10. Mr. Kyser. 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 pro-
vided 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, sing-
ing and instrumental ensembles, the place of music in all types of inte-
grating courses for secondary schools, and class instruction in voice and
the various instruments.
DIVISION OF FINE ARTS

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 counter-
      point in the five species—double counterpoint, obligatos, descants, canons,
      and fugues. Prerequisite: Advanced Harmony 206A, B.
      First semester, M. W. F. 3. The Staff. Three semester hours.

305B  Counterpoint
      A continuation of 305A.
      Second semester, M. W. F. 3. The Staff. Three semester hours.

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. The Staff. Three semester hours.

306B  Composition
      A continuation of 306A.
      Second semester, time to be arranged. The 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 Literature
      Survey of contemporary music literature through listening. Some study
      of the chronological evolution of modern structure and harmony. Special
      emphasis on idiom, neo-classicism, polytonality, and atonality.
      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.
      Second 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.
      First 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, Tu. Th. 2. Mr. Adams. 0 semester hours.

324B German Diction and Song Literature
A continuation of 324A.
Second semester, Tu. 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, application in arranging for various instrumental combinations including accompaniments for solos, vocal and instrumental. The course is about evenly divided between arranging for band and for orchestra. Some attention is given to the problems in score reading. Prerequisite: Advanced Harmony 206A, B.
First semester, 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.

360 Workshop in Special Problems
Designed for students interested in some special field of music not formally listed for instruction. All special problems must be approved by the head of the Department of Music, but may be under the direct guidance of any of the members of the music faculty. This course may be elected as many as three times.
Hours per week to be arranged with major professor. The Staff. One to three semester hours.

APPLIED MUSIC

Individual lessons in applied music can be elected for college credit by any student in the college. Students in other departments of the college who wish individual instruction in some field of applied music should contact the head of the Department of Music for assignment of instructor. Such requests will be granted to the extent that the instructor's time and practice facilities are available beyond the needs of the music-major degree candidates. All music majors are required to have 60 minutes a week of individual instruction in their major performance field of concentration through the entire four-year course.

Eight levels of study in the various areas of applied music are indicated in the Music Supplement Catalog. Levels one through four grant two semester hours of credit per semester. Levels five through eight grant three semester hours of credit per semester.

11A through 18B Harp
21A through 28B Piano
31A through 38B Organ
41A through 48B Voice
51A through 58B Stringed Instruments
   Violin, Viola, Cello, Bass Viol.
61A through 68B Brass Instruments
   Cornet or Trumpet, Trombone, French Horn, Tuba, Baritone.
71A through 78B Woodwind Instruments
   Flute, Oboe, Bassoon, Clarinet, Saxophone
81A through 88B Percussion

MUSIC ENSEMBLES

All music majors are required to participate in some large music ensemble, e.g., orchestra, band, choir, or glee club, throughout their four years of study. Students who want to participate in an ensemble should contact the director.

130 Women's Glee Club ........................................ Mrs. Snyder
The Women's Glee Club of fifty is selected by try-outs. The object is to select students for special artistic training in ensemble work. The glee club sings before a number of high schools throughout the state and takes an active part in the musical work on the campus and in the city.
131 Men's Glee Club .......................... Mr. Adams
Open to all men with musical ability who have had experience in singing. The club makes a concert tour during the spring vacation in addition to filling numerous other engagements and taking an active part in the music life on the campus.

132 Orchestra .............................. Mr. Stulberg
The orchestra is open to all students who have had a reasonable amount of orchestral experience. Many fine compositions will be studied and played during the year. The orchestra will assist in the Messiah and other festivals. Many unusual instruments are available for the use of students.

133 Band ............................... Mr. Meretta
This organization affords to the student who plays some instrument an opportunity for development in both marching and playing. The band furnishes music at nearly all athletic events, concerts are given during the year on the campus and at various high schools. Uniforms and many of the instruments are furnished. (May be substituted for physical education credit.)

134 Auxiliary Choir .............................. Mrs. Snyder
The Auxiliary Choir is open to all students (men and women) who wish to obtain 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.

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.

**OCCUPATIONAL THERAPY**

**Marion R. Spear**  
**Karl Gasslander**

In order to meet the increasing demands of both civilian hospitals and those of the armed forces, the following courses are given in occupational therapy. They may be taken in any one of the following curricula: B.S. degree, with or without Teacher's Certificate and Diploma in Occupational Therapy, or the Diploma course for undergraduates and for college graduates. These four curricula are approved by the American Medical Association and graduates are qualified to take the examination for registration in the American Occupational Therapy Association.
Students enrolling in this department will take their major in occupational therapy and their minors in biology and art. It is expected that students will, as far as possible, choose the electives allowed in the curricula they are following from allied fields such as music, fine arts, or psychology.

A major in occupational therapy consists of courses 140A, 203, 208, 210A and B, 216A and B, 223, 224, 226, 328. A minor in art consists of courses 105, 111, 303; and a choice of courses 106, 108, 113, 201, 221, 310. A minor in biology consists of courses 100A and B, 215, 303.

The courses given under Theory are open to occupational therapy students only; the courses under Therapeutic Occupations may be taken by students enrolled in other departments with consent of the instructors.

THEORY

210A Theory of Occupational Therapy
Study of the history, purpose, and aims of occupational therapy from ancient times. Special emphasis is placed on occupational therapy in the psychiatric field and on professional and hospital ethics and etiquette.

Each semester, Tu. Th. 1. Miss Spear. Two semester hours.

210B Theory of Occupational Therapy
Specific instructions in applying occupational therapy in the various fields of service. Survey of public and private agencies offering facilities for the placement of the handicapped.

Each semester, Tu. Th. 2. 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.

First semester, M. W. F. 1-3, Tu. Th. 2-4. 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 studied according to origin, insertion, action, and effect of loss. This study accompanied by a review of the skeletal and nervous systems and basic terminology of kinesiology. Prerequisite: Anatomy and Physiology (for Occupational Therapists) 215.

Each semester, Tu. Th. 10. Miss Gower. Two semester hours.

216B Medical Lectures
A series of lectures on medical and orthopedic conditions. These will be correlated with occupational therapy treatment. Prerequisite: Kinesiology 216A.

Second semester, Tu. 7-9 p. m., W. 3. Miss Gower. Three 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. Supplemented by field trips to hospitals, social agencies, and allied industries.

Each semester, Tu. Th. 11. Miss Spear. Two semester hours.

THERAPEUTIC OCCUPATIONS

222 Recreational Therapy
A creative approach to writing, dramatics, singing, percussion instruments, games, dances, fiesta meals, and nature study as therapeutic measures enabling students to develop a basis for work with both children and adults.

Each semester, Tu. Th. 2-4. Mr. Gasslander. Two semester hours.

223 Stitchery
Includes samples of simple and decorative stitches, such as Italian hem-stitching, Assisi, Swedish darning, and others; also knitting, crocheting, tatting, and the assembling of projects.

Each semester, Tu. Th. 8-10. Miss Nelson. Two semester hours.

224 Therapeutic Crafts
Course covers techniques and equipment used in short-time crafts, including hand printing, carving, string and paper work. Emphasis is placed on the application of these techniques to occupational therapy treatment.

Second semester, M. W. F. Sec. I, 10-12, Sec. II, 3-5. Miss Gower. Three semester hours.

225 Ceramics and Jewelry
A beginning course dealing with the fundamentals of work in clay and other media, together with the designing and construction of jewelry in silver and other metals. Originality of ideas, methods of construction, and suitable finishing will be the main considerations.

Each semester, Tu. Th. 10-12. Mr. Gasslander. Two semester hours.

226 Minor Crafts
A course giving the techniques and equipment used in Basketry, Bookbinding, Leatherwork, and Rug Making. Special emphasis will be placed on the use of these crafts in occupational therapy treatment.

Each semester, M. W. F. Sec. I, 10-12, Sec. II, 1-3. The Staff. Three semester hours. Miss Gower.

303 Weaving
Designed to give a working knowledge of hand looms. Includes discussion of looms, functional adaptations of them for special treatments, reading and drafting patterns, warping and threading looms, and types of weaving.

Each semester, Lecture M. 3, Laboratory M. W. F. 8-10. Miss Nelson. Four semester hours.
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. 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, as related to clinical training.
Members of the Hospital Staff. During clinical training at each hospital. Four semester hours.

334 Clinical Observations
Consists of observations of clinical activities, such as shock therapy, Kenney methods, pneumothorax, skin graft, spinal fusion, thoracoplasty, and others; ward rounds with physicians; and clinics. Written reports are required of each student.
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 patient, to the Occupational Therapy Department, and to the hospital.
Members of Hospital Staff. During clinical training at each hospital. Three semester hours.

352 Hospital Case Studies
Complete and thorough case histories of typical patients observed in occupational therapy departments. 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.
DIVISION OF LANGUAGES AND LITERATURE
William R. Brown, Chairman

The Division includes the Departments of English, Languages, and Speech. It functions through a committee consisting of the respective heads of these departments. The heads of the departments and the departmental counselors will advise students relative to requirements for majors and minors in these departments and concerning any special requirements set up by the departments. In certain cases, where a group major or minor is possible and advisable, the chairman of the Division should be consulted.

ENGLISH

William R. Brown
Thehma E. Anton
Edith M. Eicher
Lorena M. Gary
Frank C. Householder
Robert M. Limpus
Minnie D. Loutzenhiser
Donald M. Martin
HeLEN E. Master

Cornelia D. Matthews
Ralph N. Miller
Lucille A. Nobbs
Frederick J. Rogers
Helen G. Sellers
Charles A. Smith
Ruth Van Horn
Louise J. Walker
DeForrest P. Walton

The courses in English are planned primarily to meet the needs of students preparing to teach in the various departments of the public schools.

The choice of Freshmen who elect literature in addition to rhetoric should be determined by the nature of their high school English. Freshmen may elect Introduction to Literature 107, or American Literature 121, A and B, or General Literature 124, A and B.

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 college course. The following general suggestions may be of service as tentative guides in planning program 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 poetry; 3 to 4 hours in non-fiction prose; 3 hours in fiction; 3 to 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 Shakespeare, Anglo-Saxon and Chaucer, and the English Novel, some non-fiction prose, some American literature, and some poetry. Not more than 6 of the 24 hours for a major and not more than 3 of the 15 hours for a minor may be counted from the following courses: Journalism 201, A and B; Expository Writing 326; Writing by Types 327; and Creative Writing 328.
All majors and minors in English must take in addition to Rhetoric 106, A and B, an additional two hours in History of the English Language 325, which may not be counted toward the requirement in Group I, or toward the minimum requirements for major or minor.

**LANGUAGE**

**106A Rhetoric**

The course is planned to aid the student in developing greater facility in the use of language in the common human experiences of thinking, talking, reading, and writing.

First semester, M. W. F. 8, 9, 10, 11, 12, 1, 2, 3; second semester, M. W. F. 12, 3. The Staff.

**106B Rhetoric**

A continuation of 106A.

First semester, M. W. F. 12, 3; second semester, M. W. F. 8, 9, 10, 11, 12, 1, 2, 3. The Staff.

**201A Journalism**

Origins, development, and ethical principles involved in writing and editing American newspapers; and practice in types of journalistic writing and editing are given. Straight news, advance, follow, and sports stories; interviews; informative, human-interest, and entertainment features and columns; ethics of journalism and publicity; copy-editing and headlines are studied.


**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. 9, 11, 1, 2. Miss Eicher, Dr. Limpus, Miss Master. Two semester hours.

**326 Expository Writing**

An elective course offering practice in the writing of expository papers of all kinds.

Each semester, Tu. Th. 9. 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
Original writing in the field of the student's choice. Open only to juniors and seniors who have gained permission. Students are requested to mail the instructor at least one original manuscript before enrollment.
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.
Not offered in 1948-1949. Dr. Miller. Two semester hours.

425(152) Modern English Grammar
A study of the historical development of the English language with special attention to the evolution of modern syntax and the growth of new meanings of words.
Second semester, S. 11-1. Dr. Limpus. Two semester hours.

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

107 Introduction to Literature
Limited to freshmen, this course aims to define literature, to train the student to differentiate its forms, and to understand and appreciate various types and styles of writing.
Each semester, M. W. F. 8, 10, 2. The Staff. Three semester hours.

121A American Literature
A survey of American literature from the beginning to the Civil War with special reference to the development of literary movements and types. Open only to freshmen.
First semester, M. W. F. 8, 10, 12, 2. Mr. Householder, Mrs. Matthews, Dr. Martin, Miss Nobbs, Miss Walker. Three semester hours.

121B American Literature
This course is a continuation of American Literature 121A from the Civil War to the present. Open only to freshmen.
Second semester, M. W. F. 8, 10, 12, 2. Mr. Householder, Mrs. Matthews, Dr. Martin, Miss Nobbs, Miss Walker. Three semester hours.
124A General Literature
A careful reading of representative pieces of European literature in translation. First semester, reading in the epic and drama.
First semester, M. W. F. 3. Dr. Brown, Miss Master. Three semester hours.

124B General Literature
A continuation of 124A. Readings in prose fiction and the lyric.
Second semester, M. W. F. 3. Dr. Brown, Miss Master. Three semester hours.

203 Literature for Children
A general survey of the field of literature suited to the needs and tastes of children; the general principles which underlie the selection of literature for children under any given conditions.
Each semester, M. W. F. 9, 1. Miss Master. Three semester hours.

207A Great English Writers
Emphasis is placed on the study of Chaucer, Shakespeare's Henry IV, Part I, Twelfth Night, Milton's Paradise Lost, and Boswell's Johnson. Open only to sophomores.
First semester, M. W. F. 9, 10, 1. Miss Eicher, Miss Loutzenhiser, Miss Van Horn. Three semester hours.

207B Great English Writers
Emphasis is placed on the study of Wordsworth, Eliot's Adam Bede, Browning's Shorter Poems, Newman, and Huxley. Open only to sophomores.
Second semester, M. W. F. 9, 10, 1. Miss Eicher, Miss Loutzenhiser, Miss Van Horn. Three semester hours.

210 Literary Interpretation
In this course an attempt is made to introduce the student to the general field of literary study and to develop in him some skill in critical interpretation. The typical forms of literature are carefully studied, and different ways of approaching the subject are considered.
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.
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.
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.

216 Contemporary Literature
A survey of English and American Literature from the beginning of the century to the present time.
Second semester, Tu. Th. 10. Mr. Martin. 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.
First semester, Tu. Th. 1. Miss Gary. Two semester hours.

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

219 Short Story
A study of the short story as an art form, principally in America, England, and certain European countries, with comments on the interrelationship of ideas. One term paper required.
Each semester, Tu. Th. 1. Miss Van Horn. Two semester hours.

223A English Literature 1660-1730
Literature of the classical period exclusive of Milton.
First semester, M. W. F. 9. Dr. Miller. Three semester hours.

223B English Literature 1730-1798

225 The Ballad

227 Seventeenth Century Poetry and Prose
The poets read and discussed in this course are "metaphysicals"—Donne, Herbert, Crashaw, Vaughan—and the "neoclassicals"—Jonson, Kerrick, Lovelace, Suckling. The prose writers, who are studied for their style and for their views, are Bacon, Browne, Donne, Bunyan, and Taylor. Prerequisite: Three hours of literature.
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.
305A Victorian Literature
The poetry and prose of the Regency and Early Victorian Periods. For juniors and seniors. Sophomores may enroll with the permission of the instructor.
First semester, Tu. Th. 3. Mr. Martin. Two semester hours.
305B Victorian Literature
The poetry and prose of the Middle and Late Victorian Period. For juniors and seniors. Sophomores may enroll with the permission of the instructor. (305A is not prerequisite for 305B).
Second semester, Tu. Th. 3. Mr. Martin. Two semester hours.
306 Carlyle
This course is intended for mature students who have a taste for serious, thoughtful reading and who care for a better acquaintance with the work of this author.
First semester, Tu. Th. 3. Miss Loutzenhiser. Two semester hours.
307A History of English Literature
This course is intended primarily for third- and fourth-year students who have had no literature in the first and second years. It may be elected by other third- and fourth-year students who have not taken English Literature 207. A study of English epic and lyric poetry.
First semester, 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 English Drama
The chief aim of the course is to acquaint the students with both interesting and significant plays by Elizabethan and Jacobean playwrights.
First semester, Tu. Th. 8. Mr. Smith. Two semester hours.
308B English Drama
A continuation of 308A. Restoration and eighteenth century plays by Dryden, Wycherley, Steele, Addison, Gay, Garrick, Sheridan, and others are studied.
Second semester, Tu. Th. 8. Mr. Smith. Two semester hours.
309A English Literature of the Romantic Period
A study of the main currents of English literature near the beginning of the nineteenth century, beginning with Blake and Burns and emphasizing
Wordsworth, Coleridge, Scott, and the major criticism of the period. Pre-
 requisite: Six hours of literature.
   First semester, M. W. F. 3. Dr. Limpus. Three semester hours.

309B  English Literature of the Romantic Period
   A continuation of 309A, emphasizing Byron, Shelley, Keats, Hazlitt, Lamb,
   and DeQuincey.
   Second semester, M. W. F. 3. Dr. Limpus. Three semester hours.

313  English Novel
   A study of the technique of the novel and its development in England
   from Defoe to Hardy.
   First semester, M. W. F. 10. Dr. Brown. Three semester hours.

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.
   Second semester, Tu. Th. 10. Dr. Brown. Two semester hours.

322  American Literature
   This course is intended for juniors and seniors who have not taken English
   121A, B. (This course cannot be counted for credit together with courses
   121A, B.)
   Each semester, M. W. F. 11, 3. Dr. Miller, Miss Nobbs. Three semester
   hours.

333  Lives and Letters of English Authors
   This course combines a detailed study of the Wordsworths and Carlyles,
   with wide reading in biography and letters. Reports and critical essays
   are required.
   First semester, Tu. Th. 10. Dr. Brown. Two semester hours.

337  European Drama to 1890
   A study of great plays in translation from Greek drama to Ibsen, with
   particular reference to their literary significance and their influence upon
   English drama. Not open to students who have had General Literature
   124A.
   First semester, 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.
   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.  

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 1948-1949. 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 1948-1949. 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 1948-1949. Dr. Miller. Three semester hours.

417(178) English Literature from 1730 to 1798  
Second semester, S. 9-11. Dr. Miller. Three semester hours.

421(181) American Literature  
A survey of the literature of the colonial and early national period, including the writings of Freneau, Irving, Bryant, Emerson, Thoreau, Hawthorne, Poe, and Melville.  
Not offered in 1948-1949. Dr. Miller. Two semester hours.

422(182) American Literature  
A study of representative prose and poetry from 1870 to the present. Individual assignments cover schools and tendencies, with emphasis upon Whitman, Mark Twain, Henry James, O'Neill, Robinson, Steinbeck, and Hemingway.  
First semester, S. 9-11. Miss Nobbs. Two semester hours.

TEACHING

300 Teaching of English  
This course aims to give the prospective teacher in the junior and senior high school the best available information relative to the content and teaching of English. This course is strongly recommended for secondary English majors.  
First semester, Tu. Th. 9. Miss Walker. Two semester hours.
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. No credit will be given for less than eight semester hours of a beginning language.

Students desiring to do directed teaching in foreign languages must have completed a minimum of fifteen semester hours and must be approved by the head of the department. Teaching of Latin 342 is prerequisite to directed teaching in Latin. Phonetics 305 is required of students majoring or minor- ing in French; France and the French 207A, B is required of those major- ing in French. Latin Writing 305 is required of all students majoring in Latin.

A course in modern European history is desirable for students majoring or minoring in a modern foreign language.

Students are urged to take the advanced courses as full year units, although credit may be obtained for one semester upon consultation with the instructor.

**FRENCH**

**100A  Elementary French**

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, 11, 1. Dr. Noble, Miss Tamin. Four semester hours.

**100B  Elementary French**

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

Second semester, M. Tu. W. F. 10, 11, 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, 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, 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
This course is required of those specializing in French, but is conducted in English and open to those not in the Department of French. A study is made of geography, art, historical monuments, and contemporary problems of French life.
First semester, 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
This course is intended to give a corrective description of the difficulties encountered by students of French with Anglo-American habits of pronunciation. Required of all students majoring or minoring in French. Prerequisite: Two years of college French or equivalent.

306 Advanced Composition and Grammar Review
This course is intended to verify and to strengthen the knowledge of fundamental principles of grammar in those students who are planning to teach French. Prerequisite: Two years of college French or equivalent.
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307A Contemporary French Literature
A study of a few outstanding novels by leading writers of the period between the two wars, with a definite effort to find out the different trends of thought of contemporary writers. Prerequisite: Three years of college French or equivalent.
Not offered in 1948-1949. Miss Tamin. Two semester hours.

307B Contemporary French Literature
This is a continuation of 307A. It consists of a study of the evolution of the drama in France from the beginning of the twentieth century, with careful reading of a few outstanding plays. Prerequisite: Three years of college French or equivalent.
Not offered in 1948-1949. Miss Tamin. Two semester hours.

310A Seventeenth Century French Literature
This is a study of the development of classicism against the social background of the seventeenth century. An anthology of the prose and poetry of the period is used as the center of interest. Prerequisite: Three years of college French or equivalent.
First semester, Tu. Th. F. 2. Miss Tamin. Three semester hours.

310B Seventeenth Century French Literature
This is a study of the great dramatists: Corneille, Racine, Molière with a thorough study of some of their best-known plays. Prerequisite: Three years of college French or equivalent.
Second semester, Tu. Th. F. 2. Miss Tamin. Three semester hours.

313A Survey of French Literature
This course is intended to acquaint students with the masterpieces of French literature, with special emphasis on the medieval period and the Renaissance. Prerequisite: Three years of college French or equivalent.
Not offered in 1948-1949. Miss Tamin. Two semester hours.

313B Survey of French Literature
This is a continuation of 313A with emphasis on the eighteenth century philosophers and their influence on the political reformers in America.
Not offered in 1948-1949. Miss Tamin. Two semester hours.

GERMAN

100A Elementary German
This course aims to give the student an understanding of the fundamentals of German grammar, and some facility in speaking and writing the language. Ability to read German is developed by the study of 100 pages of prose. One year of high-school German may be applied on the elementary course.
First semester, M. W. Th. F. 8, 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 required. 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. 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 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.
Not offered in 1948-1949. Mr. Rothfuss. Two semester hours.

210B German Conversation and Composition
This is a continuation of 201A.
Not offered in 1948-1949. 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.

Not offered in 1948-1949. 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.

Not offered in 1948-1949. Miss Steckelberg. Four semester hours.

306A German Literature from 1825 to the Present
The romantic movement in Germany and German drama through the time of Hebbel are studied. The works of the romanticists and the dramas of Kleist and Hebbel are read. Prerequisite: The equivalent of two years of college German.

First semester, M. Tu. Th. F. 9. 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.


LATIN

100A Elementary and Second-Year Latin
This course is designed for those students who need two units of Latin for admission to the A. B. curriculum or to a medical, law, or other professional course. With 100B 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.
First semester, M. W. Th. F. 10. 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.

204A Horace
The *Odes*, *Epodes*, and *Satires* are read. A study of the philosophy of Horace accompanies the reading.
Not offered in 1948-1949. 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.
Not offered in 1948-1949. Miss Kraft. Four semester hours.

305 Latin Writing
Practice is given in the fundamental principles of correct expression in Latin. Required of all students majoring in Latin.
First semester, 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 1948-1949. 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 1948-1949. 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, M. Tu. W. F. 8, 9, M. Tu. Th. F. 10, 1. Mr. Greenwall, Miss Windsor. Four semester hours.

100B Elementary Spanish
This is a continuation of 100A.
Second semester, M. Tu. W. F. 8, 9, M. Tu. Th. F. 10, 1. 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.

102B Intermediate Spanish
This is a continuation of 102A.

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

201B Spanish Conversation and Composition
This is a continuation of 201A.
Second semester, Tu. Th. 9. Miss Windsor. 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.
305A Spanish-American Literature.
Selected Spanish-American literary texts are studied. Prerequisite: Spanish 203A, B or its equivalent.
Not offered in 1948-1949. Dr. Thompson. Two semester hours.

305B Spanish-American Literature
More difficult Spanish-American texts are studied. Courses 305A and 305B together represent a survey of the entire history of Spanish-American literature. Prerequisite: Spanish 305A or its equivalent.
Not offered in 1948-1949. Dr. Thompson. Two semester hours.

306A Spanish Literature
Readings from Spanish literature from the sixteenth century to the present are selected for this course. Prerequisite: Spanish 305A, B, or consent of the instructor.
First semester, Tu. Th. 8. Dr. Thompson. Two semester hours.

306B Spanish Literature
This is a continuation of 306A. A survey of the entire history of the literature of Spain is represented by the two courses. Prerequisite: 306A.
Second semester, Tu. Th. 8. Dr. Thompson. Two semester hours.

SPEECH

Laura V. Shaw
Albert B. Becker
Gifford Blyton
Clara N. Bush

Wallace L. Garneau
Deldee M. Herman
Anna E. Lindblom
Charles Van Riper

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 courses to bring the total to a minimum of 15 semester hours.
A minor sequence in speech correction consists of courses 105A, 230, 231, 318, 319.
For students specializing in English, courses 105A, B, 210, 310, 315, and 316 are recommended.
Students majoring in speech are strongly urged to minor in English.

99 Special Speech Problems
This course is designed to meet the needs of students with emotional conflicts or speech difficulties. Emphasis is placed upon the solution of the individual speech problem through applied mental hygiene and intensive speech practice.

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, Mr. Garneau, Mrs. Herman, Miss Lindblom, Miss Shaw. 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 Bush, Mr. Garneau, Mrs. Herman, 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, Miss Lindblom. 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. 10, 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, M. W. F. 11, Tu. Th. S. 11. Mr. Becker, Dr. Blyton, Miss Lindblom. Three semester hours.

210  Interpretive Reading

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

First semester, M. W. F. 1, 2; second semester, M. W. F. 1, 2. Miss Bush, Mr. Garneau, 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.

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, Dr. Blyton, Mrs. Herman, 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, Mrs. Herman.

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. 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 oratorical 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, Dr. Blyton, 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 instructor.

First semester, M. 3. Dr. Blyton, Mrs. Herman. One semester hour.

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

Second semester, M. 3. Dr. Blyton, Mrs. Herman. 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 tran-
   scription, 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 hear-
   ing; 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: Funda-
   mentals of Speech 105A, B.
   Second semester, M. W. F. 2. Dr. Van Riper. Three semester hours.

320 Play Production
   Methods of staging plays, including direction, stage settings, costumes,
   and make-up. Plays are presented by the class. Each student directs at least
   one play. Prerequisite: Fundamentals of Speech 105A, B, Interpretive
   Reading 210, Acting 215, and consent of instructor.
   Second semester, 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 knowl-
   edge of the nature, causes, development, and treatment of the more serious
   speech disorders. The literature of stuttering, cleft palate, deaf, and aphasic
   individuals will be surveyed, and the various methods of treating these
   disorders will be described in detail. Case studies and presentation will be
   provided. Prerequisite: Principles of Speech Correction 231.
   Second semester, 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 utiliza-
   tion 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 Seniors and Graduates

440(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, HEALTH, AND RECREATION

Judson A. Hyames, Chairman

The Division includes the Department of Physical Education for Men and the Department of Physical Education for Women. It functions through a committee consisting of the respective heads of these departments. The heads of the departments and the departmental counselors will advise students relative to requirements for majors or minors in these departments and concerning any special requirements set up by the departments.

PHYSICAL EDUCATION FOR MEN

Judson A. Hyames
Mitchell J. Gary
Edward A. Gabel
John W. Gill
Roy J. Wietz

Charles H. Maher
Clayton J. Maus
Herbert W. Read
Donald N. Scott

All men students must participate in general physical education beginning with the first semester of residence, until a minimum of 15 class hours is completed except that the requirement for men who attended Western Michigan College of Education prior to July 1, 1946 will remain at 10 class hours. An A course and a B course in the 100 group must be completed before the student enrolls in the 200 group. An A course and a B course in the 200 group must be completed before the student enrolls in the 300 group.

A medical examination is required of all students upon initial entrance. 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.

Students transferring from other institutions, and students with irregular programs will consult the head of the Department of Physical Education to determine what recommendation shall be made for satisfactory completion of the general physical education requirement.
Required courses for the twenty-four hour major in physical education are 105A, 105B, 205A, 205B, 206, 208, 209, 210, 211, 305, 306, 310, 320. Strongly recommended electives are 207, 307, 312. Education 343 is required of those who plan to do directed teaching in physical education. A course in Library Methods is required.

Minimum requirements for men who elect physical education as their minor are 105A, 105B, 312, 208, 209, 210, 211, 320.

COURSES FOR NON-SPECIALIZING STUDENTS

102A General Physical Education
Activities of this course are especially designed to meet the physical needs of college freshmen. Emphasis is on fundamentals of the sports of the season, calisthenics, gymnastics, tumbling, and military drill.
First semester, Tu. Th. 11, 12. Mr. Maher, Mr. Maus, Mr. Scott, Mr. Wietz. Two class hours.

102B General Physical Education
A continuation of the activities of 102A.
Second semester, Tu. Th. 8, 12. Mr. Gill, Mr. Maher, Mr. Maus, Mr. Scott, Mr. Wietz. Two class hours.

103A General Physical Education
Similar in content to 102A above except that class meets three hours per week.
First semester, M. W. F. 9, 12. Mr. Maher, Mr. Maus, Mr. Scott, Mr. Wietz. Three class hours.

103B General Physical Education
A continuation of the activities of 103A.
Second semester, M. W. F. 9, 12. Mr. Gill, Mr. Maher, Mr. Maus, Mr. Scott, Mr. Wietz. Three class hours.

202A General Physical Education
Activities of this course follow the general pattern of the 100 group, emphasis on participation in the sports in season, with advanced work in gymnastics and tumbling.
First semester, Tu. Th. 10, 2. Mr. Maher, Mr. Maus, Mr. Scott, Mr. Wietz. Two class hours.

202B General Physical Education
This is a continuation of 202A.
Second semester, Tu. Th. 9, 2. Mr. Gill, Mr. Maher, Mr. Maus, Mr. Scott, Mr. Wietz. Two class hours.

203A General Physical Education
Content similar to 202A except class meets three hours per week.
First semester, M. W. F. 8. Mr. Maher, Mr. Maus, Mr. Scott, Mr. Wietz. Three class hours.
203B General Physical Education
This is a continuation of 203A.
Second semester, M. W. F. 11. Mr. Gill, Mr. Maher, Mr. Maus, Mr. Scott, Mr. Wietz. Three class hours.

302A General Physical Education
This class is organized to give additional participation in activities covered in the 100 and 200 groups with opportunities for students to spend special time in activities of major interest.
First semester, Tu. Th. 9. Mr. Maher, Mr. Maus, Mr. Scott, Mr. Wietz. Two class hours.

302B General Physical Education
This is a continuation of 302A.
Second semester, Tu. Th. 10, 11. Mr. Gill, Mr. Maher, Mr. Maus, Mr. Scott, Mr. Wietz. Two class hours.

303A General Physical Education
Similar in content to 302A except that class meets three hours per week.
First semester, M. W. F. 11. Mr. Maher, Mr. Maus, Mr. Scott, Mr. Wietz. Three class hours.

303B General Physical Education
This is a continuation of 303A.
Second semester, M. W. F. 2. Mr. Gill, Mr. Maher, Mr. Maus, Mr. Scott, Mr. Wietz. Three class hours.

COURSES FOR SPECIALIZING STUDENTS

105A General Athletics and Elementary Gymnastics
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 fundamentals on the buck, side horse, high bar, parallel bars, ladder, etc., with some attention to 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
A continuation of 105A with the addition of wrestling, softball, and touch football.
Second semester, M. W. F. 1, Tu. Th. F. 1. Mr. Wietz. One semester hour.

205A Advanced Athletics and Gymnastics
This course advances the skills covered in 105A and stresses leadership. The work is outdoors during seasonable weather and takes up gymnastics indoors during the winter months.
First semester, M. W. F. 10, Tu. Th. S. 10. Mr. Read, Mr. Maus. One semester hour.
205B Advanced Gymnastics and Outdoor Games
This continues 205A, but in the spring playground games and activities are covered and a track pentathlon suitable for playground uses.
Second semester, M. W. F. 10, Tu. Th. S. 10. Mr. Read, Mr. Maus. One semester hour.

206 History and Principles of Physical Education
In this course the experiences of past peoples in the physical development of youth are considered, principles are deduced therefrom and adapted to modern economic and political conditions.
Each semester, M. W. F. 9. Mr. Read. Three semester hours.

207 Camping and Scouting.
History, principles, and aims of the Boy Scout movement. Tests are passed and techniques mastered. General camping material is presented and tested in evening and overnight hikes. Good background for potential scoutmasters.
Second semester, M. W. F. 11. Mr. Read. Three semester hours.

208 Fundamentals and Technique of Football
Fundamentals of football coaching, with special emphasis on blocking, tackling, passing, kicking, and line and backfield maneuvers. Building an offense, principles of defensive formations, scouting and rules.
First semester, M. W. F. 11. Mr. Gill. Two semester hours.

209 Fundamentals and Technique of Basketball
This covers the theory and practice of basketball coaching. Foundation skills are stressed, with a study of offensive and defensive systems. A personal textbook involving all material is created.
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. Factors affecting speed, endurance, and fatigue. The selection and preparation of contestants for track and field events. Managing of meets.
Second semester, M. W. F. 1. Mr. Maus. Two semester hours.

305 Principles and Technique of Gymnastic Teaching
The materials and skills covered in the 105 and 205 courses are now presented from the angle of the prospective teacher. Knowledge of all mastered and skilled leadership developed. Notebook.
Second semester, M. W. F. 1. Mr. Maus, 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 coach's point of view. Prerequisites: Anatomy 211A, Physiology 211B.
Each semester, M. W. F. 10. Mr. Gabel. Three semester hours.

307 Physiology of Exercise
Fundamental principles underlying the physiology of muscle and nerve, with special application to physical activities. Inter-relationship of digestion, respiration, excretion, and internal secreting glands to muscular activity and efficiency. Prerequisites: Anatomy 211A, Physiology 211B.
First semester, Tu. Th. 10. Mr. Scott. Two semester hours.

308 Kinesiology
Study of function of the muscles, ligaments, and joints 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. 8. Mr. Gary. Two semester hours.

309 Tests and Measurements in Physical Education
A study of the historical development of measurement in physical education with consideration of the tests currently used. Prerequisites: Anatomy 211A, Physiology 211B.

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. 10. Mr. Gabel. One semester hour.

312 Psychology of Coaching
Considers principles of psychology and their application to athletics and athletic coaching. Phases considered are: preparation for coaching; practice sessions; presenting material effectively; planning the season's campaign; personality and will power.
Each semester, Tu. Th. 1. Mr. Gill. Two semester hours.

320 Playground and Community Recreation
Nature and function of play; age periods and adaptations of activities; social environment; needs and objectives; playground development; construction, management supervision. Study of outstanding programs in operation. A survey of recreational material.
Each semester, M. W. F. 11. Mr. Hyames. Three semester hours.
The Department of Physical Education for Women aims to provide an interesting and beneficial program of physical activity for each student. Physical fitness of the individual for participation is determined by medical and posture examinations. No student is excused from physical education, but program adjustments are arranged to take care of those with physical handicaps. Uniforms obtainable at the Campus Store are required for activity classes.

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.)

Requirements for the Physical Education major are: Physical Education 151, 251, 270, 271, 273, 274, 275, 276, 285, 344, 345, 351, 361 and 373, Biology 100, Hygiene 112, Anatomy 211A and Physiology 211B. A twenty-four hour major planned for students who do not intend to teach in this field only, may be arranged with the head of the department.

Requirements for a Physical Education minor are six semester hours of Physical Education Theory and Practice, Elementary School Physical Education 270A, B, or Secondary School Physical Education 274A, B, and additional courses to make a total of fifteen hours selected from the following: 175, 271, 275, 276, 285, 344, 345.

COURSES FOR NON-SPECIALIZING STUDENTS

100 Physical Education
The aim of this course is to give the student an understanding of the values of participation in physical activities, and to aid her in determining her physical abilities and needs.

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.
First semester, Tu. Th. 4. Miss Bottje.

109 Individual Gymnastic
A course of remedial exercise for students who do not pass the posture examination. Credit will be given in this course for one repetition only.
First semester, Tu. Th. 10, 1, 2; second semester, Tu. Th. 10, 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, Mrs. Brown, Miss Hussey, 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, 9, 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.

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.

118 Archery
  Prerequisite: Physical Education 100.
  Each semester, W. F. 9, 10. Miss Vestal.

119 Tap Dancing
  Prerequisite: Physical Education 100.

120 Badminton
  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. Prerequisite: Physical Education 100.

122 Social Dancing

233 Rural School Physical Education
Indoor and outdoor programs for mixed-age groups. Ideas for track meets, picnics, play days, holiday programs, and student leadership systems. Prerequisite: Physical Education 100.
Second semester, Tu. Th. 3. Miss Bottje.

330 Elementary School Physical Education
A study of the physical, mental, and social nature of children in the early elementary group and of activities suited to their needs. Prerequisite: Physical Education 100.
Second semester, Tu. Th. 4. Miss Bottje.

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.

COURSES FOR SPECIALIZING STUDENTS

151A Physical Education Theory and Practice
Fundamental skills, body mechanics, folk dancing, social dancing, swimming, and hockey or soccer.
First semester, M. Tu. W. Th. F. 11, 1. Mrs. Brown, 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. Mrs. Brown, 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 171A.
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, 1. Miss Bottje, Mrs. Brown, 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, Mrs. Brown, 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.

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.

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, Tu. Th. 8. 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.
Not offered in 1948-1949. 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. In addition, a study is made 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.
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 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 Crane, Miss Worner. Two semester hours.

351A Physical Education Theory and Practice
This course offers instruction in the theory and practice of group and team games of secondary level, individual sports, such as 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. Mrs. Brown, Miss Hussey, 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 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 Hussey, 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.

Second semester, W. F. 10. Miss Hussey. Three semester hours.
DIVISION OF SCIENCE AND MATHEMATICS

Gerald Osborn, Chairman

The Division includes the Departments of Biology, Chemistry, Geography and Geology, Mathematics, Nursing,* Physics, and Psychology. It functions through a committee consisting of the respective heads of these departments. Major and minor requirements are listed under the individual departments. The heads of the respective departments will advise students relative to their chosen majors and minors.

In certain cases, where a 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 (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 group science minor
   1. Twenty or more semester hours are required in the division;
   2. The subjects selected must be taken from no more than two departments;
   3. At least eight semester hours of the work must be in courses above the freshman level.

The following Division courses are offered:

100A  Physical Science
   This course is designed for students who are not planning to specialize in any of the physical sciences but who desire a general background in this field. The course offers a correlated presentation of selected topics in astronomy, chemistry, geology, meteorology, and physics.
   First semester, Lecture, M. Tu. Th. 11, Quiz, F. 11. Dr. Berry, 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. Marburger, Dr. Osborn, Dr. Rood.

*For purposes of convenience descriptions of courses offered by the Department of Nursing are listed under other departments: Anatomy and Physiology 213, Bacteriology 214, Chemistry 106, General Psychology 202, and Sociology 244. For the curriculum in Nursing, see page 122.
300 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

571(D201a) 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 1948-1949. Dr. Osborn. Two semester hours.

BIOLOGY

Leslie A. Kenoyer
LaVerne Argabright
Harriet Clegern
Raymond C. Deur
A. Verne Fuller
Frank J. Hinds

Roy E. Joyce
Myrtle Powers
Edward E. Reynolds
Caroline H. Sleep
Edwin B. Steen
Merrill R. Wiseman

Courses 100A, B serve as the biological foundation for a cultural education and as prerequisites for advanced courses.
A recommended minor for elementary teachers consists of 100A, B and 231A, B. A recommended minor for secondary teachers should include 304; a recommended major for the latter consists of 100A, B; 221A, B; 242A, B; and 304. Students are expected to take 304 before enrolling for directed teaching in biology.
A major for premedical and predental students consists of 100A, B; 242A, B; and 8 semester hours selected from 211A, B; 212A, B; 341; or 342. A major for students preparing for forestry, horticulture or landscape architecture consists of 100A, B; 221A, B; and 242A, B. The required minor for physical education students consists of 100A, B; 211A, B; and 112. The required minor for occupational therapy students consists of 100A, B, 215, and Neurology and Psychiatry 330.

GENERAL COURSES

100A General Biology
The course includes the general organization, structure, and physiology of plants and animals, and the study of type forms of the lower groups, with stress on their importance to man.
First semester, Lecture W. F. 8, Tu. Th. 9, 10, 1, M. W. 12, 3; Laboratory W. F. 8-10, 12-2, M. W. 10-12, 2-4, Tu. Th. 8-10, 10-12, 12-2, 2-4. Each student should choose a lecture and a laboratory section. The Staff.
Four semester hours.
100B  General Biology
This takes up the structure, functions, and classification of the arthropods, the chordates, and the higher plant groups, and considers the fields of genetics, embryology, evolution and ecology. Prerequisite: 100A.
Second semester, Lecture W. F. 8, Tu. Th. 9, 10, 1, M. W. 12, 3; Laboratory W. F. 8-10, 12-2, M. W. 10-12, 2-4, Tu. Th. 8-10, 10-12, 2-4. The Staff. Four semester hours.

304  Methods and Materials in Biology
This consists of class discussion, laboratory practice, and field work illustrating the selection, collection, preparation, care and use of materials for biological teaching with particular reference to high school conditions. Prerequisite: 100A, B, or equivalent.
Second semester, Tu. Th. 8. 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: 100A, B, or equivalent.
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: 100A, B, or equivalent.
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 Fuller, Mr. Hinds, Mr. Joyce, Miss Powers, Mr. Reynolds, Dr. Steen. Two semester hours.

211A  Anatomy
This course is designed to give the student a thorough knowledge of mammalian anatomy with special reference to man. Each system of organs is taken up in detail. In the laboratory the human skeleton is studied and the cat dissected. Prerequisite: 100A, B, or equivalent.
First semester, Lecture Tu. Th. 8, W. F. 9, Laboratory M. W. 8-10, 10-12, Tu. Th. 8-10, 10-12. Miss Clegern, Mr. Reynolds, Mrs. Sleep, Dr. Steen. Four semester hours.
211B Physiology
This course deals with the fundamental principles of physiology and their application to body functioning, particularly in man. The various metabolic processes are studied in detail. Prerequisite: 100A, B, 211A, or their equivalent.
Second semester, Lecture M. W. F. 8, 9; Laboratory Tu. 8-10, 10-12, Th. 8-0, 10-12. Miss Clegern, Mrs. Sleep, Mr. Wiseman. 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: 100A, B or equivalent.
First semester, Lecture, W. F. 8, Laboratory, Tu. Th. 8-10. Mr. Wiseman, Mrs. Sleep. 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; school health; and the functioning of organized health agencies are considered. Prerequisite: 100A, B or equivalent.
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. Prerequisite: 100A, B or equivalent.
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. Prerequisite: 100A, B or equivalent.
Second semester, Lecture, Tu. Th. 3, Laboratory, M. 2-4, W. 2-4. Mr. Wiseman, Mrs. Sleep. 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: 100A, B or equivalent.
First semester, Lecture, Tu. Th. 11, Laboratory, M. F. 10-12. Mr. Wiseman. Four semester hours.

Open to Seniors and Graduates

414(171) Public Health Practices
A practical course of lectures and demonstrations in which emphasis is placed on the effective health supervision of school children, the prin-
ciples and practices of health teaching in the various grades, and the in-
terrelation of this teaching to that of the other subjects in the curriculum.

Second semester, S. 1-3. Mr. Hinds. Two semester hours.

**BOTANY**

221A Botany
A general study of the gross and microscopic structures of higher plants, illustrated by laboratory and field experience. The college greenhouse is used for physiological experiments. A broad view of plant classification is given. Prerequisite: 100A, B, or a year of high school botany.

First semester, Lecture, Tu. Th. 2; Laboratory, M. W. 2-5. Mr. Joyce. Four semester hours.

221B Botany
This continuation of 221A covers the morphology of the plant phyla, plant identification in field and laboratory, and the principles of plant ecology. Prerequisite: same as 221A.

Second semester, hours same as for 221A. Mr. Joyce. Four semester hours.

**NATURE STUDY**

231A Nature Study
The aims of this course are to develop an ability to interpret natural phenomena with scientific accuracy, and an understanding and appreciation of some of the laws of nature. Materials are autumn flowers, seed dispersal, flowerless plants, insects, spiders, winter birds, heat, light, weather, and astronomy. Field trips are part of the scheduled work.

First semester, Lecture W. F. 8, M. W. 11; Laboratory Tu. Th. 8-10, 10-12. Miss Argabright. Four semester hours.

231B Nature Study
Rocks, minerals, electricity, spring flowers, pond life, and migratory and resident birds are included in discussions, laboratory, and field work, which continue the aims of 231A.

Second semester, hours same as for 231A. 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, nesting habits, relation to environment, and importance to man. The student learns to identify a minimum of 100 birds in the laboratory and fifty in the field.

Second semester, Tu. Th. 8 and early morning trips. Miss Fuller. Two semester hours.
242A Invertebrate Zoology
This course deals with the structural characteristics, physiology, life histories, habits, distribution, and classification of the invertebrates. Identification of local forms and economic values are emphasized. Prerequisite: 100A, B or equivalent.

First semester, Lecture Tu. Th. 2; Laboratory M.W. 1-4. Mr. Hinds. Four semester hours.

242B Vertebrate Zoology
The work of this course covers the classes of vertebrates with emphasis on classification, anatomy, physiology, ecology, and economic aspects. Field work is included. Prerequisite: Same as 242A.

Second semester, hours same as 242A. Mr. Hinds. Four semester hours.

341 Cytology and Histology
This course deals with the structures and properties of cells and of the fundamental tissues; also with the grouping of the latter into organs and systems. Prerequisite: 100A, B or equivalent and eight additional hours of Biology.

Second semester, Lecture Tu. Th. 9; Laboratory M. W. F. 8-10. Dr. Steen. Four semester hours.

342 Vertebrate Embryology
This course takes up in detail the embryological development of the vertebrates with special emphasis on human development. In the laboratory the starfish, the frog, the chick, and the pig or mouse illustrate the course of development. Prerequisite: Same as for 341.

Not offered in 1948-1949. Four semester hours.

CHEMISTRY

Gerald Osborn
James W. Boynton
Robert J. Eldridge

Gordon H. French
Lawrence G. Knowlton
Lillian H. Meyer

A major in chemistry consists of one year of general chemistry (8 semester hours, and 16 semester hours from the following: 201, 202, 306A, B, 341, 350, 303A, B. Students majoring in chemistry in the general degree curriculum and desiring an industrial laboratory position upon graduation should plan to take an additional ten hours of chemistry. Students majoring in chemistry should have a minor in physics.

A minor sequence in chemistry consists of 8 hours of general chemistry and 8 hours from the following: 201, 202, 306A, B, 341, 350.

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 on the subject. This course may also be
DESCRIPTION OF COURSES

taken as a cultural subject. 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.

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 principals 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 principles and theories of chemistry are studied, along with some of the common non-metallic elements and their compounds. Open only to students in the Department of Home Economics.

First semester, 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. 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.
201 Qualitative Analysis
A lecture and laboratory course treating the theory and practice of separation and identification of both cations and anions. Prerequisite: General Chemistry 100A, B or 101A, B. A knowledge of common logarithms is essential.
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: 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. Prerequisite: General Chemistry 100A, B or 101A, B.

303A Physical Chemistry
The course includes studies in kinetic theories of gases, liquids, solids, solutions, thermodynamics, physical bases for molecular structure, thermochimistry, homogeneous equilibria, heterogeneous equilibria, etc. Prerequisite: Quantitative Analysis 202, Physics 203A, B; College Algebra and Analytic Geometry 104A, B or equivalent; and Calculus 205A, B.
First semester, 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, polepotentials, 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.

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. One or two 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. 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 theories is critically presented. Prerequisite: Two years of college chemistry.
Not offered in 1948-1949. Dr. Osborn. Two semester hours.

341 Food Chemistry
This will be mainly a laboratory course and includes the quantitative analysis of foods for important components such as carbohydrates, proteins, fats, and vitamins; tests for preservatives and adulteration; and food colors. Prerequisite: Organic Chemistry 306A or General Chemistry 105A.
First semester, 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.

GEOGRAPHY AND GEOLOGY

WILLIAM J. BERRY
Cyril L. Stout
Marguerite Logan

Introductory Geography, either 105A, B or 305, must precede all other 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 Geog- raphy 105A, B, Dynamic Geology 230A, (General Geology 230S may be substituted), Climatology 325, Field Geography 340, Geographic Techniques 303 or equivalent, Regional Geography, and an Elective for three hours.
A major in earth science consists of Geology 230A, B and 16 semester hours additional in geography and geology. Two of the six semester hours earned in Physical Science 100A, B may be counted toward a major or a minor in earth science.
A minor in geography consists of 15 semester hours, including Field Geography 340 or an approved equivalent.

FOUNDATIONAL COURSES

105A Introductory Geography
Designed to build the background of factual material and principles basic to the study of regional geography. Introductory Geography con- tinues throughout two semesters and the two semesters’ work should be taken consecutively.
First semester, M. W. F. 8, 9, 10, 11, 1; second semester, M. W. F. 9, 2.
The Staff. Three semester hours.
105B Introductory Geography
Continuation of Introductory Geography 105A.
First semester, M. W. F. 1, second semester, M. W. F. 8, 9, 11, 1. The Staff. Three semester hours.

305 Introductory Geography for Juniors and Seniors
Course should be elected instead of 105A, B by students who do not begin the study of geography before the junior year. Not open to students who have received credit for 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 areal differentiation in Anglo-American 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. 11. 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. 1. 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. Prerequisite: Introductory Geography 105A, B or Geography 305.
Second semester, M. W. F. 11. Dr. Stout. 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. Dr. Stout. Two semester hours.

307 Asia
Interpretation of the major geographic regions of Asia. Special emphasis is given to the organization of materials into geographic units. Prerequisites: Introductory Geography 105A, B or Geography 305.

308 Africa
The evolution of the present political pattern of the continent; governmental policies of the colonial powers; the geography of the major areas of economic exploitation; impending changes related to opposition to
colonial status. Prerequisite: Introductory Geography 105A, B or Geography 305.
Second semester, M. W. F. 11. Dr. Stout. 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 1948-1949. Three semester hours.

INTENSIVE REGIONAL COURSES

304 The British Isles
Geographical analysis of their present and potential development. Prerequisite: Geography 105A, B or Geography 305, and Europe 207.
Not offered in 1948-1949. 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 state where each activity is prominent. Prerequisite: Introductory Geography 105A, B or Geography 305.
Not offered in 1948-1949. 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 1948-1949. Dr. Berry. 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 1948-1949. 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.
Not offered in 1948-1949. Miss Logan. Three semester hours.

FUNCTIONAL COURSES

218 Economic Geography
Course dealing with important commercial products from the standpoint of their places of origin, cultural and natural factors in their production, their flow in commerce, and principal regions of their consumption.
First semester, M. W. F. 8, 2; second semester, M. W. F. 8, 3. Dr. Stout. Three semester hours.
225 Meteorology
Study of the elements of weather: temperature, precipitation, and pressure; the reading of weather maps; and the characteristics of fronts and air masses. Thermodynamics and the mechanics of atmosphere are used to explain weather phenomena. The course is non-technical.
Not offered in 1948-1949. Dr. Stout. Two semester hours.

303 Geographic Techniques.
Guidance is given in the selection, interpretation, and use of all major types of geographical materials such as texts, library materials, pictures, and maps. Special emphasis is placed upon the organization of geographic findings. Prerequisite: 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.

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. Prerequisite: at least one year of college geography.
Not offered in 1948-1949. Miss Logan. Two semester hours.

325 Climatology
Study of the distribution and character of the major climatic types of the earth. Fundamentals of air physics as applied to this distribution are discussed. Prerequisite: Introductory Geography 105A, B or Geography 305 or Meteorology 225.
First semester, Tu. Th. 9. Dr. Stout. Two semester hours.

350 Cartography and Graphics
Study of maps, the construction of them for reproduction, and the projections and symbolism most commonly used; also the graphical presentation of statistical material. Prerequisite: Introductory Geography 105A, B or Geography 305.
Not offered in 1948-1949. Dr. Stout. Two semester hours.
340 Field Geography
Intensive study of type areas near Kalamazoo with the purpose of observing how agricultural and industrial development, transportation, commercial organization, and the urban pattern have made adjustments in these areas. The course is based primarily upon field work. Prerequisite: Introductory Geography 105A, B or Geography 305.
Second semester, Tu. 2-5. Dr. Berry. Three semester hours.

341 Advanced Field Geography
Planned for students who desire to do independent field work in geography. The amount of credit will depend on the size of the project and the intensity with which the work is done. A complete report written in scientific style is required. Not a residence course. Enrollment must be made with the Extension Division and fees paid at that office. Residence credit is given. Prerequisite: Field Geography 340 or an approved equivalent and consent of 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.
Off-campus course given residence credit. The Staff. Three semester hours.

Open to Seniors and Graduates

410(130) Library and Laboratory Techniques in Geographic Investigations
Utilization of maps, literature, and data in developing regional concepts. There will be field excursions for the purpose of observing landscape phenomena of geographic significance. Prerequisite: one year of college geography.
Not offered in 1948-1949. Dr. Berry. Two semester hours.

Open to Graduates

506(120) Cultural Geography of North America
Migrations and routes of travel of the various European colonizers, together with the geographical conditions encountered in developing each part of the continent for human use. Prerequisite: Introductory Geography 105A, B, or consent of instructor.
Not offered in 1948-1949. 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 1948-1949. Miss Logan. Two semester hours.
224

DESCRIPTION OF COURSES

578(145) Pro-seminar in Economic Geography
Each member of the class carries on an individual investigation of some problem in economic geography. Theory and technique of research in economic geography, and the treatment of graphic forms as applied to geography. Prerequisite: Introductory Geography 105A, B or Geography 305 and Commercial Geography 218, or consent of instructor.
First semester, S. 1-3. 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. 2-4. 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.
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 1948-1949. Dr. Berry. Two semester hours.

MATHEMATICS

HAROLD BLAIR
FRED A. BEELEER
CHARLES H. BUTLER
WILLIAM H. CAIN

PEARL L. FORD
WILLIAM H ALNNO
HERBERT H. HANNON
JOSEPH K. PETERSON

CONWAY C. SAMS

Courses in the Department of Mathematics are designed to meet the needs of students presenting three types of preparation in high school.
A freshman electing work in mathematics for the first time should be careful to select from courses 100A, 103A, and 104A the one best adapted to the amount of high-school mathematics for which he has credit.

The department offers four sequences leading to calculus. Sequence A (104A, 104B) is designed for students who present trigonometry as part of their high-school preparation. Sequence B (103A, 103B) is designed for students who present one and a half years of algebra, but no trigonometry, as part of their preparation. Sequences C and D are for students who have completed but one year of algebra in high school; sequence D (100A, 100B*, 100C, 104A, 104B), the one regularly pursued by such students, requires two years to reach calculus; for exceptional cases in which students having but one year of high-school algebra desire to enter calculus in the second year of their college course, sequence C (100A, 100B*, 100C, 115, 116) is offered; this requires the student to make up deficiencies in his high-school course by taking two courses (115 and 116) in the summer session following his freshman year. Note that the four sequences are mutually exclusive.

Following courses 205A and 205B, which are taken the second year, a student has the privilege of electing several courses for which Calculus is a prerequisite. Juniors may make their selection of courses after consultation with the chairman of the department.

For students interested in mathematics of business there is offered by the department a group of subjects consisting of the following courses: Mathematics of Finance 227, Mathematics of Insurance 228, Introduction to Statistics 211. One or more of these courses will be offered each semester at eleven o'clock.

The attention of the students who plan to teach mathematics is directed to the following subjects: Teaching of Arithmetic 101, Teaching of Secondary Mathematics 401.

A minor in mathematics comprises not less than eight semester hours of work completed subsequent to any one of courses 103B, 104B, 116, and elected with the approval of the departmental adviser.

A major in mathematics comprises not less than eight semester hours of work completed subsequent to a year's course in Calculus and elected with the approval of the departmental adviser.

Students desiring to do directed teaching in mathematics must have completed a major or a minor in this subject and have included in this preparation Teaching of Secondary Mathematics 401. History of Mathematics 315A, B is also recommended.

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-

*Solid Euclidean Geometry 100B may be taken in combination with course 100A or course 100C, either the first or the second semester.
school course. 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, Mr. Sams, Mr. Peterson. Three semester hours.

100B Solid Euclidean Geometry
Designed for those students who present for admission only one year of geometry. This course, if not taken in high school, should be taken by all majors in mathematics. Theorems and constructions, including the relations of planes and lines in space; the properties of the sphere and the spherical triangle. Prerequisite: one year of high-school geometry.

First semester, Tu. Th. 11. Miss Ford. Two semester hours.

100C Plane Trigonometry
Trigonometric ratios, identities and equations, inverse function, theory and use of logarithms, circular measure of angles, solution of triangles. Prerequisite: Intermediate Algebra 100A or a year and a half of high-school algebra, and at least one year of Euclidean geometry.

Second semester, M. W. F. 8, 9, 1, 3; Tu. Th. S. 10. Mr. Beeler. Three semester hours.

100D Spherical Trigonometry
This course extends the theory of plane trigonometry so as to cover the case of a triangle formed by arcs of a great circle on a sphere. Applications are made to problems in geography, navigation, aviation, surveying and cartography. Prerequisite: Plane Trigonometry 100C.

Not offered in 1948-1949.

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. The course 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, Mr. Peterson, Mr. Sams. 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, Mr. Peterson, Mr. Sams. Five semester hours.
104A College Algebra and Analytic Geometry
Designed for students who have taken trigonometry. 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.

105A Introduction to College Mathematics
This elementary mathematics analysis course is specially designed to qualify business administration majors for the business mathematics sequence. Prerequisite: two years of high school mathematics.
First semester, M. Tu. Th. F. 4. Dr. Butler, Mr. Hannon. Four semester hours.

105B Introduction to College Mathematics
This course is a continuation of Introduction to College Mathematics 105A.

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 1948-1949. Mr. Hannon. 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 equation, including Horner's method, determinants, permutations and combinations. Prerequisite: one and one-half years of high-school algebra and one or one and one-half years of high-school geometry, or the equivalent.
First semester, M. W. F. 3; second semester, M. W. F. 8, 3. Mr. Beeler. Three semester hours.
116 Analytic Geometry
Analytic geometry of the straight line, circle, and conic sections; change of axes; properties of conics, involving tangents, diameters, and asymptotes. Prerequisite: trigonometry and college algebra.
Second semester, M. Tu. Th. F. 2. Dr. Butler, Mr. Cain. Four semester hours.

120 Business Mathematics
This course includes diagnostic and remedial work in the fundamental operations of arithmetic, followed by a study of elementary business problems such as percentage, interest, insurance, annuities. The course is intended primarily for students 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
This course is designed to cover the application of cash and installment buying, interest, discount, and annuities to business and budgetary problems. It is intended primarily for students who desire an elementary knowledge of some of the topics covered in Mathematics of Finance and Mathematics of Insurance. Prerequisites: high-school algebra and geometry.
Second semester, Tu. Th. 11. Mr. Hannon. Two semester hours.

201 Field Work in Mathematics
Designed to familiarize the student with the nature and use of common mathematical instruments. Classroom discussion is supplemented by practical field work. Prerequisite: plane trigonometry.
Not offered in 1948-1949. 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. Dr. Butler. 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, M. W. F. 11. Dr. Butler. Three semester hours.

209 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 calculations of mortality tables, expectation of life, life annuities, premiums, and reserves. Prerequisite: Mathematics of Finance 227.

Second semester, Tu. Th. 11. Dr. Butler. Two semester hours.

230 College Geometry
An advanced study of the geometry of the triangle and the circle. Recommended especially for those who expect to teach Geometry in high school. Prerequisite: Analytic Geometry.

Offered whenever there is sufficient demand. Three semester hours.

305 Vector Analysis
Algebra factors; applications to geometry and mechanics; calculus of vectors; gradient, curl, divergence; line and surface integrals; theorems of Green and Stokes; applications to physics. Prerequisite: Integral calculus.

First semester, M. W. F. 8. Mr. Peterson. Three semester hours.

315A History of Mathematics
Treats of the history of geometry and trigonometry from earliest times to the present. Prerequisite: analytic geometry.

First semester, Tu. Th. 11. Mr. Blair. Two semester hours.

315B History of Mathematics
Treats of the history of arithmetic and algebra.

Second semester, Tu. Th. 11. 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 criterion 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
Velocity, acceleration, vectors, statics of particles and rigid bodies, center of gravity, moment of inertia, rectilinear and curvilinear motion of a particle, motion of a rigid body, moment of momentum integral of energy. 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. The actual learning of subject matter is employed to a considerable extent as furnishing a most effective background for teaching and illustrating principles of instruction. This course is prerequisite to directed teaching in mathematics. Prerequisite: Analytic Geometry.
First semester, 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 everyday life; and (2) those for individuals who intend to major or minor in the subject. Astronomy 210, Household Physics 202, Photography 220, and Elementary Acoustics 110 belong to Group 1, as does also Physical Science 100A, B (listed under "Division of Science and Mathematics.") The remainder of the courses listed below, together with Teaching of Physical Science 300 (see "Division of Science and Mathematics"), belong to the second group. Courses 203A, B belong in both groups.

Courses 204A, B are required for all engineering students and recommended for all others.

A major in physics consists of 24 semester hours; a minor, 15 semester hours. In all cases Mechanics, Sound, Heat 203A and Electricity and Light 203B are the first two courses in any sequence leading to a major or a minor; the remainder are arranged in consultation with the departmental adviser.

Students wishing to do directed teaching in physics must offer a major or minor in this field. It is advisable to defer directed teaching until the senior year, after a considerable portion of the major or minor has been completed.

110 Elementary Acoustics
In this course are studied the nature of sound, how sounds are produced, reflection and absorption, reverberation, the physics of hearing, and the physical basis of musical scales. It is a required course for students majoring in music. Open to any student.
Each semester, Tu. Th. 1. Dr. McGonnagle. Two semester hours.

200 Slide Rule
A course in the use of the slide rule.

202 Household Physics
A study of the problems related to the home, such as machines, heat control and refrigeration, light and gas bills and meter reading, electrical devices and illumination. Open only to women students. Required in Home Economics.
Second semester, 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, of heat, and their applications. Freshmen may elect this course. Prerequisite: high-school physics and trigonometry.
Each semester, Lecture M. Tu. W. Th. 8. Laboratory, one two-hour period each week. Mr. Marburger, Dr. Rood. Four semester hours.
203B Electricity and Light
This course follows Mechanics, Sound, and Heat 203A and consists of studies in electricity, magnetism, and light. Prerequisite: Mechanics, Sound, and Heat 203A.
Each semester, Lecture M. Tu. W. Th. 8. Laboratory, one two-hour period each week. 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.
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.
Each semester, F. 8. Mr. Marburger, Dr. Rood. One semester hour.

210 Astronomy
A course in descriptive astronomy including the study of the solar system, stars and constellations, and nebulae. Frequent use is made of a 9-foot planetarium and a 4½" refracting telescope.
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. To enrol in this course students should get permission from the instructor.
First semester, M. W. F. 10. Mr. Baker. Three semester hours.

320 Statics
This satisfies the requirements for a course in statics in mechanical engineering. It includes a study of the general principles of forces in equilibrium and their application to hanging cables, problems in friction, and stresses in frameworks of various types. Prerequisite: Electricity and Light 203B, Calculus 205A, B.
Each semester, M. W. F. 11. Mr. Fox. Three semester hours.

350A Light
This is a course in physical optics. The main topics discussed are: light as a wave motion, interference, and diffraction. Prerequisite: Electricity and Light, 203B, Calculus 205A, B.
First semester, M. F. 3. Laboratory W. 3-5. Dr. Rood. Three semester hours.

350B Light
Designed to follow Light 350A. It includes a study of the dispersion of light, polarization, double refraction, reflection, magneto-and electro-optics. Prerequisite: Light 350A.
Second semester, M. F. 3. Laboratory W. 3-5. Dr. Rood. Three semester hours.
340 Atomic Physics
A study is made of the electron, the photoelectric effect, thermionic emission, the physics of X-rays, quantum theory, devices for accelerating nuclear particles, isotopes, spectra, and atomic structure. Prerequisite: Electricity and Light 203B, Calculus 205A, B.

First semester, M. W. F. 2. Dr. McGonnagle. Three semester hours.

341 Nuclear Physics
Designed to follow Atomic Physics 340. It includes natural and artificial radioactive transformations, the experimental methods of nuclear physics, properties of neutrons, binding energy, nuclear reactions, nuclear structure, fission, and cosmic rays. Prerequisite: Atomic Physics 340.

Second semester, M. W. F. 2. Dr. McGonnagle. Three semester hours.

361 Introduction to Electronics
This course includes an introduction to electric circuit analysis with particular reference to electron tube circuits. The more important uses of electron tubes are considered in some detail. Prerequisite: Electricity and Light 203B and Calculus 205A, B.

Each semester, Lectures M. F. 9. Laboratory W. or Th. 9-10. Mr. Marburger. Three semester hours.

362 Electrical Measurements
This course deals with the theory and use of instruments to measure electrical and magnetic quantities. Both AC and DC bridge methods are included. Prerequisite: Introduction to Electronics 361, Calculus 205A, B.

Second semester, Lecture M. 2. Laboratory Tu. Th. 2-4. Mr. Marburger. Three semester hours.

365 Principles of Radio Communication
The electrical principles involved in different radio frequency communication systems are treated in this course. Laboratory work includes measurements of electrical properties and quantities at audio and radio frequencies. Prerequisite: Introduction to Electronics 361, Calculus 205A, B.

First semester, Lecture M. F. 2. Laboratory W. 2-4. Mr. Marburger. Three semester hours.

390 Laboratory Techniques
Prerequisite: Electricity and Light 203B.

Each semester, Laboratory F. 9-11. Mr. Marburger. One semester hour.

399 Advanced Laboratory Physics
A course in laboratory experimentation more advanced than that in 203A, B. May be elected only on arrangement with the instructor. Prerequisite: Electricity and Light 203B and at least one 300 physics course.

Second semester, Laboratory Tu. Th. 9-11. Mr. Marburger, Dr. McGonnagle, Dr. Rood. Two semester hours.
Modern Physics
Same as Atomic Physics 340, with the additional requirements of reading certain assignments in the current literature of the subject and a thesis.
First semester, M. W. F. 2. Dr. McGonnagle. Three semester hours.

PSYCHOLOGY

General Psychology 200 is prerequisite to all other courses in this department, except courses 100 and 102, 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.

Students majoring in psychology are advised to elect from the Department of Biology, General Biology 100A and B and Anatomy 211A.

100 Introduction to Learning and Adjustment
Psychological principles of effective learning will be presented; methods of note-taking, reading, memorizing, and organization will be discussed. Emphasis will be placed upon problems of personal, educational, and social adjustment.
Each semester, Tu. Th. 8. Mr. Carter, Miss Frans. 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.

102 General Psychology (for Nurses)
An introductory course intended to fit the needs of students of nursing. Not open to regular students. It covers the recommendations of the Curriculum Guide for Schools of Nursing.
First semester, W. F. 2. Dr. Henry. Two semester hours.

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.
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
Attention is given to individual differences and abilities, traits, content, and synthesis of personality; modification of behavior, varieties of adjustive behavior and behavior deviations.

302 Laboratory in Psychological Testing
The course will consider selection, administration, and interpretation of educational, personality, and aptitude tests. A competency in minimal statistics will be developed.
First semester, Lecture, M. 9; Laboratory, W. F. 9-11. Mr. Carter, Miss Frans, 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 purpose of this course is to provide training in the administration, scoring, and interpretation of the Revised Stanford-Binet Scale.
First semester, S. 9-11. Mr. Carter, Miss McGinnis. Two semester hours.

309 Clinical Psychology
This course considers theory and practice of the case study. It involves individual case studies, home visits, interviewing, conferences, laboratory and clinical procedure. 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.
First semester, W. 7-9 p. m. Dr. Gibbons. Two semester hours.
DIVISION OF SOCIAL SCIENCES

Floyd W. Moore, Chairman

The Division includes the Departments of Economics, History, Philosophy, Political Science, and Sociology. It functions through a committee consisting of the respective heads of these departments. The heads of the departments and the departmental counselors will advise students relative to requirements for majors or minors in these departments and concerning any special requirements set up by the departments. In certain cases, where a group major or minor is possible and advisable, the chairman of the Division should be consulted.

ECONOMICS

Floyd W. Moore  Robert S. Bowers
John D. Amey  Theodore L. Carlson
Howard F. Bigelow  John B. Healey

Course 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. For freshmen only. This course aims to make the student familiar with the terms, concepts, data, and institutions he must know about if he is to participate intelligently in business affairs.

First semester, Tu. Th. 8, 10, 1, 2; second semester, Tu. Th. 3. Mr. Amey. 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. Amey. Two semester hours.

220A Principles of Economics

A study of the fundamental principles of economics and their application to some of our more important economic problems.

First semester, M. W. F. 9, 11, 1, 3, Tu. Th. S. 8; second semester, M. W. F. 10. Mr. Bigelow, Dr. Carlson, Mr. Healey, Dr. Moore. Three semester hours.

Note.—Principles of Economics 220A and 220B form a single course, which is prerequisite to advanced work in the field. A student planning to take only a single semester's work in economics should consult with the instructor before electing Principles of Economics 220A.
220B Principles of Economics
A continuation of Principles of Economics 220A. Prerequisite 220A.
First semester, M. W. F. 10; second semester, M. W. F. 9, 11, 1, 3, Tu. Th. S. 8. Mr. Bigelow, Dr. Carlson, Mr. Healey, 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. Dr. Carlson. Two semester hours.

221B Money and Credit
A continuation of 221A with special emphasis on banking and other financial institutions. Prerequisite: Money and Credit 221A.
Second semester, Tu. Th. 2. Dr. Carlson. 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 problems the individual and the family face in trying to satisfy their wants with the money income and other resources at their disposal.
First semester, M. W. F. 9. Mr. Bigelow. Three semester hours.

320. Public Finance
A study of government expenditure, revenues, debts, and problems of fiscal administration. Prerequisite: Principles of Economics 220A, B. Work in government may be substituted in special cases by permission of the instructor.
Second semester, 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 plant location and types of construction; material equipment and power; planning and routing; statistics and accounting; marketing methods and problems; production management; personnel administration; purchasing, traffic, credit, and collections. Prerequisite: Principles of Economics 220A, B.
Second semester, M. W. F. 2. Dr. Moore. Three semester hours.
322 Corporations
A study of the nature of the modern business corporation, and its place in modern business life. Consideration is given to problems of organization, direction, finance, and control. Prerequisite: Principles of Economics 220A, B.

First semester, M. W. F. 10. Mr. Bigelow. Three semester hours.

323 Marketing
A study of the principles, methods, and problems of marketing. Included in the study is a general criticism of the existing market structure and some proposals for its improvement. Prerequisite: Principles of Economics 220A, B.

First semester, M. W. F. 2. Dr. Moore. Three semester hours.

324 Transportation
An analysis of the various means of transportation, including the items of service, cost, revenues, and government regulation. Prerequisite: Principles of Economics 220A, B.

First semester, M. W. F. 11. Mr. Healey. 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. Healey. 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. Healey. 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.
Not offered in 1948-1949. 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.
Second semester, S. 11-1. Dr. Moore. Two semester hours.

425(193) Consumption and Standards of Living
A comparative study of standards and levels of living, designed to acquaint the student with the ways people actually live in different types of communities and various economic levels. Of special interest to the teacher. Prerequisite: Principles of Economics 220A, B or consent of the instructor.
First semester, S. 11-1. 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 classical school, socialistic tendencies, and the controversial theories of the present experimental era. Prerequisite: not fewer than 12 semester hours in Economics.
Not offered in 1948-1949. Dr. Moore. Two semester hours.

429(141) International Trade
A general course in international relations with special emphasis on the fundamentals of international trade theory and the impact of national economic policies on international relations. Prerequisite: Principles of Economics 220A and B.
Not offered in 1948-1949. Dr. Carlson. Two semester hours.
Students preparing to teach in the later-elementary grades are advised to take Foundations of Western Civilization 100A, B, and a sequence of courses in United States history.

Students who have had a thorough course in United States history in high school and have made good grades in the subject should not take United States History 201A, B, but should instead select advanced courses in the field—305A, B; 306A, B; 312; 313; 317; 404; 406B; 418.

Students are advised not to take both English History 109A, B, and 100A, B, or 108A, B, except in special cases. English history is offered primarily to meet the needs of students who are pursuing the pre-law curriculum and students who are specializing in English literature.

Credit is not given for both Foundations of Western Civilization 100B and Modern Europe 108A, B.

A major in history should include at least 12 semester hours in courses numbered above the one hundreds; and at least part of the higher-number courses must be selected from those that deal intensively with a short period, and, therefore, afford students a better opportunity to become acquainted with methods of advanced historical study—305A, B; 306A, B; 308; 309; 315; 316; 404; 406B; 418.

A minor in history should include at least 3 semester hours in courses numbered above the one-hundreds.

Since a reading knowledge of French or German, or both, is helpful in advanced courses in history and essential in graduate work in the field, students majoring in history are urged to elect at least two years of French or German.

100A Foundations of Western Civilization

A course designed to acquaint students with 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. Tu. W. F. 10, 2, 3, M. Tu. Th. F. 9, M. W. Th. F. 8, 10, 11, 1; second semester, M. Tu. Th. S. 9. Mr. Crawford, Dr. Friedmann, Dr. MacMillan, Dr. Seibert, Mr. Starring. 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.

First semester, M. Tu. Th. S. 9; second semester, M. Tu. W. F. 10, 2, 3, M. Tu. Th. F. 9, M. W. Th. F. 8, 10, 11, 1. Mr. Crawford, Dr. Friedmann, Dr. MacMillan, Dr. Seibert, Mr. Starring. Four semester hours.
108A Modern Europe 1500-1815
A study of the Reformation; the struggle between Spain and England; the rise of the Dutch Republic; the growth of absolutism in France; the establishment of parliamentary supremacy in England; the rise of Russia and Prussia; colonial conflict, social and political ideas of the eighteenth century; the French Revolution; and the era of Napoleon.
First semester, M. W. F. 9, 11, 1; second semester, M. W. F. 11. Dr. Friedmann, Dr. Scott, Dr. Wichers. 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 results 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. Scott. 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. Scott. Three semester hours.

201A United States History to 1860
A general survey of American history from the beginning of the Thirteen Colonies to the Civil War.
First semester, M. W. F. 8, 9, 10, 11, 1, 2, 3; Tu. Th. S. 9; second semester, Tu. Th. S. 8. Dr. Knauss, Dr. Macmillan, Dr. Russel, Mr. Starring, Mr. Yntema. Three semester hours.

201B United States History, 1860 to the Present
A general survey of United States history for the period.
First semester, Tu. Th. S. 8; second semester, M. W. F. 8, 10, 11, 1, 2, 3, Tu. Th. S. 9. Dr. Knauss, Dr. Macmillan, Dr. Russel, Mr. Starring, Mr. Yntema. Three semester hours.

305A United States History, 1783-1815
An intensive study of selected topics. A principal object is to acquaint students with the various classes of historical materials and to introduce them to methods of advanced historical study. Prerequisite: six semester hours of history.
First semester, Tu. Th. 8. Dr. Russel. Two semester hours.
305B  United States History, 1845-1877
This course deals principally with the great sectional struggle over slavery. It is conducted in the same manner as 305A. Prerequisite: six semester hours of history.
Second semester, Tu. Th. 8. Dr. Russel. Two semester hours.

306A  United States History, 1877-1901
An intensive study of a short period. The course is conducted in a manner similar to that of 305A, B. Prerequisite: six semester hours of history.
Not offered in 1948-1949. Dr. Russel. Two semester hours.

306B  United States History, 1901 to the Present
This course is conducted in a manner similar to that of 305A, B and 306A, but a greater effort is made to present a complete outline. Prerequisite: six semester hours of history.
Not offered in 1948-1949. Dr. Russel. Two semester hours.

308  European Diplomatic History, 1878-1919
A study of the causes of World War I; the military and diplomatic events of the war; the revolutionary 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 the problems growing out of the peace treaties; successive changes in Italy, Russia, and Germany; the Spanish War; political aspects of the economic tension; causes and outcomes of World War II; the United Nations.
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 with comparisons of Europe and the United States.
Not offered in 1948-1949. Dr. Russel. Three semester hours.

312  Economic History of the United States
A general survey of the subject. A general knowledge of United States history such as may be gained from 201A, B is presupposed and a knowledge of the principles of economics is very helpful.
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.
DIVISION OF SOCIAL SCIENCES

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 316, 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, Directory, Consulate, and 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.
Second semester, M. W. F. 1. Dr. Russel. Three semester hours.

319 History of Russia
This course stresses (1) those phases in the evolution of the Russian people necessary to an understanding of the present; (2) conditions and tendencies in Russia. Prerequisite: six hours of history.
First semester, Tu. Th. F. 10. Dr. Scott. Three semester hours.

320 Ancient Greece
Background: Near East and Aegean civilization—The Homeric Age; rise and fall of Athens; Alexander the Great; Hellenism. Political achievements; the cultural legacy of the Greeks.
First semester, M. W. F. 10. Dr. Friedmann. Three semester hours.

321 Ancient Rome
Its growth, expansion, civil wars, imperialism, and final decline. Constitutional history, Roman law. The rise of the Christian church until the sixth century.
Second semester, M. W. F. 10. Dr. Friedmann. Three semester hours.
322 Renaissance and Reformation (1350-1650)
Italian Renaissance, the awakening of the modern mind. Humanism. Lutheranism; Calvinism; Anglicanism, Anabaptism. The Catholic Reformation. Resulting European civilization.
First semester, M. W. F. 11. Dr. Wichers. Three semester hours.

322 The Modern Near East
A study of the east Mediterranean lands formerly part of the Ottoman Empire; the problems resulting from racial conflict, economic imperialism, and the rise of nationalism; Balkan frontier disputes; Palestine, Turkey, and question of control of the Dardanelles.
Second semester, Tu. Th. F. 10. Dr. Scott. Three semester hours.

323 Modern Nationalism in Europe and America
Second semester, Tu. Th. 9. Dr. Macmillan. Two semester hours.

Open to Seniors and Graduates

404(162) The Era of the American Revolution 1763-1787

406B(182) United States from the Spanish American War to the Present
A general survey of the period with emphasis upon the Progressive Movement, the New Deal, and our entrance into World War II.
First semester, S. 1-3. Dr. Russel. Two semester hours.

418(177) The Old South
A study of economic, social, and cultural conditions in the ante-bellum South— with emphasis on the plantation system and Negro slavery and the social and political philosophy of Southern leaders.
Not offered in 1948-1949. Dr. Russel. Two semester hours.

Open to Graduates

510(281) Studies in Modern European History; Race Conflict in Central Europe
Migration and settlement of peoples in central Europe; racial difficulties in the Hapsburg monarchy; diplomatic and revolutionary movements of 1914-1945; the peace settlements; domestic and foreign policy of the succession states.
Not offered in 1948-1949. Dr. Scott. Two semester hours.

511(282) Studies in Modern European History: The Impact of Two World Wars 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.

Second semester, S. 9-11. Dr. Scott. Two semester hours.

513(201) Studies in Michigan History
Studies in the history of Michigan since its admission as a state. Attention is given to the critical use of historical materials and the preparation of bibliographies.

Not offered in 1948-1949. Dr. Knauss. Two semester hours.

515(285) Studies in Western Europe: Eighteenth Century Enlightenment
Lectures and reading on the character of the eighteenth century enlightenment, with special attention to France; and the critical use of historical materials in the preparation of papers on significant philosophes.

Second semester, S. 1-3. Dr. Seibert. Two semester hours.

519(262) Studies in Russian History
Lectures and reading on those phases of Russian history necessary for an understanding of the present. The critical use of historical materials in the preparation of papers on topics of current significance along two general lines: (a) problems connected with Russia's borderlands; (b) the evolution of Soviet institutions.

Not offered in 1948-1949. Dr. Scott. Two semester hours.

PHILOSOPHY
ROBERT FRIEDMANN

390 Introduction to Philosophy
A first acquaintance with the problems of philosophy; relationship between philosophy, science, and religion. Theoretical and practical philosophy. Problems of philosophy: universe, man, inner life, moral conduct, esthetics. Different schools of thought.

First semester, Tu. Th. 10. Dr. Friedmann. Two semester hours.

391A History of Philosophy: Greek and Christian Philosophy
The great thinkers of the Greeks and Romans, Plato, Aristotle, Stoicism, etc. The church fathers and the schoolmen of the Middle Ages up to the Renaissance.

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

391B History of Philosophy: Modern and Recent Thinkers
The new world view since the Renaissance. Bruno, Galileo, Descartes, Spinoza, Leibnitz, English thinkers: Locke to Hume; Kant to Hegel, and the more recent thinkers of both Europe and America.

Second semester, Tu. Th. 11. Dr. Friedmann. Two semester hours.
392 Problems of Ethics
Basic principles of moral philosophy, the human situation; different answers such as relative and absolute ethics. Problem of evil, limitations of human nature. Model of great moral teachers. Religion and morals.
Not offered in 1948-1949. Dr. Friedmann. Two semester hours.

393 Philosophy of Science
Logical foundations, methodology of sciences. The eternal principles of the universe as discussed by Physics, Chemistry, and Biology. Law and causality. Mechanism and vitalism.
Not offered in 1948-1949. Dr. Friedmann. Two semester hours.

394 Philosophy of History
The theories about the laws and principles of history. Fate or contingency? Meaning of historical happenings, their inner morphology. Tradition and revolutions. Discussion of Toynbee, Sorokin, Spengler, and other theorists.
Second semester, Tu. Th. 10. Dr. Friedmann. Two semester hours.

POLITICAL SCIENCE

D. C. SHILLING  CARL SANTORO
SAMUEL I. CLARK  WILLIAM V. WEBER

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. 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: Government 230, 231, or 234.

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, 2, 3, Tu. Th. S. 9; second semester, M. W. F. 11, 2. Mr. Clark, Mr. Santoro, Dr. Shilling, Dr. Weber. Three semester hours.

231 American State and Local Government
An effort is made to acquaint the student with the organization, aims, and problems of state, county, and municipal government. Special emphasis on Michigan.
First semester, M. W. F. 9, 10, 11, 2; second semester, M. W. F. 8, 9, 10, 1, 2, 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 courses 230 and 231.
First semester, Tu. Th. 10; second semester, Tu. Th. 10. Dr. Weber. Two semester hours.
330 Political Philosophy
An introduction to a selected portion of the political thought that has influenced the thinking of all ages and areas. Prerequisite: Government 230 and 231, or consent of the instructor.
Second semester, M. W. F. 1. 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: Courses 230 and 231.
First semester, Tu. Th. 1. Mr. Santoro. Two semester hours.

332 American Rural Government
A critical appraisal is made of rural government, together with a study of recent changes and plans proposed for further reorganization, especially in Michigan. Desirable antecedent: Government 231.
Not offered in 1948-1949. 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: Courses 230 and 231, or consent of instructor.
First 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: Government 230.

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: Government 230 and 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, in state legislatures, and the world. Prerequisite: Economics 220A, B, or Government 230 and 231, or consent of instructor.
Not offered in 1948-1949. 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. 11. Dr. Weber. Two semester hours.

338 International Law
Relations of nations in war and in peace, and the accepted usages regarding the rights of neutrals and belligerents, contraband, blockade, visit and search, changes of sovereignty, extradition, expatriation, and similar subjects. Changes brought about by World War II. Prerequisite: six semester hours of government 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: Government 230 or consent of 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 1948-1949. 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 1948-1949. 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: Government 230.
Not offered in 1948-1949. Dr. Shilling. Two semester hours.

431(141) Municipal Government and Administration
The main emphasis will be placed upon administration, studying such services as planning, zoning, police, welfare, utilities, and public works. Problems of metropolitan communities will be considered. Considerable source materials will be used. Prerequisite: Government 231.
Second semester, S. 9-11. Dr. Shilling. 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 present. Prerequisite: six hours of political science or six hours of United States history.

First semester, S. 9-11. Dr. Shilling. Two semester hours.

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**SOCIOMETRY**

**Leonard C. Kercher**  
**Robert Friedmann**  
**Paul B. Horton**  

Courses in sociology are designed (1) to give students in general a better understanding of the significant factors and processes of modern life; (2) to meet the needs of students preparing to teach in the social-science field; (3) to prepare students to do graduate work in the field of sociology; and (4) to stimulate interest in and provide some prerequisite study for the profession of social work.

A major in the field consists of 24 semester hours and a minor of 15 semester hours of course work.

Courses 241 and 242 are required of all students majoring or minoring in sociology and should constitute a minimum selection for students preparing to teach "Community Civics." All courses may be taken separately, and may be taken in any order by students who have had the prerequisite courses.

The curriculum in social work requires a major in sociology or a major in social science with a sociology concentration and a minor in social work, consisting of courses 255, 348, 351, 353, 355, 358A and 358B. Students intending to pursue this curriculum should seek counsel and guidance early from the instructor in social work.

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**SOCIOLOGY COURSES**

**241 Principles of Sociology**

A study of man's social nature and of the social world in which he lives. The biological, social, and cultural factors underlying the development of human personality and the various forms and processes of group association are analyzed.

First semester, Tu. Th. S. 8, M. W. F. 9, 10, 11, 3; second semester, M. W. F. 8, 2. Mr. Horton, Dr. Hunt, Dr. Kercher. Three semester hours.

**242 Modern Social Problems**

A general survey of some of the major social problems now confronting American society, such as inter-group conflict, physical and mental ill health, economic insecurity, juvenile delinquency and crime, population changes, and mass communication. Prerequisite: Principles of Sociology 241.

First semester, M. W. F. 8, 2; second semester, Tu. Th. S. 8, M. W. F. 9, 10, 1, 2. Mr. Horton, Dr. Kercher. Three semester hours.
243 Social Psychology
A study of the social and cultural aspects of individual personality, together with an analysis of the problems of personal adjustment that arise from the interaction of personalities and from the relation of the individual to the social environment in general. Prerequisite: Principles of Sociology 241.
First semester, 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.
First semester, W. F. 2. 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.
Offered off-campus only. Dr. Kercher. Three semester hours.

247 Problems of Family Life
A study of the social functions of the family with special emphasis on preparation for marriage through an analysis of the problems of interpersonal adjustment in family living.
First semester, M. W. F. 3; second semester, M. W. F. 10. Mr. Horton. Three semester hours.

248 Cultural Anthropology
A descriptive and comparative study of the cultures of primitive peoples; their technology, art, social life, and religion. The course includes also a consideration of the origins and functional interrelationships of significant aspects of contemporary culture.
First semester, M. W. F. 10. Dr. Hunt. Three semester hours.

340 Urban Community
A study of community life as influenced by the processes of industrialization and urbanization. Community problems and social planning for community life are given appropriate consideration. Prerequisite: Principles of Sociology 241.
Second semester, Tu. Th. 10. Mr. Horton. Two semester hours.

341 Social Control
A study of the means and the forms of social control. Emphasis is upon the systematic analysis of social control situations. Limited research project assigned. Prerequisite: Principles of Sociology 241 and Modern Social Problems 242.
First semester, Tu. Th. 1. Dr. Hunt. Two semester hours.
342 Criminology
A study of crime as a social problem. Course includes (1) an analysis of causative factors in crime, (2) a study of American police and court systems, (3) a survey of the problems of penology, and (4) a consideration of crime prevention. Visits to institutions are made.

343 Population
A study of the causes and implications of major contemporary population changes, both quantitative and qualitative in the United States and in the world.
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. 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, Tu. Th. 2. Dr. Hunt. Two semester hours.

348 Introduction to Social Research
An introductory course in the principles and techniques of social investigation. The leading research approaches are surveyed. Procedures for planning, organizing, and conducting limited research projects are analyzed. Statistical concepts and methods are studied. Each student will take part in a group study project. Prerequisite: 12 semester hours of social science other than history.
Second semester, M. W. F. 2. Dr. Kercher. Three semester hours.

349 Contemporary Social Movements
A study of the growth and place in contemporary society of selected social movements, including communism, fascism, Ku Klux Klan, the Townsend movement, the labor movement, and the like.
Not offered in 1948-1949. Mr. Horton. Two semester hours.

350 The Community and the School
A study of the social functions of education in promoting constructive community life. When offered off-campus for resident credit each student, working singly or in small committees, is expected to develop an instructional unit for practical classroom use. Prerequisite: Principles of Sociology 241 or equivalent.
Open to Seniors and Graduates

445 (162) Cooperative Social Organization
A study of cooperative enterprise and cooperative movements; covering principles, historical developments, forms and manifestations, problems of operation, and place in contemporary society.
Not offered in 1948-1949. 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.
First semester, S. 11-1. Dr. Kercher. Two semester hours.

447 (118) Migrations
A study of major human migrations, both historical and contemporary. The nature of these migrations, the factors responsible for them, and the problems arising in relation to them are emphasized. Prerequisite: Principles of Sociology 241 or equivalent.
Not offered in 1948-1949. Dr. Kercher. Two semester hours.

Open to Graduates

541 (158) Advanced Studies in Social Control
A consideration of the agencies and means of social control from the standpoint of their relation to different socio-economic systems. Treatment of ridicule, gossip, rewards, coercion, propaganda, and censorship. Term projects in special areas of control. Prerequisite: Principles of Sociology 241 or equivalent.
Second semester, S. 11-1. Dr. Hunt. Two semester hours.

543 (115) Advanced Population Studies
A study of significant population conditions and changes, both quantitative and qualitative, in the United States and in the world's trouble spots. Facts, causes, consequences, and policies with respect to contemporary population situations are considered.
Not offered in 1948-1949. Dr. Kercher. Two semester hours.

547 (160) Advanced Studies in the Family
The major aspects of family life are explored. Attention is directed to historical family organizations, the family in other cultures, changing institutional functions, major family problems, and family disorganization and reorganization. Prerequisite: Principles of Sociology 241 or equivalent.
Not offered in 1948-1949. Two semester hours.

SOCIAL WORK COURSES

255 The Field of Social Work
A study of social work as a professional field. The philosophy, functions, employment opportunities, patterns of specialization, and methods of social
work are surveyed. Interpretative visits to varied types of social work agencies are made.

First semester, 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 a public agency point of view. 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

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. Prerequisite: 12 semester hours of social science other than history.


355 Principles of Social Work

A course designed for students without social work experience. It constitutes a general introduction to the basic principles and processes of social case work. For those students needing it consideration is also given to the principles, methods, and problems of social group work. Prerequisite: consent of the instructor.

First semester, 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. A minimum of 50 hours of on-the-spot study of the agency's organization, functions, and methods are required. Prerequisite: Principles of Social Work 355, and consent of the instructor.

First semester, Tu. Th. 10; second 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 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

An introduction to the field of mental and nervous diseases. Organic and functional psychoses and psychoneuroses and their social implications.

First semester, M. 7-9 p. m. Dr. Williamson. Two semester hours.
549(243)  Child Psychiatry
Discussion of causation, symptomatology, prognosis, and treatment of mental and emotional maladjustments of childhood.
Second 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.
Not offered in 1948-1949. Dr. Williamson. Two semester hours.
DIVISION OF TEACHER EDUCATION

James H. Griggs, Chairman

EDUCATION

MANLEY M. ELLIS  ARTHUR J. MANSKE
VIOLET BEIRGE  KATHERINE A. MASON
JANE A. BLACKBURN  LOY NORRIS
ROY C. BRYAN  RAY C. PELLETT
CARL R. COOPER  HAZEL I. PADEN
JOHN L. FEIRER  EFFIE B. PHILLIPS
ORIE I. FREDERICK  MARION J. SHERWOOD
MITCHELL E. GARY  ROXANA A. STEELE
GEORGE H. HILLIARD  LOUISE F. STRUBLE
EUNICE E. KRAFT  ALFRED R. THEA
LESTER R. LINDQUIST  WILBUR D. WEST

ELMER H. WILDS

Courses in the Department of Education are designed to meet the professional needs of the student preparing to teach. All students pursuing a curriculum for a secondary provisional certificate and a degree are required to take as a minimum 21 semester hours of professional work in education; 24 semester hours for the elementary provisional certificate. The following courses, or their equivalent, are required: Human Growth and Development 251, 3 semester hours; Psychology of Reading 212, 3 semester hours for elementary teachers; Introduction to Directed Teaching 240 or 351, 3 semester hours; and Directed Teaching, Laboratory in Education, and General Educational Problems 370A, B, C, 15 semester hours.

Applicants for the elementary or secondary provisional certificate are not permitted to major in Education.

Elective courses are available in the following fields: early-elementary education, later-elementary education, secondary education, special education, methods of teaching, theory and principles of education, educational measurements, rural education, and health education. Certain special-methods courses are available in other departments of the institution.

Students take Directed Teaching and Laboratory in Education 370A and B, 12 semester hours, during one semester, and General Educational Problems 370C, 3 semester hours, during either semester of the senior year. Students with advanced credit in education or with irregularities in their professional work should confer with the departmental adviser at the earliest possible date.
REQUIRED WORK IN EDUCATION

(For Provisional Certificate)

Sophomore or Junior Year

251 Human Growth and Development
Class meets four periods a week for three hours credit. Course deals with physical, social, emotional, and intellectual growth and development of children and adolescents. Prerequisite: as many honor points as hours of credit.

First semester, M. W. F. S. 9, M. W. Th. F. 8, 10, 11, 1, 2, 3; second semester, M. W. F. S. 9, M. W. Th. F. 8, 10, 11, 1, 2, 3. Dr. Beirge, Miss Blackburn, Dr. Ellis, Mrs. Phillips, Dr. West. Three semester hours.

Junior Year

351 Introduction to Directed Teaching
This course is designed to prepare students for successful student-teaching. Prerequisite: Human Growth and Development 251 or equivalent and as many honor points as hours of credit.

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

370A, B, C Integrated Professional Education
For all seniors whose programs will permit them to devote one semester entirely to professional education. A unified course for seniors which is based on needs and problems of students while doing their directed teaching. Prerequisite: Human Growth and Development 251 and Introduction to Directed Teaching 351, or equivalent; and as many honor points as hours of credit.

Miss Blackburn, Dr. Frederick, Dr. Manske, Miss Steele, supervisors, and resource persons. Fifteen semester hours.

370A Directed Teaching
Students devote a half day for one semester to Directed Teaching, at which time they have experiences in both the curricular and extra-curricular program of the training school in which they teach. All students expecting to do Directed Teaching should enroll in the 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 the kinds of problems faced in directed teaching situations in classroom, school, and community. Other problems to be faced later as full-time teachers are considered. Suggestions and guidance are afforded by staff members and by resource persons.
Each semester, (Elementary) M. W. Th. 9-11, M. W. F. 1-3; (Secondary) Tu. W. Th. F. 9 and Tu. Th. 10; M. W. F. 10-12; M. W. F. 1-3; Tu. Th. 2 and Tu. W. Th. F. 3. Four semester hours.

370C General Educational Problems
Course content includes such matters as social, political, and economic influences on education; historical and philosophical backgrounds of present-day education; changes and trends in education; and current problems in education.

Each semester, M. W. F. 9, 11, 1, 3. 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.

Each semester. Supervisors. Four semester hours.

372 Directed Teaching
Only for seniors who have previously fulfilled a part of their requirement in directed teaching. Similar to description for 370A.

Each semester. Supervisors. Four semester hours.

373 Directed Teaching
This elective course is planned primarily for those students who wish to extend their teaching over a wider range of grades or subjects, and for students who, in the opinion of the head of the department and the Director of Teacher Education, need more experience in teaching. Prerequisite: Directed Teaching 372 or 370A.

Each semester. Supervisors. Four semester hours.

374 Directed Teaching
A course in the teaching of arts and crafts related to work in occupational therapy in the public schools and in institutions for defective children. Prerequisite: same as for Directed Teaching 371. Open only to students of occupational therapy.

Each semester. 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. Prerequisite: as many honor points as hours of credit.
First semester, M. W. F. 10, 11; second semester, M. W. F. 10. Miss Blackburn. 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
This course will enable students to appraise and organize materials and methods of work suitable for child-study groups or parent-teacher meetings. Efforts will be made to secure practice in handling child-study groups.
Not offered in 1948-1949. 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.
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 1948-1949. 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 1948-1949. Dr. Frederick. Two semester hours.

312 Later Elementary Education.
A study of the characteristics and needs of pupils in the later-elementary grades and of the materials and methods of instruction. Prerequisite: Human Growth and Development 251.
Not offered in 1948-1949. Miss Mason. Three semester hours.
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.
Not offered in 1948-1949. 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 1948-1949. 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.
Second semester, S. 11-1. Dr. Hilliard. Two semester hours.

510B (C107b) Psychology of the Elementary School Subjects: Arithmetic, Spelling, and Social Studies
Deals with the psychological principles underlying the present and projected practices in the teaching of arithmetic, spelling, and the social studies.
Not offered in 1948-1949. 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 1948-1949. Dr. Frederick. Two semester hours.

513 (B251) Supervision of Elementary School Instruction
Required of students preparing for the preliminary examination for the doctorate of elementary education. Presupposes training and experience in elementary education and a rudimentary knowledge of public-school administration.
Not offered in 1948-1949. Dr. Norrix. 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.
First 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 1948-1949. 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 1948-1949. 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 1948-1949. 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.
First semester, S. 9-11. Dr. Bryan. Two semester hours.

521(B122) The Modern High School Curriculum
Concerned largely with the literature dealing with the high-school program of studies, the criticisms directed against the existing curriculum, and the more significant proposals for its reform.
Not offered in 1948-1949. Dr. Frederick. Two semester hours.

523(C119) Educational Guidance and Adjustment of High School Pupils
Deals with the personal, recreational, educational, and vocational guidance of youth. Methods of counseling and techniques of gathering pertinent personnel data will be presented.
First semester, S. 11-1. 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 1948-1949. Dr. Bryan. Two semester hours.
526(C117) Aptitude and Vocational Tests
The nature of vocational aptitudes and the means of disclosing them. Practice in the application of tests and the interpretation of data will be provided.
Not offered in 1948-1949. Dr. Manske. Two semester hours.

527A(B227a) Seminar in Secondary School Curriculum
Considers needs and interests of adolescents, content and organization of school experiences, ways to vitalize experiences of youth, and the use of research techniques in working on curriculum problems.
First semester, S. 1-3. Dr. Frederick. Two semester hours.

527B(B227b) Seminar in Secondary School Curriculum
A continuation of 527A.
Second semester, S. 1-3. Dr. Frederick. 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.
First semester, S. 9-11. Dr. Wilds. 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.
Not offered in 1948-1949. Dr. Manske. Two semester hours.

530(C220) Seminar in Guidance and Adjustment
Research in the field of guidance and adjustment. Restricted to advanced students who wish to prepare theses or engage in other research activities in the field.
Second semester, S. 1-3. Dr. Manske. Two semester hours.

SPECIAL EDUCATION

231 Introduction to Special Education
A beginning course in the field of special education, dealing with the education of gifted, subnormal, neurotic, delinquent, speech-defective, blind, deaf, and crippled children. Prerequisite: Human Growth and Development 251.
First semester, Tu. Th. 10. Dr. Ellis. Two semester hours.

232 Problems of the Deaf and Hard of Hearing
A study of the handicap of deafness. Topics included are: the history of the treatment and education of the deaf; the social, economic, educational, and psychological problems resulting from a loss of hearing; and the special speech problems encountered.
Not offered in 1948-1949. Three semester hours.
233 Introduction to Lip Reading
   A course designed to acquaint the student with the various methods of
   lip reading and the problems encountered in the teaching of this skill. The
   student is given opportunity to acquire elementary lip reading skill as well
   as practice in the techniques of teaching.
   Not offered in 1948-1949. Three semester hours.

234 Advanced Lip Reading
   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 lip reading to both children and adults.
   Not offered in 1948-1949. Three semester hours.

235 Introduction to Mental Hygiene
   A course in the mental hygiene of childhood and adolescence. Among
   the topics considered are: adjustment to home and school; failure, frustra-
   tion, and aggression; role of the emotions in education; adolescence and its
   problems; sex development; juvenile delinquency; the mental hygiene of
   courting, mating, and marital relations; the mental hygiene of religion.
   Second semester, M. W. F. 2. Dr. Ellis. 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 op-
   portunity 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.
   Not offered in 1948-1949. Two semesters hours.

332 Mental Deficiency
   A course in the psychology and the school treatment of subnormal chil-
   dren. 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.

336 Character Education
   The objectives of character education are studied and catalogued. The
   influences of the curriculum, the cardinal principles of education and social
   agencies, in relation to heredity and environment, are observed. A bibli-
   ography of reference to methods and materials is collected.
   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 1948-1949. 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.

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.
Second semester, S. 11-1. Mr. Thea. Two semester hours.

435(C120a) Mental Hygiene of Adolescence
Problems and adjustment of youth of high school age. 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.
Not offered in 1948-1949. Dr. Ellis. Two semester hours.

436(C120b) 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.
Second semester, S. 9-11. Dr. Ellis. Two semester hours.

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 1948-1949. Dr. Ellis. Two semester hours.

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, tests, meets, tournaments, and seasonal 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**
This course is designed for the prospective teacher of high school subjects. Consideration is given to business education programs, equipment, approved teaching procedures and teaching aids.
Second semester, Tu. Th. 2. Mr. Lindquist. Two semester hours.

347 **Plan and Organization of a School Shop**
This is a course to help teachers plan and organize the school shop. Topics concerned include physical needs of the subject, selection of activities, shop layout, purchasing equipment, establishing a supply routine, planning personnel organization and shop management.
Each semester, Tu. Th. 9. Dr. Feirer. Two semester hours.
348 Teaching of Industrial Arts
This course deals with the problems in teaching industrial arts subjects, the techniques employed in the analysis of instructional units, construction of tests and rating scales, and problems dealing with administration and work. The principal methods of instruction used in industrial arts subjects will be emphasized.

Each semester, M. W. F. 9. Dr. Feirer. Three semester hours.

THEORIES AND PRINCIPLES OF EDUCATION

352 The Theory and Practice of Creative Education
This course is especially designed for leaders in any field who are interested in the creative way of living and learning. An attempt will be made to discover creative procedures which are more productive of results in setting up learning situations for those groups, in or out of school, who are interested in self-development and community achievement.

Each semester, Tu. Th. 3. Dr. Beirge. Two semester hours.

353 Foundations of Modern Education
This course acquaints the prospective teacher with the historical and philosophical backgrounds of the institution in which he is to work, in order to prepare for intelligent participation in the interpretation of modern educational issues and the solution of present-day educational problems. Prerequisite: Human Growth and Development 251.

Not offered in 1948-1949. Dr. Wilds, Dr. Frederick. Three semester hours.

Open to Seniors and Graduates

451(A125) Philosophy of Education
For graduate students and teachers of experience. Analyzes and interprets the changes in education taking place in this and other countries.
Second semester, W. 7-9 p.m. 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.
First semester, S. 9-11. 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 1948-1949. 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 1948-1949. 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. 11-1. Dr. Norrix. Two semester hours.

561(B255) Social Interpretation
Deals with community education with respect to the educational program. Considers the principles of education interpretative service and their application in every phase of the system, considering specifically the constructive method of continuous community education.
Second semester, S. 9-11. 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. West. 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 for students who are interested in the educational possibilities of camping. The work includes a study of the camping literature, a comparison of the philosophies of education and of camping, discus-
sions of camping problems and of the opportunities for guidance and group work in camp living, and visitation of neighboring camps.

Not offered in 1948-1949. 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 1948-1949. 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 1948-1949. 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.

Second semester, S. 9-11. Dr. West. Two semester hours.

LIBRARIANSHIP

ALICE LOUISE LEFEVRE  MATE GRAYE HUNT

The Department of Librarianship is fully accredited by the American Library Association as a library school.

The curriculum in librarianship provides a choice of two programs: (1) The School Library sequence leading to a B.S. degree including teaching certificate with a major (24 semester hours) in librarianship which prepares the candidate to hold a position as librarian in elementary or secondary schools. Provision is also made for students to present a minor in preparation for part-time school library service: (2) The County Library sequence leading to an A.B. or a B.S. degree with a major in librarianship qualifying the candidate for library service in small communities or in rural areas. Certain of the courses are also open to other students who desire a wider acquaintance with books and other library materials.

The courses are open to juniors and seniors with the exception of Reading Interests of Children 202 which is also open to sophomores. The major for either of the above sequences consists of courses 202 or 302, 303, 311, 360, 361, 362, 370 and two of the other three hour courses. The minor consists of 302 or 202, 303, 305, 311, 360 and 361. Candidates in the School Library sequence spend a part of the practice teaching period (Education 370A) in a supervised school library. Candidates in the County Library sequence will elect 380 to provide a similar period of supervised practice
in a county library. Consult the director of the department for further information on selection of courses.

The courses in the Department of Librarianship count in the following subject groupings: Group I, Language and Literature, 202, 302, 303, 304, 311; Group III, Social Science, 362; Group IV, Education, 361, 363, 305; Group VI, Practical Arts, 360, 370, 380.

202 Reading Interests of Children
In association with children, the class will read and evaluate a wide range of books on varying reading levels as a basis for consideration of present day children's interests in the light of the development of children's reading. There will be opportunity to examine, evaluate, and use printed aids for the selection of books for children.

First semester, M. W. F. 8; second semester, M. W. F. 8. Miss Hunt. Three semester hours.

302 Reading Interests of Youth
Study of the fields of literature of interest to youth. Students will read and evaluate, in association with young people, a wide range of books selected from both adult and juvenile levels. Emphasis is placed on the development of appreciation and methods of awakening interest in reading. Attention is given to sources for selection of such books.

First semester, M. W. F. 10; second semester, M. W. F. 10. Miss LeFevre. Three semester hours.

303 Selection of Reading materials*
Building the book collection for the library, with emphasis on the needs of the school clientele and in relation to the community. Attention is given to the evaluation and effective use of sources for selection of books, periodicals, and other materials.


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. 9. 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. 12. 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.


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. 10; second semester, Tu. Th. 8. Miss Hunt. Two semester hours.

361 Administration of School Libraries*
Consideration is given the functions of the library in the school, its objectives, contributions to the educational program and administrative procedures. Stresses the responsibility of the library in carrying out the aims of the school program. Covers problems of support, housing and equipment, personnel, public relations, and standards of service.

First semester, Tu. Th. 11; second semester, Tu. Th. 10. Miss Hunt. Two semester hours.

362 The Library in the Modern Community*
The course aims to give the student professional background and opportunity to broaden his own reading program. Surveys the development of libraries in the United States from the Colonial period to the present day with consideration of various types of libraries in relation to their contribution to society. Attention is given the adult education program, county and regional library service, and the services rendered through national, state, and local library agencies.

First semester, Tu. Th. 9; second semester, Tu. Th. 8. 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.


380 Library Observation and Practice*

Opportunity will be given the student to observe various kinds of library service. Candidates in the county library program will elect this course to provide supervised practice periods in selected cooperating county libraries and candidates in the school library program who have previously completed practice teaching will need to elect this to provide a practice period under supervision in a school library.

Hours to be arranged. Miss LeFevre. Two or three semester hours.

*Starred courses open only to majors and minors in the Department of Librarianship.
DIVISION OF RURAL LIFE AND EDUCATION

Wm. McKinley Robinson, Chairman

The Division includes the Departments of Agriculture and Rural Life and Education. It functions through a committee consisting of the respective heads of these departments. The heads of the departments and the departmental counselors will advise students relative to requirements for majors or minors in these departments and concerning any special requirements set up by the departments. In certain cases, where a group major or minor is possible and advisable, the chairman of the Division should be consulted.

AGRICULTURE

HOWARD D. CORBUS

The four major objectives of the Department of Agriculture are: (1) to prepare teachers of agriculture and shop work in rural consolidated schools and other schools in agricultural districts of the state; (2) to assist in the preparation of elementary teachers in rural schools; (3) to offer a preprofessional program for students who plan to transfer to schools of forestry, veterinary science, and specialized fields of agriculture; (4) to provide a general education in the field of agriculture as it relates to our national economy.

It is recommended that students in the first group elect basic science courses in biology, general chemistry, geology and geography, and also basic courses in economics, sociology, history, and government for background information which is closely associated with all production and marketing practices in agriculture. Basic courses in industrial arts are also recommended in combinations of agriculture and shop courses, making possible major and minor sequences in these fields. Courses in education and directed teaching should be arranged with the counselor of the Division of Rural Life and Education. Majors in agricultural subjects with or without combinations in other departments can be arranged. Courses 107, 108, 109, 200, 201, 202, and 203 are included in Group II.

105 Rural School Agriculture

A course designed to present to prospective rural school teachers as much information and materials, as time permits, concerning the environment surrounding representative rural schools. Consideration is given to the amounts and sources of cash used to support family and school costs in farming areas.

First semester, M. W. F. 2. Mr. Corbus. Three semester hours.

106 Introduction to Agriculture

An introduction to the national institution of farming, where it operates, the rewards and compensations, the main problems, and opportunities
present which may support acceptable living standards for families living on farms and also for those investing capital in the business of farming.

Not offered in 1948-1949. Mr. Corbus. Three semester hours.

107 Animal Husbandry
An introduction to the industry of animal production, the development, consumption characteristics, marketing systems, and producer and consumer price relationships.
First semester, M. W. F. 3. Mr. Corbus. Three semester hours.

108 Dairying and Feeding
A course to open up to possible producers and consumers of milk products the possibilities of cash income from producing milk and butterfat, and the accompanying factors affecting success in the business.
Second semester, M. W. F. 3. Mr. Corbus. Three semester hours.

109 Poultry
Poultry courses include the consideration of likely cash incomes from poultry enterprises, with the hazards, sources of stock, care, and marketing problems examined.
Second semester, M. W. F. 2. Mr. Corbus. Three semester hours.

200 Soils
This course is intended to open new interests, establish scientific thinking, and promote more specific and continued observations with personal understandings of the importance of soils in the lives of everyone.
First semester, M. W. F. 8. Mr. Corbus. Three semester hours.

201 Farm Crops
This course includes a survey of areas of crop production in the country, and in state and local communities, together with the study of cultural practices used to produce crops for market.
Second semester, M. W. F. 8. Mr. Corbus. Three semester hours.

202 Horticulture
Organized to develop more fully the possibilities of financially supporting a farm family, using horticultural products as the sources of income. Handicaps, specific problems, marketing and approved practices are studied.
Not offered in 1948-1949. Mr. Corbus. Three semester hours.

300 Farm Management
This part of farm organization has been divided from the Farm Crops course in order to examine more fully the records of farm enterprises that are now a part of farm production.

301 Land Use and Soil Conservation
This course is aimed at establishing an understanding of the movement promoting better use of the various types of land, and the recommended practices for conserving the productivities of these lands.
First semester, M. W. F. 9. Mr. Corbus. Three semester hours.
310 Organizations in Agriculture

This is a specialized course in which the wide variety of farm organizations are studied so that the purpose, personnel, and influence of the organizations can be better observed.

Second semester, W. 12. Mr. Corbus. One semester hour.

RURAL LIFE AND EDUCATION

WM. MCKINLEY ROBINSON ESTHER D. SCHROEDER

Students completing degrees—elementary or secondary—in Rural Life and Education select in their senior year two or more rural seminars.

Rural Education Courses count in Group IV; Rural Social Science Courses count in Group III.

RURAL EDUCATION COURSES

140 Curriculum

A study of the particular needs of rural children, the objectives of education relating to rural needs, and curriculum practices in carrying out accepted objectives. Students have a wide range of experience in observation and in the examination and development of materials suitable for rural schools.

First semester, M. W. F. 8, S. 9-12; second semester, M. W. F. 8. Miss Schroeder. Three semester hours.

240 Introduction to Directed Teaching

A functional study of the general principles underlying good teaching and management in the various types of rural schools. Group and individual observation and participation opportunities on and off campus are provided.

First semester, M. W. F. 10; second semester, M. W. F. 10, 1. Miss Schroeder. Three semester hours.

241 Directed Teaching

The Hurd One-Teacher and the Portage Rural Agricultural School are used for students in the department. Selected students are permitted to do practice teaching* while in residence for six weeks in a school district in one of the several counties in the service area of the college.


340 Rural School Administration

Problems met by teachers in rural schools are considered, such as district reorganization, community schools, public relations, support and control, county superintendent, state department, school plant, equipment and supplies, school law, professional ethics.

Second semester, Tu. Th. 8. Dr. Robinson. Two semester hours.

345 Rural School Supervision (Seminar)

Planned for principals, supervisors, and superintendents, this includes individual reports on problems related to the curriculum, teaching, and
supervision of all types of rural schools and stresses the in-service education of teachers. Prerequisite: consent of instructor.

First semester, M. W. 3. Miss Schroeder. Two semester hours.

346 Rural School Supervision (Seminar)
Continuation of 345. Study of group and individual problems pertaining to supervision and the related administrative activities in rural areas. Field work is afforded. Prerequisite: consent of instructor.

Second semester, M. W. 3. Miss Schroeder. Two semester hours.

348 Special Problems of Village and Consolidated Schools (Seminar)
Supplementing 340, considers administrative topics confronting principals and superintendents in rural areas, such as aims and functions of the school in relation to the community, district surveys, location and planning of buildings, finance, transportation, selection, salary and tenure of teachers, extra curricular activities, PTA. Includes trips to nearby schools. Prerequisite: consent of instructor.

Second semester, M. W. 3. Dr. Robinson. Two semester hours.

RURAL SOCIAL SCIENCE COURSES

220 Rural Sociology
Study of life in the rural environment—population trends, community, social institutions, health facilities, libraries, etc.—is the aim of this course. Current magazines and pamphlets supplement the textbooks.

First semester, S. 9-12; second semester, M. W. F. 9. Dr. Robinson. Three semester hours.

230 Rural Economics
The fundamental principles are considered in terms of rural life relating to the local community and to the national and international scene. Economic interpretation is given topics touched upon in the elementary and secondary school curricula; notably, conservation, agricultural extension services, cooperatives, insurance, consumer education, etc.

First semester, M. W. F. 9; second semester, S. 9-12. Dr. Robinson. Three semester hours.

320 Rural Life (Seminar)
Critical study of recent advanced books in the field of rural social life with emphasis upon leadership, supplemented with references including research studies. Prerequisite: consent of instructor.

First semester, Tu. Th. 3. Dr. Robinson. Two semester hours.

321 Rural Life (Seminar)
Social research, such as local, county, or regional planning of various services and agencies is considered, members of the class devising forms and schedules for a rural community study. Individual problems are studied, field trips are included. Prerequisite: consent of instructor.

Second semester, Tu. Th. 3. Dr. Robinson. Two semester hours.
DIVISION OF VOCATIONAL AND PRACTICAL ARTS EDUCATION

Deyo B. Fox, Chairman

The Division includes the Departments of Business Education, Distributive Education, Home Economics, and Industrial Education. It functions through a committee consisting of the respective heads of these departments. The heads of the departments and the departmental counselors will advise students relative to requirements for majors or minors in these departments and concerning any special requirements set up by the departments. In certain cases, where a group major or minor is possible and advisable, the chairman of the Division should be consulted.

BUSINESS EDUCATION

ARNOLD E. SCHNEIDER
JOHN D. AMEY, JR.
AGNES E. ANDERSON
HOMER ARNETT
ERNST W. CASLER
DORIS COOPER
JOHN B. HEALEY
GEORGE A. KIRBY
LESTER LINDQUIST

RALPH W. MATTHEWS
ELIZABETH MUSSELMAN
THOMAS W. NULL
GLEN C. RICE
ROBERT SCHUTZ
RALPH S. SEELEY
ADRIAN TRIMPE
RUTH C. WALMSLEY
EDNA F. WHITNEY

The Department of Business Studies embraces three major professional and technical areas. They are: I. The Business Teacher Training Curricula. These are four-year curricula leading to the degree of B. S. or A. B. and are referred to under the heading of Business Education. Under these curricula the student may select one of four business teaching fields as listed below. II. Business Administration Curriculum. This is a four-year training program for various positions in business and industry leading to the degree of B. S. Under this curriculum the student may select one of several majors. III. Technical Business Curricula. These are two-year training programs for the many job opportunities in the business and industrial world leading to a diploma and certificate. These curricula are referred to as the Terminal Business Programs.

Students who intend to take a major or minor in Business Teacher Training should confer with their adviser as early as possible in their sophomore year. All students majoring in Business Teacher 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.

The curriculum for high school vocational coordinators is to be found under the curricula for teachers.
Those planning to teach business subjects in high schools must take the following subjects: For teaching secretarial and related business subjects: Secretarial Science 130A, B; Office Machines 230A, B; Coordinated Business Experience 200A; Accounting 210A, B or 211A, B; Business Correspondence 232 and Filing 236. (Note: 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.) For teaching bookkeeping and related business subjects: Accounting 210A, B; Accounting 310A, B or 311 and 312; Business Law 330A, B; Office Machines 230A, B (typing course requirement); Business Correspondence 232. For teaching retailing courses: Retail Math. 111; Fundamentals of Retailing 140; Retail Salesmanship 150; Retail Advertising 240; Retail Credit and Collections 241; Store Organization 251A, B; Accounting 210A, B.

Students who desire to minor in Business Teacher Education may select 15 hours from any one of the three fields listed above or they may select the following sequence: Secretarial Science 130A; Coordinated Business Experience 200A; Accounting 210A, B or 211A, B and Business Correspondence 232.

General Degree students are referred to the general requirements for the Business Administration curriculum as given under the non-teaching professional curricula. Majors in Business Administration are presently offered in the following fields: Accounting, Air Transportation, General Business, Office Management, Secretarial Science, and Retailing.

Students desiring to enter on the Terminal Business programs are referred to their specific adviser as listed above and to the requirements for these programs as given under the non-teaching curricula. Students may enter on the cooperative work-study programs in retailing or secretarial training or they may elect the regular technical two-year program with a specialization in: Clerical Accounting, General Business, and General Clerical.

ACCOUNTING

210A Accounting

This course deals with the elementary principles of accounting and considers the more common technical devices for recording business transactions according to those principles.

First semester, M. W. F. 8, 10, M. Th. 7-9 p. m.; second semester, M. W. F. 1. Mr. Kirby, Mr. Amey, Mr. Casler. Three semester hours.

210B Accounting

A continuation of course 210A, applying the principles developed in the preceding course to partnerships and corporations. Manufacturing accounts and statements, reserves and funds, the voucher system and the analysis and interpretation of simple financial statements are studied. Prerequisite: Accounting 210A.

Second semester, M. W. F. 8, 10, M. Th. 7-9 p. m. Mr. Kirby, Mr. Amey, Mr. Casler. Three semester hours.
211A Secretarial Accounting
In this course the basic principles of accounting are presented from the viewpoint of the secretary. The accounts of private individuals, professional men, institutions, and small business firms of various types are studied.
First semester, M. W. F. 9. Dr. Schneider. Three semester hours.

211B Secretarial Accounting
A continuation of course 211A in which practical applications will be applied in a large number of work situations. Prerequisite: Secretarial Accounting 211A.
Second semester, M. W. F. 9. Dr. Schneider. Three semester hours.

310A Advanced Accounting
A study of evaluation of assets; investments; depreciation, appraisal, and depletion of fixed assets; current, contingent, and fixed liabilities; capital stock; surplus and reserves. Prerequisite: Accounting 210A, B.
First semester, M. W. F. 10. Dr. Schneider. Three semester hours.

310B Advanced Accounting
A continuation of Accounting 310A, including the following topics: consignments, installment sales, mergers, holding companies, receiverships, estates, and trusts. Prerequisite: Advanced Accounting 310A.
Second semester, M. W. F. 10. Dr. Schneider. Three semester hours.

311 Cost Accounting
The relation of cost accounting to management for control; general principles involved in constructing a cost system; distribution of cost—material, labor, and burden; cost records; operating reports; joint and by-product costs and budgetary control. Prerequisite: Accounting 210A, B.
Second semester, M. W. 7-9 p. m. Mr. Schutz, Mr. Casler. Three semester hours.

312 Tax Accounting
A study of the Federal Income Tax Laws, social security, and payroll tax rebatulations as they apply to old age benefits, state unemployment insurance, payroll records, and government reports. Prerequisite: Accounting 210A, B or consent of instructor.
First semester, M. W. 7-9 p. m. Mr. Schutz, Mr. Casler. Three semester hours.

GENERAL BUSINESS

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 all letters of business correspondence.
First semester, M. W. F. 9. Mr. Lindquist. Three semester hours.
235 Statistical and Financial Ratios
An introduction to basic applied business statistics. A study of various statistical and financial ratios as guides to efficient business management and the interpretation of financial data. Prerequisite: Accounting 210A.
First semester, M. W. F. 9. Mr. Vixo. Three semester hours.

239. Office Organization and Management
The flow of office work and the basic purposes served. Areas of office services from the managerial viewpoint. A brief over-view of the problems of organizing, constructing, installing, and maintaining office systems.
Second semester, M. W. F. 11. Dr. Schneider. Three semester hours.

330A Business Law
A study of the basic principles of law applicable to business. Law of contracts, negotiable instruments, debtor or creditor relationships, bailment, are studied from the viewpoint of the business man.
First semester, M. W. F. 9, 1. Mr. Healey, Mr. Arnett. Three semester hours.

330B Business Law
Continuation of Business Law 330A with emphasis on personal property, real property, statute of fraud, insurance, partnerships, and corporations.
Second semester, M. W. F. 9, 1. Mr. Healey, Mr. Arnett. Three semester hours.

336 Personnel Administration
The personnel office in modern business and industry. The duties and work of the personnel staff, personnel office, records and reports, interviewing, counseling, adjustment of complaints, job analysis, job classification, in-service training, and upgrading of employees. Prerequisite or concurrent: Psychology of Personality 207.
First semester, M. W. F. 2. Mr. Healey. Three semester hours.

339 Business Problems
An opportunity to approach business from the case study viewpoint. Problems to be studied will be correlated with the students’ major interest in their field of business. Wherever possible, actual business cases in the surrounding business area will be used.

RETAILING

100 Coordinated Business Experience
Limited to second semester students enrolled in Retailing Curriculum. The requirement for credit will be (1) a minimum of 200 clock hours of approved store work, (2) a report from the employer, and (3) a term report by the student.
Each semester, M. 8 p.m. Mr. Rice. One semester hour.
111 Retail Merchandise Mathematics
An introduction to the mathematics of merchandising. Mark-up, mark-down, discounts, terms, turn-over ratios, methods of inventory and specific problems are studied.

140 Fundamentals of Retailing
In this introductory retailing course a survey of our distributive system is presented. Types of retail establishments and opportunities in the occupational field of retailing are discussed.
First semester, M. W. F. 10. Mr. Seeley. Three semester hours.

141 Selling Fashion Merchandise
A specialized course in the application of salesmanship to fashion merchandise. A study of color and design, fashion history, fashion functions, influences of changes, and the world's key designers and fashion centers.

150 Retail Salesmanship
This course analyzes successful retail selling. Actual sales demonstrations made by experts in the field are an integral part of the course. The various steps in a sale are studied along with their accompanying customer reactions.
First semester, M. W. F. 9. Mr. Rice. Three semester hours.

151A Merchandise Information—Non-textiles
An organized study of non-textile merchandise especially aimed at correlating retail experience with classroom work. Merchandise manuals are studied and developed.
First semester, Tu. Th. 10 (men), 11 (women). Mrs. Walmsley. Two semester hours.

151B Merchandise Information—Textiles
A study of fabrics and textile merchandise. The course includes identification and analysis, sources of fibers, processes of creating and finishing cloth and the fabric suitability and saleability as related to specific merchandise.
Second semester, Tu. Th. 10 (men), 11 (women). Mrs. Walmsley. Two semester hours.

200A Coordinated Business Experience
Limited to second year students who are currently enrolled in Store Organization 251. Credit will be granted upon completion of (1) a minimum of 200 clock hours of approved store work, (2) a report from the employer, and (3) a term paper by the student.
First semester, M. 7 p.m. Mr. Rice. One semester hour.

200B Coordinated Business Experience
Continuation of 200A open to students currently enrolled in Retail Personnel Management 252.
Second semester, M. 7 p.m. Mr. Rice. One semester hour.
240 Retail Advertising
Newspaper, radio, direct mail advertising; display plans and techniques of sales promotion. The publicity calendar and budget.

First semester, Tu. Th. 7-9 p.m. Mrs. Walmsley. Three semester hours.

241 Retail Credit and Collections
A practical and detailed study of the meaning and importance of credit. The areas of study in this course are: Extent of Retail Credit; Sources of Credit Information; Legal Aspects, Policies and Procedures; Collection Problems.

First semester, M. W. F. 8. Mr. Matthews. Three semester hours.

242 Selling Home Furnishings
Selling techniques applicable to home furnishings through proper use of interior decoration. Merchandise studies with emphasis upon style, design, color, materials, and construction.

Second semester, Tu. Th. 10. Mrs. Fox. Two semester hours.

243 Retail Buying Techniques
This course deals with the work of the store buyer. Where, how and when to buy. Terms, prices, invoices, legal aspects and other arrangements with vendors are all studied.

Second semester, 7 p.m. Miss Cooper. One semester hour.

251 Store Organization
A study of the basic principles and accepted practices of successful store organization, operation, and management. An opportunity is given to each student to make a study of some particular phase of retailing.

First semester, Tu. Th. 9. Mr. Rice. Two semester hours.

252 Retail Personnel Management
Problems of selection and placement of employees, employee induction and training, personnel ratings, records needed in personnel offices, labor-relations, sources of labor supply, wage plans and personnel budgeting.

Second semester, Tu. Th. 9. Mr. Rice. Two semester hours.

SECRETARIAL COURSES

100A Shorthand
A study of the theory and principles of Gregg shorthand. Typewriting 101A or its equivalent is a requirement for course credit.


100B Shorthand
A continuation of 100A. Dictation is given at various rates of speed. Typewriting 101B or its equivalent is a requirement for course credit. Prerequisite: Shorthand 100A and Typewriting 100A.

101A Elementary Typewriting
The mastery of the keyboard and the proper techniques of typewriting are developed in this course. Open to students with less than one year high school typewriting credit.


101B Intermediate Typewriting
Special stress is placed upon perfecting the techniques necessary for accuracy and speed in typewriting. A writing rate of 40 words net per minute is required for passing. Prerequisite: Elementary Typewriting 101A or its high school equivalent.


130A Secretarial Science
Designed for the development of occupational efficiency of a secretary. Special emphasis is given to the building of accuracy and speed for office transcription.

130B Secretarial Science
A continuation of the development of speed and accuracy in shorthand, typewriting, and transcription. Prerequisite: Secretarial Science 130A.


200A Coordinated Business Experience
This is a work experience course limited to those students who are currently enrolled in the cooperative office training program and who are currently enrolled in Secretarial Practice 230A.

First semester. Mr. Null. One semester hour.

200B Coordinated Business Experience
A continuation of course 200A open to students currently enrolled in Secretarial Practice 230B.

Second semester. Mr. Null. One semester hour.

230A Office Machines
This course provides the student with the operating knowledge of office machines that are commonly used in the modern business office.

Each semester, Tu. Th. 8-10. Mr. Null. Two semester hours.

230B Office Machines
A continuation of Office Machines 230A. This course is intended primarily for the student preparing for the various office occupations.

Each semester, Tu. Th. 10-12. Mr. Null. Two semester hours.

236 Filing Principles and Techniques
A study of the indexing and filing rules and all types of filing methods, and card systems.

Each semester, Tu. Th. 12. Miss Anderson. Two semester hours.
METHODS IN BUSINESS EDUCATION

346 Teaching of Business Subjects
Teaching techniques for social, vocational, and personal use in secondary school business courses. It is recommended that this course either precede or accompany directed teaching in this area.
Second semester, Tu. Th. 2. Mr. Lindquist. Two semester hours.

Open to Graduates

501(E151) Principles of Business Education
First semester, S. 11-1. Dr. Schneider. Two semester hours.

502(E157) The Curriculum in Business Education
Principles, practices, and problems involved in the evaluation and construction of business curricula to meet the needs of a democratic society.
Second semester, S. 11-1. Dr. Schneider. Two semester hours.

503(D265a) Improvement of Instruction in Secretarial Business Subjects
A study of the latest research findings, materials, teaching procedures, tests and measurements, and possible future developments in the business subject-matter fields.
Not offered in 1948-1949. Dr. Schneider. Two semester hours.

503B(D265b) Improvement of Instruction in Non-secretarial Business Subjects
A study of the latest research findings, materials, teaching procedures, tests and measurements, and possible future developments in the business subject-matter of this field.
Not offered in 1948-1949. Dr. Schneider. Two semester hours.

504(E154) Organization and Teaching of Office Practice
A consideration of the aims and content of office practice courses in the secondary school, with plans and techniques for organizing and teaching the subject matter of the course and its laboratory material.
Not offered in 1948-1949. Dr. Schneider. Two semester hours.

512(E201a) Seminar in Vocational Education
This course is planned especially for directors and teachers of federally aided programs, who wish to work toward a master's degree. A thesis may be started in this course. Each student selects a problem, presents his plans, and reports his progress to the class for criticism and discussion. Prerequisite: Students should have completed at least three courses in vocational education and have met one-half of the general requirements for a master's degree before enrolling in this course.
First semester, S. 1-3. Dr. Fox, Dr. Schneider, Mr. Trimpe.
Western Michigan College of Education prepares students to qualify as teachers of Vocational Home Economics in Michigan under the provisions of the State and Federal acts on vocational education.

Courses are planned in the Department of Home Economics for a major or a minor in home economics. Plans are also made for meeting the requirements for a vocational certificate in Michigan.

The major consists of twenty-four or more semester hours in home economics. To be eligible for the advanced foods courses it will be necessary for the student to have had Chemistry 105A, B. To be eligible for the advanced courses in clothing it will be necessary for the student to have taken Elementary Design 105, or equivalent. A student who has a major in home economics and meets the requirements of the Department of Education for a certificate may teach home economics only in the non-vocational home-economics departments of Michigan.

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.

Only persons who meet the requirements for a vocational certificate can teach in the vocational home-economics departments in Michigan. The required courses are Biology 105A, Chemistry 105A, B, Hygiene 112, Household Physics 202; at least one course each in economics and sociology; Elementary Design 105, Costume Design 209, Home Furnishings 221; 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; Human Growth and Development 251, and other courses in the Department of Education to fulfill the requirement for a secondary provisional certificate.

The Department of Home Economics 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, 325, 339. Students may enter other courses with the consent of the instructor.
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. 1. 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. 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. Mr. Hefner. Two semester hours.

203 Clothes and Personality
This course is to help the student who is interested in spending her clothing dollars more wisely. 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; second semester, Tu. Th. 1-3. Miss Volle, Miss Stamm. 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.

First 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.

Second semester, M. W. 8-10. 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.

First semester, 10-12; second semester, M. W. 2-4. Miss Acree or Miss Taylor. 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. For nurses.
First semester, Lecture, M. 2; Laboratory, Tu. Th. 2-4. Miss Taylor. Two semester hours.

222 Everyday Nutrition for Health
The course offers information of value to everyone interested in building optimum health. The normal nutrition of the pre-school, elementary, high school student, and adults is studied. Signs of good and poor nutrition, diets for children of all ages, school lunches to promote health, and materials for teaching nutrition are included.
The course is open to sophomores, juniors, and seniors not in the department of Home Economics.
Each semester, Tu. Th. 8. Miss Acree or Miss Taylor. 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 Taylor. Three semester hours.

312 Quantity Food Management
This course includes a study of the buying, preparing, and serving of large amounts of food; 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. Th. 1, Laboratory S. 10-12. Miss Acree, Miss Taylor. 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. One semester hour.

319 Experimental Food Study
Second semester, Tu. Th. 2-4. Miss Acree or Miss Taylor. 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, and applied art. The units taught will be selected on the basis of the interests and needs of the students.

First semester, Tu. 8, 2, Th. 9. Miss Acree, Miss Stamm, or Miss Taylor. 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; second semester, M. W. 2. 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. 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 interests of the young, adolescent, and adult members of a family is studied. An analysis is made of recent developments in rural single and multiple-housing projects. Prerequisite: Elementary Design 105 and Principles of Sociology 241 or consent of instructor. Open to both men and women.

First semester, Tu. Th. 10. Miss Volle. Two semester hours.
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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 various types of family living. Prerequisite: a course in Economics.

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.

First semester, Tu. Th. 1; second semester, M. W. 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. 10. 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.
INDUSTRIAL EDUCATION

DEYO B. FOX
JOHN L. FEIRER
HENRY J. BEUKEMA
LAWRENCE J. BRINK
FRED S. HUFF
CHARLES S. NICHOLS
JOHN H. PLOUGH
DON O. PULLIN
MARION J. SHERWOOD
ELMER C. WEAVER

JOSEPH W. GIACHINO
PAUL M. AMERPOHL
HERBERT E. ELLINGER
THOMAS E. JONES
HOMER G. KUIPER
GEORGE R. MILLER
ROBERT E. MILLER
NORMAN K. RUSSELL
NEIL L. SCHOENHALS
RAYMOND J. SCHOFIELD

INDUSTRIAL ARTS COURSES

The Industrial Education Department offers shop and professional courses for teachers and supervisors of industrial arts.

A student who plans to qualify for an industrial arts teacher in both the general and unit shop should plan to take at least 35 semester hours. All industrial arts students will be required to take the following courses: Woods 100, Metals 130, Printing 140, Drawing 120, Electricity 150, Introduction to Industrial Arts 160, Industrial Design 266, and two professional courses in industrial arts during the junior and senior years.

A student may take a minor in any course sequence such as wood, metal, drawing, or printing; or he may take a group minor in wood, drawing, and metal, totaling 18 semester hours.

Woodwork

100 Woods

A survey course in the field of woodwork. It provides extensive experiences in the care and use of hand tools and techniques, as well as exploring experiences in the use of machines. Related information on materials, production, and consumption of wood production will be covered.

Each semester, Tu. Th. 2-4. Mr. Nichols. Two semester hours.

104 Rural Wood Shop

A special course in woodwork and in related areas designed particularly for prospective rural school teachers. This course is limited to students enrolled in the rural education department.

First semester, Tu. Th. 10-12. 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 projects.

Second semester, M. W. F. 2-4. Mr. Nichols. Three semester hours.
110 Special Education Shop
A basic course in shop fundamentals, including the use of hand tools, construction, design, fastening devices, and finishing. This course is limited to students enrolled in occupational therapy.
Each semester, M.W.F. 8-10. Mr. Nichols. Three semester hours.

205A Machine Woodwork
An introductory course on the use of machine woodworking equipment. The student will receive experiences in setting-up, operating, and caring for the more commonly used machines such as circular saw, jointer, shaper, planer, etc. Parts for selected projects will be machined.
First semester, 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 Furniture Construction
A course covering the design and construction of fine furniture. Each student will be required to design and carry to completion a finished piece of furniture.
First semester, M.W.F. 10-12. Mr. Nichols. Three semester hours.

209A Building Construction
A beginning course in building construction with experiences in the major areas. Special emphasis will be given in this course to carpentry, with some additional experiences in cement work, electric wiring, brick laying, and plumbing.
Not offered in 1948-1949.

209B Advanced Building Construction
An advanced course in building construction in which the student applies all previous activities to the completed job involving cement, wood, brick work, electric wiring, plumbing and heating.
Not offered in 1948-1949.

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.
121 Drawing
A beginning course in the fundamentals of drafting. For students in pre-professional and general degree courses.
Each semester, Tu Th. 10-12. Mr. Sherwood. Two semester hours.

122 Mechanical Drawing
A continuation of the principles emphasized in Mechanical Drawing 120. Lettering, sketching, drawing, tracing, and electric blueprinting of suitable shop projects.
Each semester, M. W. F: 10-12. Mr. Sherwood. Three semester hours.

123 Mechanical Drawing
More advanced problems in mechanical drawing, detailing, design, theory, and application, ranging from simple geometrical problems, through surface development of machine details, cams, gears, and some architectural drawing. Special emphasis on review of the fundamentals of drafting and discussions of problems.
Second semester, Tu. Th. 8-10. Mr. Huff. Two semester hours.

221 Mechanical Drawing
Special attention is given to orthographic projection, detailing assemblies, and other fundamentals of drafting. This course is the equivalent of Drawing I of the School of Engineering, University of Michigan, and satisfies the requirements of engineering students.
Each semester, M. W. F. 8-10, 1-3. Mr. Huff, Mr. Beukema. Three semester hours.

222 Descriptive Geometry
Instruction and exercises are given in combinations of the point, line, and plane, intersections, developments, tangent planes, and warped surfaces. This course is the equivalent of Drawing II of the School of Engineering, University of Michigan. Not offered in summer.
Each semester, M. W. F. 8-10, 8-12. Mr. Huff, Mr. Beukema. Three semester hours.

225A Architecture
First semester, Tu. Th. 8-10. Mr. Huff. Two semester hours.

225B Architecture
Plans, elevations, details, mechanical perspective, rendering, tracing, and prints of a modern house. Emphasis placed on styles of architecture and architectural appreciation.
Second semester, Tu. Th. 8-10. Mr. Huff. Two semester hours.

226A Machine Drawing
Use of drafting instruments in the production of high grade machine drawings and tracing 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.

Not offered in 1948-1949.

226B Machine Drawing
Advanced drafting procedures. Short cuts and kinks in machine drafting. Detailed design for assemblies, sketches of small machines giving consideration to the cost of production.

Not offered in 1948-1949.

Metal Work

130 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. 8-10. Mr. Weaver. Two semester hours.

211 Metal Processing
An introductory study of the principles and practices relating to the properties, processing and application of ferrous and non-ferrous metals, woods, cements and plastics. The micro-structure and physical properties of materials are analyzed. The effects of heat-treating, welding and working of materials are tested and their suitability for fabricating purposes studied.

Each semester, Tu. Th. 10-12, 1-3. Mr. R. Miller. 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. 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. 10-12. Mr. Weaver. Three semester hours.

235 Sheetmetal
An introduction to the application of hand and machine processes. Cutting, forming, seaming, burring, crimping, notching, and wiring as applied to the making of sheetmetal projects.

First semester, M. W. F. 8-10. Mr. Plough. Three semester hours.

236 Arc and Acetylene Welding
A course in gas and arc welding for beginners. Safety precaution, care of and operation of welding equipment, selection of welding rod, methods of welding will be stressed.

First semester, M. W. F. 2-4. Mr. Weaver. Three semester hours.
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237 Pattern Making and Foundry
A course involving the making of wood patterns for machine parts, as well as moldings, core-making, and cupola practice in the production of castings. The study of metallurgy of the foundry will be included.

Not offered in 1948-1949.

238 Advanced General Metal
An advanced course in general metal in which all basic experiences in the various areas of metal work will be combined in the making of metal projects. The work will include bench metal, sheetmetal, welding, electroplating, heat treating, and forging.

Second semester, M. W. F. 2-4. Mr. Weaver. Three semester hours.

Printing

140 Printing
A survey course in the field of graphic arts. Special attention will be given to hand composition. In addition the student will have an opportunity to survey the total area of graphic arts.

Each semester, Tu. Th. 10-12. Mr. Pullin. Two semester hours.

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.

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.

First semester, Tu. Th. 10-12. Mr. Brink. Two semester hours.

144 Occupational Therapy Printing
This course is intended to acquaint students with the various tools and equipment of the print shop, and to acquaint them with fundamentals of planning type composition. Limited to students enrolled in the occupational therapy department.

Each semester, M. W. F. 10-12. Mr. Pullin. Three semester hours.
240 Printing
Keeping of records and accounts, purchase of materials, planning and laying out of equipment, and study of school publications. Students will work out courses of study with job sheets, using original ideas.
Second semester, Tu. Th. 2-4. Mr. Pullin. Two semester hours.

241 Advanced Presswork and Lockup
This course is a continuation of course 141. Practical presswork and imposition of forms, make-ready of forms for jobbers and cylinder presses. Practical work on the cutter and folder will also be emphasized.
Second semester, Tu. Th. 10-12. Mr. Brink. Two semester hours.

242 Printing
Advanced work in the complete designing and producing of printed matter, with a study of plates, papers, and inks. Advanced imposition and presswork are also included.
First semester, M. W. F. 2-4. 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.
Second semester, M. W. F. 2-4. Mr. Brink. Three semester hours.

245A Linotype Composition
This course deals primarily with the operation of the linotype keyboard. Straight composition is emphasized.
Not offered in 1948-1949.

245B Linotype Composition
This course considers the problems of job, advertisement, and newspaper composition.
First semester, M. W. F. 2-4. 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.
Not offered in 1948-1949.

345B Linotype Mechanism.
This course gives the student practical experience in caring for the machines in operation.
Not offered in 1948-1949.
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Electrical

150 Introductory Electricity
A survey course in the field of electricity. Special attention will be given to elementary wiring, construction of school shop electrical projects, and a general introduction into the field of electronics and electrical appliances.
Each semester, Tu. Th. 2-4. Dr. Feirer. Two semester hours.

250 Electrical Motor Work
A study of alternate and direct current and its application to electric motors and generators. A student will do motor and generator rewiring and other types of repair work.
Not offered in 1948-1949.

251 Electrical Construction
Advanced work in electrical construction and house wiring. A study of light and power application, maintenance and repair work.
Not offered in 1948-1949.

General Shop

160 Introduction to Industrial Arts
The purpose of this course is to provide initial experiences in the industrial arts area. This course will include individual experiences in laboratory and classroom.
Each semester, Th. 1-2. Dr. Feirer. One semester hour.

170 General Shop
A comprehensive course covering a variety of mediums used in the Industrial Arts field with introductory laboratory experiences. This course is planned for students who will teach in a general shop organization. The theory and organization of the shop will also be included.
Each semester, M. W. F. 2-4. Mr. Plough. Three semester hours.

261A 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.
Not offered in 1948-1949.

262B Jewelry
A beginning course dealing with the design and construction of items of jewelry and enameling.
Second semester, Tu. Th. 10-12. Dr. Feirer. Two semester hours.

263 Related Arts and Crafts
A general course in arts and crafts, including leather work, archery, and other craft procedures suitable for leisure time activities.
Not offered in 1948-1949.
264A Farm Shop
Experience in cement work, rope work, glazing, farm electrical work, machinery repair, and other activities limited to clock hours required for State certification as a farm shop teacher.
First semester, Tu. Th. 2-4. Mr. Plough. Two semester hours.

264B Farm Shop
A continuation of 264A. To complete required hours in needed activities for State certification.
Second semester, Tu. Th. 2-4. Mr. Plough. Two semester hours.

265 Auto Mechanics
A survey course dealing with the study of the parts of the automobile and the servicing and repair of autos.
Each semester, M. W. F. 10-12. Mr. Plough. Three semester hours.

266 Industrial Design
A study of modern industrial design and its application to industrial arts projects. Development of suitable and well designed articles for school shop practice.
First semester, Tu. Th. 10-12. Dr. Feirer. Two semester hours.

INDUSTRIAL TECHNICAL COURSES

Aviation

101 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.
First semester, Tu. Th. 1-3. Mr. Ellinger. Two semester hours.

102 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.
First semester, M. W. F. 1-3. Mr. R. Miller. Two to three semester hours.

103 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.
First semester, M. Tu. W. Th. F. 10-12. Mr. Russell. Two to four semester hours.

104 Carburetion and Lubrication
Theory and principles of carburetion, disassembly, inspection, adjustment and assembly of carburetors; theory and purpose of lubrication, types, grades, and specifications of various lubricants.
First semester, Tu. Th. 10-12. Mr. Amerpohl. Two semester hours.
105 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.
First semester, M. W. F. 10-12. Mr. Amerpohl. Two to three semester hours.

106 Engine Assembly and Disassembly
Practical experience in disassembling, assembling, and proper handling of different types of aircraft engines.
First semester, M. Tu. W. Th. F. 1-4. Mr. Amerpohl. Two to six semester hours.

110 Elementary Aviation
An introductory course for those desiring an elementary knowledge of aviation terminology. The course is particularly valuable for students enrolled in the elementary and secondary school curriculum.
First semester, M. W. F. 9-10. Mr. Giachino. Three semester hours.

200 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.
Second semester, M. W. F. 8-10. Mr. Ellinger. Two to three semester hours.

201 Aircraft Electricity and Instruments
A course covering the fundamentals of electricity, aircraft electricity, aircraft electrical systems, practical application of wiring and testing of aircraft circuits. A study is also made of all flight and engine instruments and aircraft radio.
Second semester, Tu. Th. 8-10. Mr. R. Miller. Two semester hours.

202 Aircraft Sheetmetal
A study of the properties and types of aluminum alloys, practice in laying out, fabricating, and heat treating aircraft sheetmetal parts.
Second semester, M. Tu. W. Th. 10-12. Mr. Giachino. Two to four semester hours.

203 Aircraft Maintenance
Practice in disassembling, assembling, and rigging of various types of aircraft, performing repairs, and alterations conforming to CAA requirements, periodic inspections, weight and balance, and general servicing of aircraft.
204  **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.

Second semester, M. Tu. W. Th. F. 8-10. Mr. Ellinger. Two to four semester hours.

205  **Propellers**  
Theory of propellers, types, repairs, maintenance, removal, disassembly, inspection, assembly and installation of controllable, constant speed, hydro-matic, and electric propellers.

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

206  **Engine Overhaul**  
Practical work in refacing valves, valve seats, fitting piston rings, valve timing, valve clearance adjustment, magnafaux inspection, overhaul of cylinder, crankcase, power section, crankshaft, rods, pins, bushings, bearings, cam mechanism, blower section, oil and fuel pumps.

Second semester, M. Tu. W. Th. F. 1-4. Mr. Ellinger. Two to six semester hours.

210  **Model Airplane Construction**  
A course planned to prepare prospective teachers how to organize and conduct aviation club activities in junior and senior high schools. Actual practice is provided in designing and constructing scale and flying model airplanes.


211A  **General Airplane Mechanics**  
This course is intended for elementary and secondary school students who are minoring in aviation. Practical experience is provided in units dealing with aircraft fabrics and finishes, aircraft woodwork, cable and metal work, aircraft welding, and sheetmetal.

First semester, M. W. F. 1-3. Mr. Giachino. Three semester hours.

211B  **General Airplane Mechanics**  
A continuation of course 211A. Concentration will be centered on units involving work in hydraulics, electricity, instruments, assembly and rigging of aircraft, and general inspection.


212A  **General Engine Mechanics**  
This course is intended for elementary and secondary school students who are minoring in aviation. It provides experience in the repair and service of aircraft engines. The following units will be covered: engine theory, engine assembly and disassembly, ignition and accessories, carburetion and lubrication.

First semester, M. W. F. 8-10. Mr. Ellinger. Three semester hours.
212B General Engine Mechanics
A continuation of course 212A. The major emphasis of study will be on units dealing with engine overhaul, operation, and propellers.
Second semester, M. W. F. 8-10. Mr. Ellinger. Three semester hours.

214A Pilot Training and Flight Theory
This unit provides 35 to 40 hours of flight instruction and necessary ground school theory to qualify a student for a private pilot's license.
Each semester. Hours for flight training at airport to be arranged. Ground Theory, M. 7-9. Two semester hours.

214B Pilot Training and Flight Theory
This unit is intended for those who already have their private and commercial pilot's license, and who wish to secure their instructor's rating. The maximum number of hours of flight instruction allowed will be 40.
Each semester. Hours for flight training at airport to be arranged. Ground Theory, Tu. 7-9. Two semester hours.

214C Pilot Training and Flight Theory
This unit is planned for those who want a refresher course to qualify for a commercial license, or who want additional flight time beyond their private. The maximum number of hours allowed will be 40 for one semester.
Each semester. Hours for flight training at airport to be arranged. Ground Theory, Tu. 7-9. Two semester hours.

214D Pilot Training and Flight Theory
This unit is planned for students who wish a few hours of flight experience and are not necessarily interested in obtaining a license.
Each semester. Hours for flight training at airport to be arranged. Ground Theory, M. 7-9. Two semester hours.

300 Aircraft Servicing
The primary objective of this course is to provide practical experience in routine maintenance work at an airport such as gassing, cleaning, inspecting, storing, tying down aircraft, and handling numerous other hangar details. Required for all aircraft mechanics students.
Summer session only. M. Tu. W. Th. F. Six semester hours.

301 Radio Communications
Basic course in radio and ground communications; ground-to-plane and plane-to-ground radio. FCC Rules and Regulations leading to a restricted Radio-telephone Operator's license.
First semester, M. W. F. 1-3. Mr. Kuiper. Three semester hours.

302 Meteorology and Navigation
The first phase deals with a study of the weather elements, such as clouds, cloud formations, pressure systems, fronts, reading, weather maps,
teletype, and interpretation of forecasts. In the second phase, a study is
made of the various radio and celestial aids used for aerial navigation and
flight planning.

First semester, M. W. F. 8. Mr. R. Miller, Three semester hours.

303 Airport Selection and Layout
A detailed study of the selection and layout of airports, including build-

ings, classification of fields, CAA airport regulations, runways, lighting
equipment, maintenance equipment, etc.

First semester, Tu. Th. 8. Mr. R. Miller. Two semester hours.

304 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. R. Miller. Two semester hours.

305 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, oper-
ating cost, insurance rates, record keeping, etc.

First semester, Tu. Th. 9. Mr. R. Miller. Two semester hours.

306 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 equip-
ment and ground facilities. Economic principles of rate-making. Govern-
ment control and assistance to airline operations.

Second semester, Tu. Th. 8. Mr. R. Miller. Two semester hours.

307 Control Tower Operation
An introductory course in control tower operation; procedures used in
controlling moving aircraft on the ground as well as airborne; keeping
tower log, flight reports, etc.

Second semester, M. W. 10-12. Mr. R. Miller. Two semester hours.

308 Aviation and the Modern World
A course dealing with the educational, social, economic, and political
implications of aviation in the modern world. A study will be made of the
basic aviation materials that are applicable for teaching various subject

matter fields and the procedures for infusing such materials into regular
academic courses. Attention also will be given to the method of setting
up special aviation courses on the secondary school level, development of
visual aids and ascertaining appropriate aviation literature for different
grade levels.

Air Conditioning and Refrigeration

115A 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.

First semester, M. Tu. W. Th. F. 8-11, 1-4. Mr. Snyder. Six semester hours.

115B Air Conditioning
A continuation of course 115A.


215A Refrigeration Service
This course covers refrigeration theory and function, types of refrigerants, and the basic laws applying. Installation techniques.

First semester, M. Tu. W. Th. F. 8-11, 1-4. Mr. Snyder. Six semester hours.

215B Refrigeration Service
This course covers refrigeration units of standard design and construction, installation, service operations, testings and factory-recommended repair procedures.


Trade Drafting

120A Trade Drafting
A general course in drafting fundamentals involving sketching, lettering, blueprint reading, instrument drawing, and conventional practices through job assignments of representative drafting room problems.


120B Trade Drafting
A course in the principles of machine design, detail and assembly drawing of simple machine parts and assemblies. Special emphasis is given to modern drafting room practice.


220A Trade Drafting
Design of jigs, fixtures, and production tools with attention to production methods and manufacturing costs.


220B Trade Drafting
A study of presswork through die design together with some product design and industrial production illustration.

**Linotype**

125 Elementary Linotype Composition

While considering such related material as the history of the 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.


126A 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.


126B 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.


127 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.


225 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.


226A 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. Three semester hours.

226B Linotype Maintenance

Continuation of 226A.


227 Proofreading

This is a course dealing with the principles of good proofreading and involves practice in applying these principles.

228A  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.

228B  Layout and Design
Continuation of 228A.

229  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.

Machine Shop

130A  Trade Machine Shop
A course in basic machine shop practice involving practical work on the
following machines: lathe, milling machines, grinders, shapers, and drill
presses.

130B  Trade Machine Shop
A continuation of 130A.
hours.

230A  Trade Machine Shop
A course in advanced machine shop practice, including the inspection,
assembly, heat treating, and tool grinding of tools and parts which are made
to meet prevailing industrial standards.
First semester, M. Tu. W. Th. F. 8-11, 1-4. Mr. G. Miller. Six semester
hours.

230B  Trade Machine Shop
A continuation of 230A.
hours.

231  Heat Treating
This course offers practice in heat treating and testing all standard mate-
rials used in machine, tool, and die work.
Second semester, M. Tu. W. Th. F. 8. Mr. R. Miller. Three semester
hours.
Radio

135A  Radio
A course dealing with the operation of transmitting and receiving equipment and radio test procedures.

135B  Radio
A continuation of 135A.

235A  Radio
In this course practical experience is provided in the construction and operation of various types of radio transmitters and analysis of commercial receiving systems. Students are expected to pass the Federal Communication Commission examination before completing the course.

235B  Radio
A continuation of 235A.

236  Radio Code
This course provides the necessary experience in the use of the Morse code and prepares students to meet the code requirements for the FCC examination.

335A  Commercial Radio Communications
In this course students are given an opportunity to gain practical field experience in radio work. Arrangements will be made to place students in various radio activities existing in local commercial radio shops, broadcasting stations, etc.

335B  Commercial Radio Communications
A continuation of 335A.

336A  Advanced Radio Theory
This course deals with complex A.C. networks, wave propagation, pulsed circuits, and circuit parameters of equipment operating in VHF and microwave regions.

336B  Advanced Radio Theory
A continuation of 336A.
Sheetmetal

145 Trade Sheetmetal
An introduction to the application of hand and machine processes in cutting, forming, seaming, soldering, crimping and fabricating sheetmetal products.

146 Trade Sheetmetal
A continuation of 145 with emphasis on heating and ventilating duct work.

Tool and Die

150A Tool Fabrication
A course in the making of tools and fixtures. Special attention is given to precision layout and inspection.

150B Tool Fabrication
A continuation of 150A.

250A Die Making
A course in the making of dies for blanking, shaving, bending, forming, and embossing.

250B Die Making
A continuation of 250A.

Welding

165 Trade 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 tips and welding rods for various types of welding materials. Leads to qualifying tests for certified welders.

166 Trade Arc Welding
A course to train arc welding operators to fabricate sheet steel products. Selection of welding rods, current setting for various types of horizontal, vertical, and overhead welding are stressed. Leads to qualifying tests for the certified arc welder.
Related Subjects

170A Drawing
A basic course in drawing involving blue-print reading, schematic drawing, and sketching.
First semester, M. Tu. W. Th. F. 1, 2. Mr. Beukema. Three semester hours.

170B Drawing
A continuation of Drawing 170A with emphasis on instrument drawing involving lettering, dimensioning, orthographic projection, and sectional views.

171 Shop Mathematics
A beginning course dealing with a review of arithmetic and basic shop computations.
First semester, M. Tu. W. Th. F. 10, 2, 3. Mr. Jones. Three semester hours.

172 Shop Mathematics
A continuation of 171 with the introduction of more advanced shop problems. Students will be permitted to apply basic mathematical principles to problems pertinent to their field of specialization.

173A Shop 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.
First semester, M. Tu. W. Th. F. 9, 1, 3. Mr. Schofield. Three semester hours.

173B Shop Science
Continuation of 173A with special emphasis on studies pertinent to an individual's field of specialization.
Second semester, M. Tu. W. Th. F. 9, 1, 3. Mr. Schofield. Three semester hours.

174A Electricity
A basic course in electricity intended to familiarize study with electrical terminology, circuits, motors and various testing equipment.
First semester, M. Tu. W. Th. F. 1. Mr. Jones. Three semester hours.

174B Electricity
Continuation of 174A.
176A Machine Shop
A beginning machine shop course involving correct usage of tools, layout, bench work and simple lathe work.

176B Machine Shop
A continuation of 176A with emphasis on work involving the shaper, milling machine, grinder and drill press.

270 Drawing
An advanced course in mechanical drawing. The work will be planned to meet the needs of the individual's field of trade specialization.
First semester, M. W. F. 10-12. Mr. Beukema. Three semester hours.

271 Shop Mathematics
A survey course consisting of such phases of algebra, geometry, and trigonometry, as are applicable to shop work.

272 Shop Mathematics
A specialized course in which students will be permitted to work out advanced mathematical problems dealing specifically with their phase of trade specialization.

273A Shop Science
An advanced course dealing with physical and mechanical problems peculiar to a student's field of specialization.

273B Shop Science
Continuation of 273A.

274 Welding
A course involving the safe use of oxy-acetylene and arc welding equipment and acquisition of essential welding skills and technical knowledge.
Each semester, M. W. F. 8-10. Mr. Plough. Three semester hours.

275 Sheetmetal
Basic sheetmetal layout, application of hand and machine processes in cutting, forming, seaming, crimping, soldering and other operations used in the fabrication of sheetmetal products.
Each semester, Tu. Th. 8-10. Mr. Plough. Three semester hours.
278 Shop English
This course is intended for all students enrolled in terminal curricula and is designed to provide training in the use of functional English, speech, letter writing, and preparation of technical reports.

279 Personnel Relations
A basic course dealing with the principles of employee-employer relations, trade unions, workmen's compensation, social security, and psychology of human relations.

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.
First semester, S. 9-11. 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.
Not offered in 1948-1949. 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.
Not offered in 1948-1949. 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 1948-1949. Mr. Giachino. Two semester hours.
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574(E105) Special Problems in Vocational Education
Provides for the study and organization of specific problems in vocational education.
Not offered in 1948-1949. 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 1948-1949. 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.
Not offered in 1948-1949. 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 1948-1949. 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.
Second semester, S. 9-11. Dr. Fox. Two semester hours.
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