1954

Bulletin: Graduate Division Announcement for the 1954 Summer Session and the 1954-55 School Year

Western Michigan University

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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 R.O.T.C.—The Director of the Division of Military Science and Tactics.
m) Concerning vocational education—The Director of Vocational Education.
n) Other general inquiries—The Dean of Administration-Registrar.

INFORMATION FOR NEW STUDENTS

A student applying for admission should:

a) if entering as a freshman, request an official admission application blank and 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 and have all transcripts for admission to the graduate division mailed to him;
d) have credits sent in at as early a date as possible.
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### 1953

<table>
<thead>
<tr>
<th>January</th>
<th>May</th>
<th>September</th>
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### 1954

<table>
<thead>
<tr>
<th>January</th>
<th>May</th>
<th>September</th>
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### 1955

<table>
<thead>
<tr>
<th>January</th>
<th>May</th>
<th>September</th>
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</table>

### 1956

<table>
<thead>
<tr>
<th>January</th>
<th>May</th>
<th>September</th>
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</thead>
</table>
**OFFICIAL COLLEGE CALENDAR**

1. **Summer Session 1954 (6 Weeks)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 21, Monday</td>
<td>Enrollment</td>
</tr>
<tr>
<td>June 22, Tuesday</td>
<td>Recitations Begin</td>
</tr>
<tr>
<td>July 5, Monday</td>
<td>Observance of Independence Day</td>
</tr>
<tr>
<td>July 29, Thursday</td>
<td>Summer Session Commencement Exercises</td>
</tr>
<tr>
<td>July 30, Friday</td>
<td>Summer Session Closes</td>
</tr>
</tbody>
</table>

2. **Semester I, 1954-1955**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 13 and 14, Monday and Tuesday</td>
<td>Orientation Period for Freshmen and new Transferees and “Counseling Days” for undergraduate upperclassmen</td>
</tr>
<tr>
<td>September 15, Wednesday</td>
<td>Enrollment of Freshmen and New Transferees</td>
</tr>
<tr>
<td>September 16, Thursday</td>
<td>Enrollment of Sophomores and Juniors</td>
</tr>
<tr>
<td>September 17, Friday</td>
<td>Enrollment of Seniors</td>
</tr>
<tr>
<td>September 18, Saturday</td>
<td>Graduate Division Enrollment</td>
</tr>
<tr>
<td>September 20, Monday</td>
<td>Recitations Begin</td>
</tr>
<tr>
<td>October 16, Saturday</td>
<td>Homecoming</td>
</tr>
<tr>
<td>November 13, Saturday</td>
<td>“Dad’s Day”</td>
</tr>
<tr>
<td>November 24, Wednesday</td>
<td>Thanksgiving Recess</td>
</tr>
<tr>
<td>December 17, Friday</td>
<td>Holiday Recess</td>
</tr>
<tr>
<td>January 20, Thursday through January 28, Friday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>January 23, Sunday</td>
<td>Mid-Year Commencement Exercises</td>
</tr>
<tr>
<td>January 29, Saturday</td>
<td>Semester I Ends</td>
</tr>
</tbody>
</table>

3. **Semester II, 1954-1955**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
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<tbody>
<tr>
<td>February 5, Saturday</td>
<td>Graduate Division Enrollment</td>
</tr>
<tr>
<td>February 7, Monday</td>
<td>Enrollment of Freshmen and Juniors</td>
</tr>
<tr>
<td>February 8, Tuesday</td>
<td>Enrollment of Sophomores and Seniors</td>
</tr>
<tr>
<td>February 9, Wednesday</td>
<td>Recitations Begin</td>
</tr>
<tr>
<td>April 8, Friday (12:00 noon-East Campus) (12:30 p.m.-West Campus)</td>
<td>Spring Vacation</td>
</tr>
<tr>
<td>April 10, Monday (8:00-East Campus; 8:30-West Campus)</td>
<td>(April 10 is Easter Sunday.)</td>
</tr>
<tr>
<td>May 7, Saturday</td>
<td>Competitive Scholarship Examinations</td>
</tr>
<tr>
<td>May 30, Monday</td>
<td>Memorial Day Holiday</td>
</tr>
<tr>
<td>June 2, Thursday through Friday, June 10</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>June 10, Friday (7:30 p.m.)</td>
<td>Vesper Services</td>
</tr>
<tr>
<td>June 11, Saturday (9:30 a.m.)</td>
<td>Commencement Exercises</td>
</tr>
<tr>
<td>June 11, Saturday</td>
<td>Second Semester Ends</td>
</tr>
</tbody>
</table>

4. **Summer Session 1955 (6 Weeks)**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>June 20, Monday</td>
<td>Enrollment for the Summer Session</td>
</tr>
<tr>
<td>June 21, Tuesday</td>
<td>Recitations Begin</td>
</tr>
<tr>
<td>July 4, Monday</td>
<td>Observance of Independence Day</td>
</tr>
<tr>
<td>July 28, Thursday</td>
<td>Summer Session Commencement Exercises</td>
</tr>
<tr>
<td>July 29, Friday</td>
<td>Session Closes</td>
</tr>
</tbody>
</table>
OFFICIAL COLLEGE CALENDAR
Approved by the Administrative Council May 18, 1954

Semester I, 1955-1956

1956 is a Leap Year

September 12 and 13, Monday and Tuesday... Orientation Period for Freshmen and new Transferees and “Counseling Days” for undergraduate upperclassmen
September 14, Wednesday... Enrollment of Freshmen, Seniors and New Transferees
September 15, Thursday... Enrollment of Sophomores and Juniors
September 16, Friday... Recitations Begin
September 17, Saturday... Graduate Division Enrollment
November 23, Wednesday (12 noon-East Campus) to Mon., Nov. 28 (12:30 p.m.-West Campus) Thanksgiving Recess
December 16, Friday (4:00-East Campus) to Monday, Jan. 2, 1956 (4:30-West Campus)... Holiday Vacation
January 19, Thursday through January 27, Friday... Final Examinations
January 22, Sunday (2:30 p.m.)... Mid-Year Commencement Exercises
January 28, Saturday... Semester I Ends

Semester II, 1955-1956

February 4, Saturday... Graduate Division Enrollment
February 6, Monday... Enrollment of Freshmen and Seniors
February 7, Tuesday... Enrollment of Sophomores and Juniors
February 8, Wednesday (8:00-East; 8:30-West Campus)... Recitations Begin
February 29, Wednesday... “Leap Year”
March 30, Friday (12:00 noon-East Campus) to April 9, Monday (12:30 p.m.-West Campus)... Spring Vacation
April 1 is Easter Sunday (8:00-East Campus; 8:30-West Campus)
May 5, Saturday... Competitive Scholarship Examinations
May 30, Wednesday... Memorial Day Holiday
May 31, Thursday through Friday, June 8... Final Examinations
June 8, Friday (7:30 p.m.)... Vespers
June 9, Saturday (9:30 a.m.)... Commencement Exercises
June 9, Saturday... Semester II Ends

Summer Session 1956 (6 weeks)

June 18, Monday... Enrollment for the Summer Session
June 19, Tuesday... Recitations Begin
July 4, Wednesday... Independence Day
July 26, Thursday... Summer Session Commencement Exercises
July 27, Friday... Summer Session Closes
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CLAIR L. TAYLOR

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OTTO YNTEMA, A.M. ........................................... Director of Extension and Adult Education
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RALPH WILLIS  Supervisor, Janitorial Services

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LEAH M. SMITH  Secretary, Extension
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RUSSELL A. STRONG, A.B.  Publicity Director
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The Council meets weekly to keep informed on college affairs, to fix general administrative policies, and to coordinate and unify administrative decisions, practices, and services designed to promote the educational program of the college.

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

THE FACULTY COUNCIL

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

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Terms expiring 1955—FRED A. BEEGER; ALICE L. LEFEVRE; WILLIS F. DUNBAR.

Terms expiring 1956—CLAYTON MAUS; CYRIL STOUT; OTTO YNTEMA; HARRY LAWSON; WINIFRED MACFEE; SARA SWICKARD.

M.E.A. Representative—LEONARD GERNANT.

Ex-Officio, PAUL V. SANGREN; WYNAND WICHERS.

THE ATHLETIC BOARD OF CONTROL

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

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

FACULTY STANDING COMMITTEES FOR 1954-55

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

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2. George Hilliard, Wynand Wichers, Louis Govatos.

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2. Vern Mabie, Towner Smith, Otto Yntema.

RESEARCH  ORIE L. FREDERICK, Chairman
1. William Berry, Samuel Clark, George Mallinson.

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2. Winifred MacFee, C. B. MacDonald.
3. Elizabeth Householder, Andrew Luff, Robert B. Wetnight, plus five students.

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Samuel Clark, Howard Mowen, Elsworth Woods, Wynand Wichers, ex officio; chairman of Educational Policies Committee, ex officio.

VISITATION, RECRUITMENT AND ORIENTATION  JOHN C. HOEKJE, Chairman
1. Isabel Crane, Willis Dunbar, Vern Mabie, Winifred MacFee.
3. Harry Lawson, Esther Schroeder, Avis Sebaly.
THE FACULTY

1953-1954

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CLELLA STUFFT, A.B., A.M.  ASSISTANT PROFESSOR EMERITUS OF EDUCATION

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HOWARD D. CORBUS, M.S.  AGRICULTURE
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CRYSTAL WORNER, A.M.  
A.B., Michigan State Normal College; A.M., University of Michigan.

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

ZACK YORK, PH.D.  
A.B., Western Michigan College; Ph.D., University of Wisconsin.

FRED A. BEELEER, PH.D.  
B.S., University of Alaska; A.M., University of Indiana; Ph.D., University of Michigan.

ALBERT B. BECKER, PH.D.  
A.B., Western Michigan College; A.M., University of Michigan; Ph.D., Northwestern University.

HOWARD F. BIGELOW, A.M.  
A.B., Wesleyan University; A.M., Harvard University.

ROBERT S. BOWERS, PH.D.  
A.B., Kansas Wesleyan University; A.M., American University; Ph.D., University of Wisconsin.

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

PROFESSORS

BIOLOGY

WILLIAM V. WEBER, PH.D.  
A.B., A.M., Ph.D., University of Iowa.

CRYSTAL WORNER, A.M.  
A.B., Michigan State Normal College; A.M., University of Michigan.

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

ZACK YORK, PH.D.  
A.B., Western Michigan College; Ph.D., University of Wisconsin.

FRED A. BEELEER, PH.D.  
B.S., University of Alaska; A.M., University of Indiana; Ph.D., University of Michigan.

ALBERT B. BECKER, PH.D.  
A.B., Western Michigan College; A.M., University of Michigan; Ph.D., Northwestern University.

HOWARD F. BIGELOW, A.M.  
A.B., Wesleyan University; A.M., Harvard University.

ROBERT S. BOWERS, PH.D.  
A.B., Kansas Wesleyan University; A.M., American University; Ph.D., University of Wisconsin.

CHARLES T. BROWN, PH.D.  
A.B., Westminster College; A.M., Ph.D., University of Wisconsin.
WILLIAM H. CAIN, A.M.  
A.B., University of Michigan; A.M., Teachers College, Columbia University.

THEODORE L. CARLSON, PH.D.  
A.B., Augustana College; A.M., Ph.D., University of Illinois.

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

CLARA R. CHIARA, PH.D.  
B.S., Miami University; A.M., Western Reserve University;  
Ph.D., Ohio State University.

WILLIS FREDERICK DUNBAR, PH.D.  
B.A., Kalamazoo College; M.A., Ph.D., University of Michigan.

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

WALLACE L. GARNEAU, A.M.  
A.B., Western Michigan College; A.M., University of Michigan.

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

LAWRENCE G. KNOWLTON, PH.D.  
A.B., Oberlin College; Ph.D., Cornell University.

HARRY W. LAWSON, M.A.  
B.S., Boston University; M.A., University of Michigan.

ROBERT M. LIMPUS, PH.D.  
A.B., Northwestern University; A.M., Ph.D., The University of Chicago.

MORRIS McCLURE, Ed.D.  
A.B., Western Michigan College; A.M., University of Michigan; Ed.D., Michigan State College.

MARGARET E. MACMILLAN, PH.D.  
A.B., A.M., University of Michigan; Ph.D., Columbia University.

CHARLES H. MAHER, A.M.  
A.B., Western Michigan College; A.M., West Virginia University.

GEORGE G. MALLINSON, PH.D.  
A.B., A.M., New York State College for Teachers; Ph.D., University of Michigan.

A. EDYTHE MANGE, PH.D.  
A.B., Greenville College; A.M., Ph.D., University of Illinois.
ARTHUR J. MANSKE, PH.D.  
A.B., Wayne University; A.M., Ph.D., Teachers College, Columbia University.

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

HOLON MATTHEWS, PH.D.  
B.M., M.M., Cincinnati College of Music; Ph.D., University of Rochester.

DONALD G. MAY, M.D.  
A.B., Kenyon College; M.D., Medical School, Wayne University.

LEONARD V. MERETTA, M.M.  
B.M., M.M., University of Michigan.

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

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

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

ALEXANDER SCHUSTER  
Graduate of Odessa Conservatory and of the Hochschule, Berlin.

AVIS L. SEBALY, PH.D.  
A.B., Western Michigan College; A.M., Ph.D., University of Michigan.

RUSSELL H. SEIBERT, PH.D.  
A.B., College of Wooster; A.M., Columbia University; Ph.D., Purdue University.

EDWIN B. STEEN, PH.D.  
A.B., Wabash College; A.M., Columbia University; Ph.D., Ohio State University.

CYRIL L. STOUT, PH.D.  
B.S., Knox College; Ph.M., University of Wisconsin; Ph.D., George Peabody College for Teachers.

JULIUS STULBERG, A.M.  
B.S., A.M., Michigan State College.

SARA RUTH SWICKARD, PH.D.  
B.S., M.A., Ph.D., Ohio State University.
CHARLES VAN RIPER, PH.D.  
A.B., A.M., University of Michigan; Ph.D., University of Iowa.

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

ELMER C. WEAVER, A.M.  
B.S., A.M., Teachers College, Columbia University.

MERRILL R. WISEMAN, M.S.P.H.  
A.B., Ohio Northern University; M.S.P.H., University of Michigan.

ASSOCIATE PROFESSORS

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

JAMES O. ANSEL, Ed.D.  
A.B., Western Michigan College; A.M., Northwestern University; Ed.D., Teachers College, Columbia University.

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

HARRIETTE V. BARTOO, PH.D.  
A.B., Hiram College; Ph.D., The University of Chicago.

ISABEL BEELEER, A.M.  
R.N., Ford Hospital, Detroit; B.S., A.M., University of Michigan.

ELMER R. BELOOF, ED.D.  

JAMES W. BOYNTON, M.S.  
A.B., Western Michigan College; M.S., University of Michigan.

GEORGE EDGAR BRADLEY, PH.D.  
A.B., Miami University; M.S., Ph.D., University of Michigan.

LAWRENCE J. BRINK, A.M.  
VOCATIONAL-INDUSTRIAL AND TECHNICAL EDUCATION  
B.S., New York State College; M.S., Iowa State Teachers College.

JOHN ALTON BUELKE, ED.D.  
B.S., Wisconsin State Teachers College; A.M., Northwestern University; Ed.D., University of Cincinnati.

WM. L. BURDICK  
B.A., Milton College; M.A., University of Wisconsin.
SAMUEL L. CLARK, PH.D.  
A.B., Ph.D., The University of Chicago.

GEORGE DALES, A.M.  
Physical Education for Men  
B.S., Miami University; A.M., University of Michigan.

EDITH M. EICHER, A.M.  
English  
A.B., Morningside College; A.M., Columbia University.

ROBERT J. ELDREDGE, M.S.  
Chemistry  
B.S., Kalamazoo College; M.S., The University of Chicago.

ROBERT ELIAS, M.S.  
Chemistry  
B.A., Lawrence College; M.S., Institute of Paper Chemistry, Appleton.

LINDSEY G. FARNAN, M.S.  
Industrial Arts  
B.S., New York State College; M.S., Iowa State Teachers College.

FRANK A. FATZINGER, PH.D.  
Psychology  
A.B., Lehigh University; M.A., Lehigh University; Ph.D., Purdue University.

WENDALL B. FIDLER, ED.M.  
Distributive Education  
B.S., Ohio State University; Ed.M., University of Pittsburgh.

PEARL L. FORD, A.M.  
Mathematics  
A.B., Western Michigan College; A.M., University of Michigan.

ROBERT FRIEDMANN, PH.D.  
History and Philosophy  
A.B., Goshen College; Ph.D., University of Vienna, Austria.

EDWARD A. GABEL, A.M.  
Physical Education for Men  
B.S., Michigan State Normal College; A.M., Western Michigan College.

LORENA M. GARY, A.M.  
English  
A.B., Western Michigan College; A.M., University of Michigan.

JOHN W. GILL, A.M.  
Associate Director of Athletics  
A.B., Western Michigan College; A.M., Teachers College, Columbia University.

M. M. GILLENDER, M.A.  
Principal, Paw Paw High School  
A.B., Western Michigan College; A.M., University of Michigan.

LOUIS A. GOVATOS, PH.D.  
Education  
B.S., University of Minnesota; M.S., Ph.D., University of Michigan.

ETHEL M. GREEN, A.M.  
Music  
A.B., Ball State Teachers College; A.M., Teachers College, Columbia University.
ASSOCIATE PROFESSORS

HERBERT H. HANNON, A.M. Mathematics
A.B., Western Michigan College; A.M., University of Michigan.

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

H. GLENN HENDERSON Music

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

JOSEPH T. HOY, M.A. Physical Education for Men
B.S., Western Michigan College; A.M., University of Michigan.

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

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

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

ROY E. JOYCE, M.S. Biology
A.B., Ohio Wesleyan University; M.S., Ohio State University.

GEORGE A. KIRBY, A.M. Business Studies
B.Ed., Western Illinois State Teachers College; A.M., Columbia University.

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

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

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

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

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

ANDREW C. LUFF, A.M., Vocational-Industrial and Technical Education
B.S., Wayne University; A.M., University of Michigan.

PHOEBE LUMAREE, M.S.L.S. Assistant Librarian
A.B., Western Michigan College; B.S., School of Library Science, Simmons College; M.S.L.S., School of Library Service, Columbia University.
HELEN E. MASTER, A.M.
A.B., A.M., University of Michigan.

JACK W. MURPHY, PH.D.
B.S., M.S., Ph.D., University of Wisconsin.

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

LUCILLE A. NOBBS, A.M.
A.B., Kalamazoo College; A.M., University of Michigan.

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

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

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

JACK PETOSKEY, A.M.
B.S., M.A., University of Michigan.

DON O. PULLIN, A.M.
B.S., Wayne University; A.M., Teachers College, Columbia University.

GLEN C. RICE, A.M.
B.S., M.A., Western Michigan College.

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

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

NORMAN K. RUSSELL, A.M.
VOCATIONAL-INDUSTRIAL AND TECHNICAL EDUCATION
B.S., Western Michigan College; A.M., University of Michigan.

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

ESTHER D. SCHROEDER, A.M.
B.S., Bemidji State Teachers College; A.M., George Peabody College for Teachers.

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

THOMAS C. SLAUGHTER, A.M.
B.S., Western Michigan College; A.M., University of Michigan.
ASSOCIATE PROFESSORS

CHARLES A. SMITH, A.M.  
A.B., Western Michigan College; A.M., University of Michigan.

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

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

RAYMOND F. SORENSON, A.M.  
B.S., Western Michigan College; A.M., University of Michigan.

CHARLES R. STARRING, A.M.  
A.B., A.M., Columbia University.

LEO C. STINE, PH.D.  

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

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

ADRIAN TRIMPE, A.M.  
B.S., Western Michigan College; A.M., University of Michigan.

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

REVA VOLLE, A.M.  
B.S., University of Illinois; A.M., Teachers College, Columbia University.

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

ROBERT B. WETNIGHT, PH.B., C.P.A.  
Ph.B., University of Toledo.

ROY J. WIEZT, A.M.  
B.S., University of Illinois; A.M., Columbia University.

ASSISTANT PROFESSORS

SAM B. ADAMS, A.M.  
A.B., University of Kentucky; A.M., Teachers College, Columbia University.

FRANCIS W. ALLEN, A.M.L.S.  
B.S., Colby College; A.B.L.S., A.M.L.S., University of Michigan.
AGNES E. ANDERSON, M.S.  
B.S., Ferris Institute; M.S., University of Tennessee.

THELMA E. ANTON, A.M.  
A.B., University of Michigan; A.M., Middlebury College.

GROVER C. BAKER, A.M.  
A.B., Michigan State Normal College; A.M., University of Michigan.

CATHERINE BAUNER, M.S.  
B.S., Western Illinois State College; M.S., University of Illinois.

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

MARGARET FELTS BELLOF, B.S.M.  
B.S.M., Oberlin College.

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

OWEN L. BERGER, A.M.  
B.M., M.M., Boguslawski College of Music; B.S., A.M., Teachers College, Columbia University.

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

HENRY J. BEUKEMA, A.M.  
B.S., Western Michigan College; A.M., University of Michigan.

GUSTAV A. BEYER, A.M.  
A.B., Western Michigan College.

EUGENE S. BIERER, CAPTAIN; B.S.  
R.O.T.C.

DONALD J. BLACK, B.S.  
B.S., Kalamazoo College; B.S.R.E., Valparaiso Technical Institute.

MARY BOTTJE, A.M.  
A.B., Western Michigan College; A.M., University of Michigan.

RUTH BOOT, M.Ed.  
B.S., University of Illinois; M.Ed., Wayne University.

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

RUSSELL W. BROWN, M.M.  
B.P.S.M., Oklahoma Agricultural and Mechanical College; M.M., University of Notre Dame.
ASSISTANT PROFESSORS

GEORGIANN BURGE, A.M.
A.B., North Texas State Teachers College; A.M., University of Michigan.

CLARA N. BUSH, A.M.
A.B., Western Michigan College; A.M., University of Michigan.

ELIZABETH L. CAUGHRAN, A.M.
A.B., Russell Sage College; A.M., Teachers College, Columbia University.

DONALD W. CARSON, FIRST Lt.
A.B., Colorado State Teachers College.

BEATRICE L. CHAIT, M.A.
B.A., Hunter College; M.A., University of Michigan.

FAYE S. CHANCE
B.S., Ball State Teachers College; M.S., Ball State Teachers College.

EHRlich L. CHIPLEY, MAJOR
B.S., The Citadel; B.S., Jefferson Reed College.

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

BERNYCE CLEVELAND, A.M.
A.B., Western Michigan College; A.M., Middlebury College.

HAZEL E. CLEVELAND SAYE, A.B.L.S.
A.B., Western Michigan College; A.B.L.S., University of Michigan.

LADeITRICH O. COGGIN, CAPTAIN, B.A.

CARL R. COOPER, A.M.
A.B., Western Michigan College; A.M., Teachers College, Columbia University.

GEORGE K. COOPER, M.B.A.
B.Ed., Western Illinois State College; M.B.A., Indiana University.

ISABEL CRANE, A.M.
B.S., Battle Creek College; A.M., Teachers College, Columbia University.

LEWIS D. CRAWFORD, A.M.
B.S., Western Michigan College; A.M., University of Michigan.

GOLDA L. CRISMAN, A.M.
A.B., Western Michigan College; A.M., University of Michigan.
ROBERT E. S. CROWE, MAJOR, M.B.A.
M.B.A., Northwestern University.

HAZEL M. DEMEYER, B.S.L.S.
A.B., Western Michigan College; B.S.L.S., School of Library Science, Columbia University.

ARDEN H. DETERT, M.A.
A.B., Baldwin-Wallace College; M.A., University of Michigan.

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

ELEANOR N. DOUGLASS, B.S.
B.S., Sargent College.

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

SHERWOOD BAKER ECK, M.B.A.
B.S., University of Richmond; M.B.A., University of Chicago.

HERBERT E. ELLINGER, M.A.
B.S., Western Michigan College; M.A., University of Michigan.

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

CARL J. ENGELS, M.A.
B.S., Oshkosh State Teachers College; M.A., University of Michigan.

WAYNE A. FALAN, A.M.
B.S., Western Michigan College; A.M., University of Michigan.

MARCELLA S. FAUSTMAN, A.M.
B.S., A.M., Teachers College, Columbia University.

EDWIN S. FOX, B.S.C.E.
B.S.C.E., University of Michigan.

ROSALIE P. FRASER, A.M.L.S.
A.B., University of Alabama; A.M.L.S., University of Michigan.

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

JACK J. FREY, M.A.
B.S., Western Michigan College; M.A., University of Michigan.

A. VERNE FULLER, A.M.
A.B., Albion College; A.M., University of Michigan.

HELEN ELIZABETH GIBBENS, R.N.
Borgess Hospital, Kalamazoo; B.S., Nazareth College.
ELIZABETH GIEDEMAN, M.A.  CAMPUS SCHOOL, LANGUAGES
B.S., Miami University; M.A., University of Michigan.

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

CLARENCE W. HACKNEY, A.M.  CAMPUS SCHOOL, MATHEMATICS
A.B., Western Michigan College; A.M., University of Michigan.

JOSEPHINE HACKNEY, M.A.  CAMPUS SCHOOL, MUSIC
A.B.; Western Michigan College; M.A., Northwestern University.

MARION I. HALL, A.M.  SOCIAL STUDIES, PORTAGE SCHOOL
Ph.B., The University of Chicago; A.M., University of Michigan.

HARRY S. HEFNER, A.M.  ART
A.B., Western Michigan College; A.M., Teachers College, Columbia University.

DELDIEE M. HERMAN, A.M.  SPEECH
A.B., Western Michigan College; A.M., University of Michigan.

ARLENE E. HOLLINGER, A.M.  SPECIAL EDUCATION, PAW PAW
A.B., Western Michigan College; A.M., Northwestern University.

FRANK C. HOUSEHOLDER, A.M.  ENGLISH
A.B., Western Michigan College; A.M., University of Michigan.

DORIS A. HUSSEY, B.S.  PHYSICAL EDUCATION FOR WOMEN
B.S., Western Michigan College.

FRANK W. JERSE, M.S.  CAMPUS SCHOOL, EIGHTH GRADE
B.S., University of Illinois; M.S., University of Wisconsin.

A. ELIZABETH JOHNSON, A.M.  CAMPUS SCHOOL, SIXTH GRADE
A.B., Kalamazoo College; A.M., Teachers College, Columbia University.

HERB B. JONES, A.M.  LANGUAGES
B.S., Nebraska State Teachers College; A.M., University of Mexico.

JOHN G. KEMPER, A.M.  ART
B.F.A., Ohio State University; A.M., Teachers College, Columbia University.

HARRIET KILROE, M.A.  CAMPUS SCHOOL OF ART

EDNA F. WHITNEY KIRBY, A.M.  BUSINESS STUDIES
B.S., Western Michigan College; A.M., University of Michigan.
RUTH YATES KIRBY, A.M., LANGUAGES, PAW PAW SCHOOL
A.B., University of Washington; A.M., University of Illinois.

ROSALIE A. KISS, B.S., OCCUPATIONAL THERAPY
B.S., Wayne University.

DANIEL A. KYSER, M.M.
B.P.S.M., Oberlin College; M.M., University of Michigan.

ANGELO LAMARIANA, A.M.M.E.
B.S.M., A.M.M.E., New York University.

MARGARET LARGE, A.M., PHYSICAL EDUCATION FOR WOMEN, CAMPUS SCHOOL
A.B., University of Toronto; A.M., Wayne University.

D. B. LEONARDELLI, M.A., EDUCATION
B.S., Northern Michigan College of Education; M.A., University of Illinois.

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

JESSE H. LOONEY, 1ST. LIEUT., B.S., R.O.T.C.
B.S., University of Alabama.

JEAN E. LOWRIE, B.S.L.S., CAMPUS SCHOOL LIBRARY
A.B., Keuka College; B.S.L.S., Western Reserve University.

IONA LOYD, M.A., RURAL EDUCATION
B.S., Central Michigan College; M.A., Teachers College, Columbia University.

ROBERT H. LUNDY, A.M., ENGLISH, PAW PAW SCHOOL
B.S., Western Michigan College; A.M., Michigan State College.

WINIFRED CONGDON MACFEE, A.M., LIBRARIAN, EDUCATIONAL SERVICE
B.S., Western Michigan College; A.M., University of Michigan.

JEAN G. MALMSTROM, A.M., ENGLISH

JEROME G. MANIS, PH.D., SOCIOLOGY
B.A., Wayne University; M.A., University of Chicago; Ph.D., Columbia University.

EMELINE J. MCCOWEN, A.M., CAMPUS SCHOOL THIRD GRADE
A.B., National College of Education; A.M., Teachers College, Columbia University.

ELOISE McCORKLE, A.M., SCIENCE, PORTAGE SCHOOL
B.S., A.M., George Peabody College for Teachers.

DOROTHY J. McGINNIS, A.M., PSYCHOLOGY
B.S., Western Michigan College; A.M., Ohio State University.
<table>
<thead>
<tr>
<th>Name</th>
<th>Field</th>
<th>Degree(s)</th>
<th>Institution(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elizabeth L. McQuigg, A.M.</td>
<td>Second Grade, Paw Paw School</td>
<td>B.S., A.M., Teachers College, Columbia University.</td>
<td></td>
</tr>
<tr>
<td>Lois B. Monroe, A.M.</td>
<td>Campus School Foreign Languages</td>
<td>A.B., Western Michigan College; A.M., University of Michigan.</td>
<td></td>
</tr>
<tr>
<td>Howard A. Mowen, A.M.</td>
<td>History</td>
<td>A.B., Baldwin-Wallace College; A.M., Western Reserve University.</td>
<td></td>
</tr>
<tr>
<td>Louise C. Myers, A.M.</td>
<td>First Grade, Paw Paw School</td>
<td>B.S., A.M., Teachers College, Columbia University.</td>
<td></td>
</tr>
<tr>
<td>Donald W. Nantz, M.S.</td>
<td>Vocational-Industrial and Technical Education</td>
<td>B.S., M.S., Stout Institute.</td>
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<tr>
<td>Josephine Nicolette, A.M.</td>
<td>Sixth Grade, Paw Paw School</td>
<td>A.B., Western Michigan College; A.M., University of Michigan.</td>
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<tr>
<td>Dolly Werner Ortaggio, M.S.</td>
<td>Commerce, Paw Paw School</td>
<td>B.S., Kent State University; M.S., Western Reserve University.</td>
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<tr>
<td>Hazel I. Paden, A.M.</td>
<td>Art</td>
<td>B.S., Massachusetts School of Arts; A.M., University of Syracuse.</td>
<td></td>
</tr>
<tr>
<td>Marguerite Patton, A.M.</td>
<td>Economics</td>
<td>A.B., University of Toronto; B.M., Michigan State College; A.M., University of Toronto.</td>
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<tr>
<td>Jack C. Plano, Ph.D.</td>
<td>Political Science</td>
<td>B.A., Ripon; M.A., Ph.D., University of Wisconsin.</td>
<td></td>
</tr>
<tr>
<td>John H. Plough, M.A.</td>
<td>Industrial Arts</td>
<td>B.S., Western Michigan College; M.A., University of Michigan.</td>
<td></td>
</tr>
</tbody>
</table>
FACULTY

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

CIRCULATION LIBRARIAN

NELLIE N. REID, A.M.  
A.B., State University of Iowa; A.M., The University of Chicago.

SOCIOLOGY

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

BIOLOGY

ROBERT E. RING, B.S.  
VOCATIONAL-INDUSTRIAL AND TECHNICAL EDUCATION  
B.S., Purdue

KATHERINE ROGERS, A.M.  
A.M., Columbia University.

CAMPUS SCHOOL ENGLISH

GLADYS ROWE, B.S.  
B.S., Michigan State College.

CAMPUS SCHOOL HOME ECONOMICS

WILLIAM A. SACK, A.B.  
A.B., Western Michigan College.

CAMPUS SCHOOL, ENGLISH, SPEECH

NEIL L. SCHOENHALS, A.M.  
B.S., Western Michigan College; A.M., University of Michigan.

CAMPUS SCHOOL INDUSTRIAL ARTS

WILLIAM A. SCHREIBER, B.S.  
VOCATIONAL-INDUSTRIAL AND TECHNICAL EDUCATION  
B.A., Cooper Union College.

HELEN G. SELLERS, A.M.  
A.B., Michigan State College; A.M., University of Wisconsin.

ENGLISH

HESTER B. SKEHAN, A.B.; M.A.  
KINDERGARTEN, PAW PAW SCHOOL  
A.B., George Washington University; M.A., Western Michigan College.

WILLIAM A. SCHREIBER, B.S.  
VOCATIONAL-INDUSTRIAL AND TECHNICAL EDUCATION  
B.A., Cooper Union College.

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

CAMPUS SCHOOL ART

RUTH SMYTHE, A.M.  
B.S., Michigan State Normal College; A.M., University of Michigan.

FOURTH GRADE, PAW PAW SCHOOL

EMIL J. SOKOLOWSKI, A.M.  
B.S., Detroit Institute of Technology; A.M., University of Michigan.

BUSINESS STUDIES

MARION A. SPALDING, A.M.  
PHYSICAL EDUCATION, PAW PAW SCHOOL  
A.B., Western Michigan College; A.M., Teachers College, Columbia University.
Opal Stamm, A.M.  
A.B., Berea College; A.M., Teachers College, Columbia University.

Evelyn Steketee, A.M.  
A.B., Hope College; A.M., University of Illinois.

Fred Stevens, A.M.  
Campus School Physical Education and Science  
B.S., A.M., Western Michigan College.

Elaine L. Stevenson, A.M.  
A.B., Western Michigan College; B.A.E., The Art Institute of Chicago; A.M., Ohio State University.

Charlotte Bishop Sumney, A.M.  
B.S., Western Michigan College; A.M., University of Michigan.

Marion Tamin, A.M.  
Ph.B., The University of Chicago; A.M., Teachers College, Columbia University.

Robert D. Taylor, M.A.  
Campus School, Social Studies  
B.A., Western Michigan College; M.A., University of Michigan.

Jane B. Thomas, O.T.R., A.M.  
Occupational Therapy  
B.S., Western Michigan College; O.T.R., Kalamazoo School of Occupational Therapy; A.M., University of Michigan.

Joseph Carl Torok, A.M.  
A.B., Kalamazoo College; A.M., The University of Chicago.

Robert B. Trader, M.S.  
Business Studies  
B.S., Indiana University; M.S., University of Pittsburgh.

Dean Mohr VanLandingham, A.M.  
Mathematics, Paw Paw School  
B.S., Western Michigan College; A.M., University of Michigan.

Gertrude Van Zee, M.A.L.S.  
Cataloging Librarian  
A.B., Hope College; M.A.L.S., University of Michigan.

Edwin O. Vaughn, A.M.  
Science, Paw Paw School  

Jean Vis, A.M.  
English, Paw Paw School  
A.B., Michigan State Normal College; A.M., University of Michigan.

Ruth L. Walker, M.A.  
Campus School, First Grade  
A.B., M.A., Western Michigan College of Education.

Roy Garth Walters, B.S.  
Campus School Physical Education and Science  
B.S., Minnesota State Teachers College.
ERNEST WEBER, A.M.  
A.B., Western Michigan College; A.M., Teachers College, Columbia University.

WILLIAM R. WEEKS, B.S.  
VOCATIONAL-INDUSTRIAL AND TECHNICAL EDUCATION  
B.S., Wayne University.

WILLIAM A. WICHERS, A.B.  
VOCATIONAL-INDUSTRIAL AND TECHNICAL EDUCATION  
A.B., Hope College; Certificate, Boeing School of Aeronautics.

MYRTLE WINDSOR, A.M.  
A.B., A.M., University of Michigan.

LANGUAGES

JOHN W. BAKER, S.F.C.

BETTE E. BARNES, M.S.
B.A., Kalamazoo College; M.S., University of Wisconsin.

JAMES E. CASEY, S.F.C.

BERNADINE P. CARLSON
A.B., Western Michigan College.

PATRICK H. DOYLE, M.S.
B.S., M.S., University of Michigan.

JAMES E. DUNCANSON, MASTER/Sgt.

THOMAS FULTON, M.M.
B.M., Western Michigan College of Education; M.M., Eastman School of Music.

MAXINE GOSLINE, B.S.
B.S., Western Michigan College of Education.

LOIS HAMLIN, B.S.
B.S., Western Michigan College of Education.

BERNARD R. JACKSON, M.A.
A.B., Western Michigan College of Education; M.A., University of Denver.

MARGUERITE CLAUDINE KRIESEL, B.S.
B.S., Western Michigan College of Education.

KENNETH E. MCCLURE, MASTER/Sgt.

JOSEPH H. McKee, B.S.
B.S., Western Michigan College of Education.

DOROTHY G. NIEMI, R.N.
R.N., Marietta Phelps Hospital.
INSTRUCTORS

DOROTHY M. OSBORN, A.M.
A.M., University of Michigan.

MYRTLE M. POWERS, M.S.
B.S., Western Michigan College of Education; M.S., Michigan State College.

STEPHANIE Prychitko, B.S.
Campus School, Physical Education
B.S., Western Michigan College of Education.

WILLIAM C. PYNE, S.F.C.

RONALD Rex, B.S.
Campus School, Eighth Grade
B.S., Ball State Teachers College.

CLARENCE A. RODDEN, Master/Sgt.

MARCIA JEANNE SHANE, A.B.
Paw Paw, Third Grade
A.B., Western Michigan College of Education.

WILLIAM H. SULLIVAN, Master/Sgt.

ROBERT R. YOUNG, Master/Sgt.

ASSISTANTS

JOETTE HAINKS
Physical Education for Women

JOYCE PHARES, R.N.
Bronson Methodist Hospital, Kalamazoo, Michigan.

GLADYS SHEPHERD, R.N.
Hackley Hospital, Muskegon, Michigan.
MICHIGAN VETERANS VOCATIONAL SCHOOL

ADMINISTRATION

OSCAR E. HARRINGTON, A.M.
B.S., Michigan State College; A.M., University of Michigan.

LLOYD G. CHAPMAN
COUNSELOR AND ASSISTANT DIRECTOR
A.B., Hope College; A.M., University of Michigan.

DONALD A. GELBAUGH

ANN W. DOBBSY, R.N.
R.N., Harper Hospital School of Nursing, Wayne University;
Public Health Training, University of Michigan.

INSTRUCTORS

WILLIAM A. ALBER
BUSINESS MACHINE REPAIR

JAMES Y. BUCHANAN
UPHOLSTERING

HOWARD N. CHAMPLIN
WATCH REPAIR

LLOYD DECKER, A.M.
ARCHITECTURAL AND MACHINE DRAFTING
A.B., Stout Institute; A.M., University of Michigan.

LAWRENCE EDINGTON, B.S.
RECREATION AND REMEDIAL ENGLISH AND ARITHMETIC
B.S., Western Michigan College.

CLAUDE A. HARRINGTON

ROBERT HEYDENBERK, B.S.
B.S., Western Michigan College.

LLOYD I. MEADOWS, B.S.
B.S., Western Michigan College.

KENNETH REEMTSN

RAYMOND SELKIRK

CLARENCE SUNQUIST, B.S.
B.S., Central Michigan College.
GENERAL INFORMATION

PURPOSE

The original purpose of Western Michigan College of Education, as stated in the act establishing it in 1903, was to prepare teachers for the public schools. The College has been true to that purpose, but as the years have come and gone the original purpose has been expanded and modified. While many of the students still are in training for the teaching profession, Western now counts large numbers who are pursuing courses of a pre-professional and vocational nature. The College now offers the following degrees: Bachelor of Arts, Bachelor of Science, Bachelor of Music, and Bachelor of Business Administration.

After thirteen years of cooperative efforts with the University of Michigan, the College last year launched its own program of graduate studies leading to a Master's Degree with specialization in Education.

HISTORICAL SKETCH

Western Michigan College of Education was established by an act of the Legislature in 1903. The first school year began 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 first building (the Administration Building) was completed. A rapid expansion of the physical facilities took place in the next twenty years. The buildings added were, the Training School, the Science Building, the Manual Arts Building, the Library, and the Men's Gymnasium. With the completion of Walwood Hall and Union Building in September of 1938, a new era of expansion began. Erected on the campus were, Waldo Stadium and Hyames Field, Vandercook Hall for Men, Student Health and Personnel Building, Lavina Spindler Hall for Women, Mechanical Trades Building, The Theatre, William McCracken Hall, Burnham Halls for Men, Harper Maybee Music Hall, Blanche Draper Hall for Women, Lydia Siedschlag Hall for Women, and the Kanley Memorial Chapel. The latest building to be completed is the new Administration and Classroom Building, dedicated in October of 1952.

The original campus of 20 acres has been expanded to one of 280 acres. Larger training school facilities have been secured by affiliation with the Paw Paw Village District, the Portage Consolidated Schools, and Rural District No. 9.

In 1927 the College was placed on the approved list of the North Central Association of Colleges and Secondary Schools; in 1928, on the approved list of the American Association of Teachers Colleges; in 1941, on the approved list of the Association of American Universities; and in 1951, the College achieved full membership in the National Association of Schools of Music.

On August 5, 1936, President Waldo tendered his resignation and became President Emeritus, in which capacity he served until his death on October
Dr. Paul V. Sangren, who had been serving in the capacity of Dean of Administration, succeeded to the presidency in August of 1936.

**COMMUNITY ADVANTAGES**

The city of Kalamazoo offers unusual cultural advantages to students. The city has its own Symphony Orchestra, Civic Theatre, and Art Institute. Each season the Community Concert series brings some of the world’s foremost musical artists. Kalamazoo is a city of churches, and leadership in the various churches is naturally rather strong in a city the size of Kalamazoo and has helped to produce a lively Christian consciousness.

**ENROLLMENT DATA**

_July 1, 1952-June 30, 1953_

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<td>Spring 1953</td>
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**GROUND AND BUILDINGS**

**LOCATION**

Western Michigan College of Education is located at Kalamazoo, Michigan, midway between Detroit and Chicago on the Michigan Central Railroad. This location ensures easy transportation to the campus from almost any direction, with three major highways, two railroads, an airline and numerous bus routes serving the community. The population of greater Kalamazoo is nearly 100,000, offering numerous cultural opportunities to students.

**GROUNDS**

The rolling campus of Western Michigan College now covers 415 acres, lying astride US-12 at its west entrance to Kalamazoo. The school began on a hilltop, but has expanded greatly and since World War II has moved a mile to the westward where the newer buildings are located. Two unusual features of the local campus are the nine-hole golf course adjacent to the west campus and the Kleinstueck Wild Life Preserve one mile south of the campus.

**BUILDINGS**

**ADMINISTRATION AND CLASSROOM BUILDING**—Administrative offices, the Graduate Division, Adult Education and Extension Division, main Campus Store, and other service facilities are housed in this newest structure,
opened in the fall of 1952. Situated on the west campus, 25 classrooms are also provided here for the Divisions of Language and Literature and Social Sciences.

Arcadia Book Clubhouse and Dining Hall—This building on the west campus provides a cafeteria and soda bar for faculty and student use, with seating capacity for 100. Faculty clubrooms are also provided.

Education Building—The oldest building on the campus was formerly the administration building. It now houses a part of the Campus Training School, the Audio-Visual center, Educational Service Library, Distributive Education Office, and Education Department classrooms and offices.

Health Service Building—This three-story structure, completed in 1940, houses on its first floor the Director of Teacher Education, Director of Vocational and Practical Arts, Director of Research, Rural Life and Education Department, and the Psychology Department. The second floor is devoted entirely to the student health service. On the third floor are classrooms for Psychology, the Psycho-Educational Clinic, and Speech Correction Clinic.

Hillside Apartments—Two modern buildings on the west campus provide 32 living units for faculty members including bachelor, one-bedroom, and two-bedroom apartments.

Industrial Arts Building—This modern Industrial Arts classroom building, built in 1921, houses classes in printing, woodworking, machine shop, metal work, and drafting.

Kanley Memorial Chapel—A main chapel, a smaller chapel in the basement, robing rooms, offices, conference rooms, a social room, kitchenette, and bride’s room are in this building, constructed by a bequest from the estate of the late William Kanley. Designed in a modern motif, this structure serves as a campus religious center for all faiths.

Library Building—The main floor reading room, with adjoining stacks, accommodates 300 students, with a periodical room in the basement holding another 50. The library’s book collection now totals more than 100,000 volumes, which are housed in the general library on the east campus, the library annex in the administration building and the music library in Maybee hall. Some 740 periodicals are currently being received, with 325 of them being bound. The Librarianship Department is housed on the second floor of the Library and the Mathematics Department in the basement.

Harper C. Maybee Music Hall—Of unusual and original design, the Music Building on the west campus was opened in 1949. It was constructed as a self-liquidating unit. Offices for the department, individual offices with adjoining instruction rooms, choral and instrumental rehearsal rooms, individual and ensemble practice rooms, a music library and a social room
are included. The top floor houses the studios of WMCR, campus FM broadcasting station.

MAINTENANCE BUILDING—The maintenance staff here has offices, shops and storage facilities.

WILLIAM McCracken Hall—Lecture rooms and laboratories for the departments of Chemistry, Physics, Occupational Therapy, Home Economics and Art are provided in this $1,000,000 classroom building opened in 1949 on the west campus. Quarters for the pulp and paper technology curriculum of the Chemistry department are also provided.

MECHANICAL TRADES BUILDING—Over 20,000 square feet of floor space are provided in this building through a 1941 gift from the W. E. Upjohn Unemployment Trustee Corporation of Kalamazoo. The department of Vocational-Industrial and Technical Education is centered here.

NATURAL SCIENCES BUILDING—Housed in this older east campus building are the departments of Agriculture, Biology, and Geography and Geology, with some other classes meeting here. An adjoining greenhouse is stocked with more than 200 species of plants from around the world. Basement space for the campus training school shop is provided.

TEMPORARY BUILDINGS—Six buildings have been obtained from the federal government for instructional uses. They provide facilities for business education, industrial arts, and vocational education, reserve officer training corps, and speech and dramatics.

THEATRE—This unique little theatre on the east campus is a center for campus dramatics activities, with an auditorium seating 350 persons. Classrooms for speech and dramatics, dressing rooms, rehearsal rooms and offices are included.

WALWOOD HALL UNION BUILDING—In this social center, opened in 1939, one finds the Davis room for the Associated Women Students, the Men’s Union room, a large cafeteria, private dining rooms, a soda bar and offices. A large ballroom, student offices and committee rooms are on the second floor.

DORMITORIES—Since 1939 Western Michigan College has opened all seven of its dormitories, three on the east campus and four on the west. All but Vandercook Hall have their own dining facilities. A new double women’s dormitory for the west campus is now being planned.

WALWOOD RESIDENCE HALL FOR WOMEN—This structure houses 115 girls in double rooms. A spacious lounge and recreational facilities are included.

LAVINA SPINDLER HALL FOR WOMEN—In this attractive building on the east campus 193 girls live in single and double rooms. An attractive lobby, reception rooms, recreation rooms, music practice rooms, a laundry, kitchenettes, and sunrooms are a part of it.
HENRY B. VANDERCOOK HALL FOR MEN—Housing for 200 men is provided here, with a snack bar in the north lobby. It was named for one of the men instrumental in the founding of Western.

BURNHAM HALLS FOR MEN—This large double dormitory on the west campus houses 500 men. Fine lounges and recreational facilities are a feature of the building.

BLANCHE DRAPER AND LYDIA SIEDSCHLAG HALLS FOR WOMEN—These twin dormitories adjacent to Burnham halls, house 500 women. Gracious lounges, uniquely and individually decorated, furnish an immediate appeal for the buildings.

NEW WOMEN’S DORMITORY—A new women’s residence, designed for 500 students, is under construction on the west campus. Half of the residence area is due for completion for the Fall, 1954 semester. A great change has been effected in this building, with each two girls having a study room, bedroom and bath to themselves. Many other new developments are included in this structure.

MARRIED STUDENT APARTMENTS—During the past year, 96 tastefully furnished apartments, in eight units, were completed on the west campus. Of permanent block construction, these units replace many temporary post-war structures. The average apartment has about 600 square feet of living space, with one bedroom. A few two-bedroom units are included. Laundry and storage facilities are also provided in the buildings. They are located adjacent to the Draper-Siedschlag and Burnham residences.

ATHLETIC PLANT

HYAMES FIELD—One of the finest collegiate baseball layouts in the nation, provides 2,500 permanent seats for spectators.

MEN’S GYMNASIUM—Seating for basketball is about 3,000, with other facilities for indoor track and field events, handball courts, baseball practice pit, locker rooms, and several classrooms.

WALDO STADIUM—Two concrete stands, each seating 7,500 persons, run from goal line to goal line, with the south stands topped by a large press box and beneath it a concession stand. Locker rooms, officials’ rooms, and equipment storage are provided under the north stands. An eight-lane quarter-mile track, with 220-yard straightaway, circles the football field.

WOMEN’S GYMNASIUM—Adjoining the education building is the women’s gymnasium, including a gym floor 60 by 119 feet, with a stage at one side. A running track circles the floor, with offices and classrooms nearby. Beneath are lockers, showers, and a swimming pool. Tennis enthusiasts will find 12 courts, six concrete and six Har-Tru, on the east campus.
TRAINING SCHOOLS—A wide range of typical schools are included in the unique training school program at Western Michigan College. Included are a one-room rural school, a consolidated school, a large-village school, a city-graded school, and a high school. These give the student an opportunity for observation of and directed teaching in any subject and in any grade from kindergarten through twelfth. Transportation to outlying schools is by college vehicle.

CAMPUS ELEMENTARY SCHOOL—Included are a nursery, kindergarten, rooms for each grade from one to eight, a library, gymnasium, special rooms for art, vocal music, instrumental music, home economics, and shop training. A cafeteria is also provided in the building.

CAMPUS HIGH SCHOOL—One major function of the school is to offer a broad curriculum in which teaching procedures designed by leaders in the field of secondary education are put into practice. Another is to offer an effective laboratory situation for training prospective teachers for secondary schools. Standard facilities are included and a well-rounded athletic and social program are a part of school life.

HURD ONE-TEACHER RURAL SCHOOL—This modern building, west of Kalamazoo on M-43, provides a typical school scene with an additional room for directed teaching.

PAW PAW LARGE-VILLAGE SCHOOL—Western Michigan College and the Paw Paw board of education unite to make this school a progressive one in every particular. Organized on the six-three-three-three plan, it is an outstanding school in the state.

KLEINSTUECK WILD LIFE PRESERVE

In 1922 the late Mrs. Caroline Hubbard Kleinstueck deeded to the State Board of Education for the use of Western Michigan College nearly 50 acres in a tract about one mile south of the east campus.

This wild life preserve abounds with land and water birds and many of the native plant species of the area. A 25-year stand of pine covers part of the area, with a hardwood forest, swamp, and lake also to be found. Classes and student groups make a wide use of the area for instructional and recreational purposes.

MICHIGAN VETERANS VOCATIONAL SCHOOL

The Michigan Veterans Vocational School is a state institution under the supervision and management of the State Board of Education and is operated in conjunction with Western Michigan College. The major objectives of the school are to furnish the best possible vocational and trade training for veterans, and, as far as possible, to be a center for the rehabilitation of non-veterans authorized to take such training under Public Law 113. It is located on the north side of Pine Lake, 22 miles from Kalamazoo.

Direct application for admission may be made to the school by writing Michigan Veterans Vocational School, Pine Lake, Doster, Mich.
STUDENT SERVICE FACILITIES

TEACHER EDUCATION AND RELIGION PROJECT

On December 4, 1953, Western Michigan College of Education was selected as one of fifteen institutions in the United States to participate in the Teacher Education and Religion Project of the American Association of Colleges for Teacher Education. Funds to underwrite the beginning of the project were provided by the Danforth Foundation.

The A.A.C.T.E. through its committee on Teacher Education and Religion has formulated the following statement of purpose:

"The Committee recommends that the chief purpose of this study of Teacher Education and Religion be to discover and develop ways and means to teach the reciprocal relation between religion and other elements in human culture in order that the prospective teacher, whether he teaches literature, history, the arts, science or other subjects, be prepared to understand, to appreciate, and to convey to his students the significance of religion in human affairs."

A committee of faculty members is working to stimulate interest at Western along the lines of curriculum, counseling, student religious activities at Kanley Memorial Chapel, and teacher training, as related to becoming informed about religion. These activities involve no sectarian approaches on the part of the college.

STUDENT WELFARE

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

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

The college is opposed to the use of liquor in any form. It will not allow the use of liquor at college functions, in college buildings, or on college property. Students entering their rooming places, either the dormitories or private houses, under the influence of liquor, and students who introduce liquor into any rooming place or college building will be subject to dismissal from the college.
STUDENT PERSONNEL AND GUIDANCE SERVICES

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

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

EMPLOYMENT FOR MEN AND FOR WOMEN

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

VETERANS COUNSELING SERVICES

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

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

OCCUPATIONAL COUNSELING SERVICE

The occupational counseling service has as its primary objective the assistance to individuals in making suitable occupational choices. This service is rendered in cooperation with the Psycho-Educational Clinic.

Any enrolled student desiring a complete discussion of his interests, aptitudes, and abilities as shown by education or work experiences and by scores on standard tests may seek this help. Referrals are made by counselors, faculty or staff members. Individuals may also seek occupational counseling, either general or for a specific objective.

Students who have not made their specific vocational plans are urged to avail themselves of this opportunity early in their college careers.

THE ATHLETIC DEPARTMENT

The Athletic Department of Western Michigan College administers a broad program of intercollegiate athletics under the policies established by
the Athletic Board of the College, the National Collegiate Athletic Association, the Mid-American Conference and the North Central Association of Colleges.

The Department attempts to conduct its athletic program so that the students participating may experience the opportunity for self-discipline, loyalty, cooperation within a group, leadership, and similar characteristics contributing to good citizenship in a democratic society.

The members of athletic teams must maintain the same progress toward degrees as any other student to be eligible for participation and must carry satisfactorily the regular semester load of academic subjects.

In addition to the physiological and sociological aims, the department recognizes a vocational objective. Many of the participants in the athletic program will teach and coach. The program is planned to assist in this phase of teacher preparation.

In summary, the department endeavors to provide through its athletic program emphasis on the recreational, social, physiological, vocational and moral values to be derived from sports as an important and integral part of the education curriculum.

HOUSING FOR MEN

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

*Burnham Halls—Room and Board*

Request for reservation should be addressed to J. Towner Smith, Dean of Men. Applications must be accompanied by a ten-dollar room deposit. This deposit does not apply on the rental charge but is held through the college year and is returned to the resident when he leaves at the end of the semester, provided he has no outstanding account with the College. The last day for requesting deposit refunds, if application to live in the dormitory is cancelled, is August 15 for the first semester and January 15 for the second semester. The rate per student in Burnham Halls for room and board is $268.00 per semester. Room and board payments must be made in advance in three installments: $125.00 prior to occupancy and two additional payments of $71.50 each at specified periods according to contract. Make all checks payable to Western Michigan College. A 5% collection fee will be added to bills not paid within one week after payment date and an additional 5% will be added to payments more than three weeks late.

Note: Due to the unsettled conditions of prices for food and labor, the College reserves the right to increase the charge during the year if, in its opinion, such increase is necessary.
STUDENT SERVICE FACILITIES

Henry B. Vandercook Hall—Room Only

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

The rate per student in Vandercook Hall is $81.00 per semester. There are a few single rooms at an additional charge. Room rent for the entire semester must be paid prior to occupancy.

HOUSING FOR WOMEN

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

Residence Halls for Women

Western's Residence Halls for Women are: "Walwood Hall, Lavina Spindler Hall, Blanche Draper Hall, and Lydia Siedschlag Hall. Rates for room and board are $268.00 per semester.

Room and board payments must be made in advance in three installments: $125.00 prior to occupancy and two additional payments of $71.50 each at specified periods according to contract. A 5% collection fee will be added to bills not paid within one week after payment date and an additional 5% will be added on payments more than 3 weeks late.

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

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

The Cafeteria hours are:

**Walwood Hall Cafeteria**

**Lunch:**

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

**Dinner:**

Sunday ........................................... 12:15 P.M. to 1:45 P.M.

Monday through Saturday ......................... 5:00 P.M. to 6:30 P.M.

**Walwood Soda Bar**

Sunday ........................................... 3:00 P.M. to 10:00 P.M.

Monday through Saturday ......................... 7:00 A.M. to 10:00 P.M.

**Arcadia Brook Cafeteria**

Monday through Friday ............................ 11:00 A.M. to 1:30 P.M.

**Arcadia Snack Bar**

Sunday ........................................... 3:00 P.M. to 10:30 P.M.

Monday through Friday ......................... 7:00 A.M. to 10:30 P.M.

Saturday ....................................... 8:00 A.M. to 1:00 P.M.

WESTERN'S CAMPUS STORES

Western Campus Stores serve as a convenience to people on the campus. Store No. 1 is located in the new Administration Building and Store No. 2 in the Education Building.

Service is the keynote of the stores, and every effort is made to keep an adequate stock of all items needed by students in their on-Campus life.

**DIRECTIVE LIST FOR BUYING BOOKS AT CAMPUS STORES**

NEW AND SECOND-HAND BOOKS and equipment for the departments below to be sold on west campus from store No. 1 in Administration Building.

1. Art
2. Business Studies
3. Chemistry
4. Economics
5. English
6. History
7. Home Economics
8. Industrial Arts
9. Languages
10. Occupational Therapy
11. Music
12. Paper Technology
13. Philosophy
14. Physics
15. Physical Education—Men
16. Physical Science Course in General Education
17. Political Science
18. Sociology
19. Vocational—Ind. and Technical Education
STUDENT SERVICE FACILITIES

NEW AND SECOND-HAND BOOKS and equipment for the departments below to be sold on east campus from store No. 2 in Education Building.

1. Agriculture
2. Biology
3. Education
4. Geography and Geology
5. Librarianship
6. Mathematics
7. Physical Ed.—Women
8. Psychology
9. Rural Education
10. Speech
11. Elementary School
12. High School

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.

The main Clinic and the Infirmary are located in the Health Service Building on the East Campus. The clinic will be open for consultation and treatments from 8:00 A.M. until 4:30 P.M., Monday through Friday, and from 9:00 to 12:00 Noon on Saturday.

The college physician is in the office from 8:30 until 10:00 A.M. daily Monday through Friday. Other services are available as follows: a surgical clinic is held from 1:00 to 4:00 P.M. on Wednesdays; the dental clinic is open on Tuesday and Thursday mornings; a special skin clinic is held twice a month, and psychiatric counseling is available by appointment.

Limited clinic service is available on the West Campus. A registered nurse will be in charge of a branch health office in room 141 in the new Administration building. Since this nurse, also supervises the emergency work in the new dormitories, the clinic is open only during the following hours: 9:00 A.M. to 12:00 Noon, and 1:00 to 4:00 P.M. Any serious illness is referred to the main Health Service for medical consultation.

Consultations and treatments given in the Health Service are free to the students, except for special medications and the materials used by the
dentist. Infirmary care is furnished at a nominal fee, if recommended by the physician.

THE GENERAL LIBRARY

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

The General Library's collection consists of about 97,000 volumes. Approximately 740 periodicals are currently received and of these more than 325 are bound for permanent retention.

About 1,800 volumes are housed on the west campus in Room 206, Maybee Hall, where a Music Library with a seating capacity of 50 is supervised by a member of the professional library staff as a branch of the General Library. This branch receives a dozen current periodicals and has a collection of 2,100 phonograph records which can be used in the adjoining listening room.

In Room 208, Administration Building, the Library Annex has a seating capacity of 85. The library's holdings include 1,400 books in the physical sciences, over 400 books on reserve for the Social Sciences and English, and some 500 general reference books. The library subscribes to 75 current science and 13 general periodicals, and to 4 newspapers. The holdings include 950 bound periodicals in science. The Library Annex is also a branch of the Main Library and is supervised by a member of the general library staff.

During the academic year the General Library is open for service from 7:30 A.M. to 10:00 P.M. Monday through Thursday; 7:30 A.M. to 9:00 P.M. Friday; 8:00 A.M. to 5:00 P.M. Saturday; and 2:30 P.M. to 5:30 P.M. Sunday.

The Music Library is open through the academic year from 8:00 A.M. to 4:00 P.M. Monday through Friday, 7:00 P.M. to 9:00 P.M. Monday through Thursday, and 9:00 A.M. to 3:00 P.M. on Saturday.

The Library Annex is open from 8:00 A.M. to 9:00 P.M., Monday through Thursday, 8:00 A.M. to 5:30 P.M. Friday, and from 8:00 A.M. to 12:00 noon on Saturday.

EDUCATIONAL SERVICE LIBRARY

The Educational Service Library, formerly the Textbook Library and Curriculum Bureau, Room 103, Education 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 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.

**CARNEGIE GIFT OF BOOKS AND PICTURES**

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

**ART COLLECTION**

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

**PSYCHO-EDUCATIONAL CLINIC**

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

**READING LABORATORY**

Individuals wishing to improve their reading skill may spend from one to two hours in the Reading Laboratory on Tuesday and Thursday of each week. The personnel of the laboratory consists of the director and three technicians. Twenty-two assignments have been prepared, and each student is expected to proceed from assignment to assignment as his ability permits. These assignments show the student how to improve his reading ability as he does his regular college work. The facilities of the Psycho-Educational Clinic will be drawn upon to provide clinical service whenever the student's needs warrant.
The Office of Placement and Alumni Relations is designed to give service to all graduating students and alumni of Western Michigan College of Education. The placement work of the office is divided into four main fields, (a) teacher placement for those entering the teaching profession, (b) vocational placement for those graduating from technical and vocational courses, (c) placement for graduates with the general degree, and (d) placement of alumni who are seeking new positions.

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

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

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

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

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

**ALUMNI ORGANIZATION**

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

In its brief history of less than a half century, Western Michigan College has granted degrees and/or certificates to approximately 24,000 individuals. More than 55,000 ex-students who did not take a degree or certificate have had part of their educational training at Western. This constantly growing body of alumni increases the stature and significance of Western Michigan College with every succeeding year. Her sons and daughters are to be found in many lands pursuing many walks in life. More of her alumni are engaged in teaching than in any other single occupation but others have entered business, agriculture, and the various professions.

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

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

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

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

**TRAINING SCHOOL FACILITIES**

The Training Schools of Western Michigan College of Education are unique in that they include a wide range of typical schools: a one-room rural school, a township-unit school, a large village school, a city graded school, and a high school—thus approximately the types of schools students may expect to work in after graduation. In addition some use is made of neighboring public school systems. 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 vehicles.
DIVISION OF EXTENSION AND ADULT EDUCATION

The Division of Extension and Adult Education offers educational opportunities to persons who do not participate in the regular full-time undergraduate or graduate program of the college.

Serving primarily the 16 counties of Southwestern Michigan, Western's offerings through Extension and Adult Education last year reached 28,373 persons. Of these, 4,975 represented extension class and correspondence enrollments. The remainder were contacted through adult education activities in conferences and discussion groups; through in-service education programs; and through extension course planning meetings.

A variety of courses is offered to benefit teachers in the field and the other interested adult students. Course offerings in the 16 counties are planned in committees with County Superintendents, Public School Superintendents, and their teacher committees. Courses are offered on both the undergraduate and graduate levels. A special schedule of on-campus offerings is planned each semester for persons who can attend Saturday or evenings classes.

There is also a wide variety of correspondence courses available. These may be taken for credit and applied toward an undergraduate degree within the limitations described in this bulletin.

In the field of adult education the office supplies advising services, speakers, discussion leaders, and persons qualified to handle leadership training programs. Upon request, such services are available to farm groups, labor unions, schools, church organizations, and other organizations.

In-service education programs are planned with schools, businesses, and any institutions seeking to improve personnel within the institutions. Advisory services are offered, as well as actual training programs.

For details of policy, and further information please write the Office of Extension and Adult Education.

Fees for undergraduate credit are $9.50 per semester hour; for graduate credit, $10.00 per semester hour.

Fees for auditors are one-half the amounts indicated.

RURAL DIVISION

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

SPECIAL EDUCATION

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

AVIATION TEACHER EDUCATION

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

MILITARY SCIENCE AND TACTICS

The United States Army has established a Reserve Officer Training Corps Unit, Quartermaster Branch, at Western Michigan College. The Military Science Course is voluntary, and consists of four years of academic work.

The first two years of ROTC is referred to as the Basic Course, and the final two years as the Advanced Course. Uniforms and textbooks are furnished, then Advanced Course students also receive a monetary allowance of approximately $27.00 each month in lieu of subsistence. Two semester hours credit is allowed for the Basic Course, and four semester hours credit is allowed for the Advanced Course.

Upon completion of the four year course, and attendance in summer camp training, students are eligible to apply for appointment as Second Lieutenant, United States Army Reserve.

MILITARY TRAINING

In view of the existing international tension, and the duty to serve our country in time of emergency, the administration of Western Michigan College advises each new student to consider seriously the relative advantages of the ROTC program. Enrollment in ROTC, with academic grades to insure graduation, will entitle a student to draft deferment by the Army, and the opportunity to complete college without interruption.

Students who are interested must enroll in ROTC upon entering Western Michigan College, since the Military Science course is a four year program which may not be consolidated. Transfer students who participated in ROTC will be granted credit commensurate with the work completed, and those eligible permitted to continue the program.
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 student and faculty members:

CHARTERS

Regulation adopted by the Michigan State Board of Education, September 17, 1952.

Charter of Clubs and Organizations may be granted provided that:

1. the aims and functions of such societies and clubs are in harmony with the ideals of the colleges as now defined, or hereafter defined, by the college authorities and the State Board of Education;

2. the aims and functions are in harmony with the American form of government, and are constructive in furthering the American way of life. No organization or its officers, local or national, shall be associated with any subversive groups or so-called fronts; and,

3. the purposes and functions of the proposed new organization shall not unnecessarily duplicate organizations already chartered by a college.

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 and representatives from each class. 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 aims to unify and inspire a high type of spirit in the college.

ASSOCIATED WOMEN STUDENTS

The Associated Women Students of Western Michigan College is organized for the purpose of uniting the undergraduate women students in order to meet their social needs, to uphold high social standards, to afford leadership opportunities, to encourage scholastic achievement, to sponsor
philanthropic activities, and to actively identify the organization with the national Associated Women Students. Women of the faculty are considered honorary members. Dues are paid at the beginning of each semester as a part of the total enrollment fee.

The Association 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 which has become a Wednesday tradition.

MEN'S UNION

All of the men of the student association, 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, billiards, checkers, chess, cards, magazines, radio, and television are located in the Union Building, for the use of the men during their leisure. Among the numerous social activities sponsored by the Men's Union are six informal dances or open houses, and the Cotillion Ball, considered to be the highlight of the social season. Dues paid at enrollment by men of the college support the Union.

II. DEPARTMENTAL CLUBS

ART CLUB

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

BETA ALPHA SIGMA

Beta Alpha Sigma is a business professional organization which aims to foster scientific research in the fields of commerce, accounts, and finance; to educate the public to appreciate and demand higher ideals therein; and to promote and advance in institutions of collegiate rank, courses leading to degrees in business administration and economics.

COLOPHON CLUB

The Colophon Club is open to majors and minors in the Department of Librarianship. It is both professional and social, and its aim is to widen the professional interests of students in library work and to open new horizons of knowledge concerning books and related materials. It meets semi-monthly in the evening, in the Department of Librarianship Laboratory.
COUNTRY LIFE CLUB (NATIONAL AFFILIATION)

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

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

DER DEUTSCHE VEREIN

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

THE ASSOCIATION OF CHILDHOOD EDUCATION

Students whose interest is in the 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 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 firsthand interest in the annual conventions of the larger organizations.

ECOS ESPANOLES

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

EPSILON DELTA GAMMA

Epsilon Delta Gamma is an organization of basic course ROTC students devoted to improving the individual’s military ability. This organization is a special drill team and participates in various school events where a touch of military ceremony can add to the occasion; such as the flag ceremonies at athletic events, the coronation ceremonies at social events, the Military Ball, the commissioning of ROTC graduates, and street parades.
FUTURE TEACHERS OF AMERICA

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

GAMMA THETA UPSILON

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

HOME ECONOMICS CLUB

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

INDUSTRIAL ARTS ASSOCIATION

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

INTERNATIONAL STUDENTS CLUB

International Students Club, formerly Foreign Students Club, is composed of students from the twenty-one countries represented on campus and recently re-organized to include American students to participate in their programs to promote friendship and mutual understanding among people from different nations, cultures, and races. Usually meet once a month for lecture, discussion and social activities.

PHILOSOPHY FORUM

The Philosophy 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.

PRE-MEDICAL CLUB

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

SABER AND KEY

Saber and Key is a local organization of ROTC advanced course cadets who have maintained an above average academic rating in military science subjects. The purpose of the organization is to bring together those advanced ROTC cadets who have shown above average ability and to improve their professional ability.

SCIENCE CLUB

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

SIGMA ALPHA IOTA

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

WATER SPRITES

The purpose of Water Sprites is to promote interest in and provide opportunity for participation in water activities. The club is open to both men and women interested in swimming.

STUDENT AFFILIATE CHAPTER of the AMERICAN CHEMICAL SOCIETY

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

TS'AI LUN

Ts'ai Lun is an organization for the students of the Pulp and Paper Curriculum. It purposes to further social contacts among the students and
to develop outside interest and recognition. In general it promotes the professional, social, and economic welfare of its members.

**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 COLLEGE PLAYERS**

The purpose of this organization is to promote an appreciation of the theater among its members, and among the general student body. The group works as a producing organization in the presentation of campus dramatic productions and thus offers practical experience in acting, staging, and management. Membership in the organization and try-outs are open to any regularly enrolled student who demonstrates his interest by active participation in the activities of the group.

**III. SPECIAL INTEREST GROUPS**

**ALPHA PHI OMEGA**

Alpha Phi Omega is a national service fraternity composed of Western Michigan College men in the fellowship of the Scout Oath and Law to promote service to the student body and faculty, to the community, and to the nation as participating citizens.

**INTERNATIONAL STUDENTS' CLUB**

The Foreign Students' Club is composed of students whose homes are outside of continental United States and interested American students. 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.

**SKI BRONCOS**

Ski Broncos has as its purpose to further interest in skiing, also to promote and develop the sport of skiing.
To awaken a wide and intelligent interest in health, physical education, and recreation, and to cooperate with similar educational organizations on a state and national basis are the chief aims of this organization.

**WESTERN WIVES CLUB**

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

**IV. HONORARY SOCIETIES**

**ARISTA**

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

**KAPPA DELTA PI—BETA IOTA CHAPTER**

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.

**EPSILON PI TAU**

The Epsilon Pi Tau Fraternity is a National Honorary Professional organization operating in the fields of Industrial Arts Education and Vocational-Industrial Education. The purposes and ideals of this organization are to recognize the place of skill, to promote social proficiency, and to foster, counsel, and reward research and to publish and circulate the results of research.

**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.

**PHI MU ALPHA SINFONIA FRATERNITY OF AMERICA**

Phi Mu Alpha Sinfonia is the only national honorary music fraternity on campus at Western.

The purposes of the organization are to advance the cause of music in
America, to foster the future welfare and brotherhood of students of music, to develop the truest fraternal spirit among its members, and to encourage loyalty to the Alma Mater.

Eligible for membership are men who have been on campus for at least one semester, who can meet the scholastic requirements, and who have an active interest in music.

This chapter sponsors various activities throughout the year; such as a symposium, jazz concert, formal dinner dance, in conjunction with the Sigma Alpha Iota, and American Musicale.

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. An honor key is awarded to a graduating senior.

PI OMEGA PI

Pi Omega Pi has as its aims and purposes the creation of interest in and promotion of scholarship in Business Education, the encouragement of high ethical standards in business and professional life, and the teaching of the ideals of service as the basis of all worthy enterprise. This organization is restricted to those students who have expressed the intention of becoming teachers of business subjects.

SIGMA ALPHA TAU

Sigma Alpha Tau is an honorary organization serving to recognize outstanding contributions and exemplary character of students in the curriculum of Air Transportation. Opportunity is given for initiative, resourcefulness, leadership, effort, and close cooperation with those in the Air Transportation industry.

SIGMA TAU CHI

Sigma Tau Chi is a national honorary fraternity for students in the Department of Business Education. Western's chapter, Beta, is the first organized in Michigan and the second in the United States.
The objectives of this club are to promote scholarship, to coordinate college training with actual business experiences, to facilitate favorable placement for members both in the business field and in the teaching field, and to promote fellowship and leadership among the students.
Members are elected from students in the Business Education Department who maintain high scholarship.
TAU KAPPA ALPHA

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

V. FRATERNITIES AND SORORITIES

ALPHA CHI OMEGA

Alpha Chi Omega is one of the oldest women's organizations on the campus. It has for its purposes 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.

ALPHAOMICRON PI

Alpha Omicron Pi tries to encourage a spirit of fraternity and love among its members; to stand at all times for character, dignity, and scholarship, strong college spirit, and pure college politics; to strive for and support the best interests of the college. Its members share their experiences and grow because of them. Formerly a local Sorority, Pi Kappa Rho, Kappa Rho Chapter was installed at Western Michigan College in September 1951.

ALPHA PI BETA

Alpha Pi Beta is a local social sorority, founded in December, 1951. Its aims are to promote among its members leadership, high moral standard, and scholastic achievement. Members are elected by the sorority on the basis of personality, scholastic ability, and leadership.

ALPHA SIGMA ALPHA

Western's newest social sorority, the Beta Psi Chapter of Alpha Sigma Alpha, was inaugurated on campus in April, 1952.

Its purpose is to further the physical, intellectual, and spiritual development of its members and to provide more opportunities for social life.

DELTA SIGMA PHI

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

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

Delta Sigma Theta, a social sorority, came on the campus in May, 1953. It has as its purpose to promote among its members leadership and active responsibility in school activities and to cultivate a fuller appreciation of the arts.

DELTA ZETA

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

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

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

KAPPA ALPHA PSI

The Gamma Beta chapter of Kappa Alpha Psi was inaugurated on Western's Campus at the start of the second semester in January, 1948.

With a fundamental purpose of achievement, Kappa Alpha Psi strives to enrich the college experience of its members, and to create a feeling of fellowship and sense of accomplishment.

SIGMA ALPHA DELTA

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

These objectives may be more realized with the fraternity acquiring their own house in the fall of 1952. Today the S.A.D's have found a new fraternity incentive by moving into the century old house overlooking the West Campus.

SIGMA EPSILON

Sigma Epsilon is a men's social fraternity. "Sig Eps", as the organization is more commonly known, was organized to promote brotherhood and school spirit on Western's campus. Membership is based upon scholarship, personality, and leadership ability.

SIGMA KAPPA

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

The Beta Rho chapter of Sigma Sigma Sigma is a women’s national social sorority, which was installed on Western’s campus on April 26, 1952. This organization seeks to encourage self-improvement, scholarly attainment, social service, and to stimulate an interest in college functions. Membership is based upon personality, scholarship, and leadership.

SIGMA TAU GAMMA

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

TAU KAPPA EPSILON

Tau Kappa Epsilon is a national fraternity of men bonded together in the belief that man is a social being. Founded in 1898, the Tekes have become one of the 10 largest national fraternities, with over 100 undergraduate chapters. Our chapter, Delta Alpha, has grown with Western. Founded 31 years ago as a local fraternity known as Theta Chi Delta, our strength, financial stability, and tradition were firmly established before we petitioned for, and were granted a charter by TKE.

The Tekes encourage participation in all college activities by lending full support and cooperation. The Alumni Banquet, the Spring Dinner Dance, the all school party “Ides of March”, the Christmas Dinner Dance, homecoming festivities, and Greek Week highlight the Teke calendar.

THETA PI ALPHA

The purpose of this local sorority is to encourage the reading of good literature and the appreciation of fine arts, to encourage individual expression; to promote toleration of ideas of others, to promote a general atmosphere of good fellowship, and to broaden the perspective of life. Candidates for membership must demonstrate scholarship and leadership.

ZETA DELTA EPSILON

Zeta Delta Epsilon is a local fraternity founded on Western’s Campus in 1941. This fraternity is one of the oldest groups on the campus. It attempts to hold every brother manfully to his task in the attainment of scholarship and encourages enduring friendships.

PANHELLENIC

Panhellenic has as its purpose to act as the coordinating and governing body for the sororities on the campus.
VI. RELIGIOUS ORGANIZATIONS

KANLEY MEMORIAL CHAPEL

Directly in the center of the new campus stand the tower and building comprising Kanley Chapel. This building, dedicated in April, 1951, was made possible by a gift from William Kanley, an alumnus of the college. It is a non-sectarian Chapel designed to serve all religious groups. Events in the Chapel include weddings, college Chapel services, and meetings of campus religious groups. The Chapel auditorium seating 288 people, a small worship room for groups of 50 to 100, and a social room designed for informal meetings and receptions. The building also includes office space which is made available to the advisers of campus religious groups.

The religious activities centering in the Chapel are coordinated by the Dean of the Chapel with the guidance of an advisory committee consisting of students, faculty, and local clergymen.

CAMPBELL CLUB

The purpose and aims of the Campbell Club are to provide a campus fellowship for students and faculty from Christian Churches and/or Churches of Christ, to cultivate spiritual growth, to broaden the knowledge of the members and to strengthen their convictions concerning the Christian way of life. All students and faculty members who share the purpose of this organization are eligible for membership.

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.

CHRISTIAN SCIENCE ORGANIZATION

This organization's aim is to benefit primarily all students of Christian Science who are in any way connected with Western Michigan College of Education and to unite them in a closer fellowship; to welcome and encourage students who are beginning the study of Christian Science, and to help them in solving their college problems.

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.
RELIGIOUS ORGANIZATIONS

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

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

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

LUTHERAN STUDENT ASSOCIATION
The Lutheran Student Association is an organization of Lutheran students connected with the National Lutheran Council whose purpose is to strengthen and sustain Christian students in their faith through fellowship in the Lutheran Student Association.

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.

PRE-MINISTERIAL CLUB
The Pre-Ministerial Club is organized for the purpose of strengthening the oneness of the members with God and with each other, and to serve others on the campus of Western Michigan College as well as the surrounding community in their spiritual needs.

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

STUDENT CHRISTIAN FORUM

This organization represents a cooperative effort on the part of a number of Kalamazoo evangelical churches to reach college students in a manner designed to fulfill the purposes, such as: to provide fellowship for Christian college students who desire spiritual growth or help with intellectual problems pertaining to Christianity.

Y.W.C.A.

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

STUDENT ACTIVITIES

MUSIC

The Band rehearses twice a week and gives concerts both on and off the college campus. The Band also plays at athletic events. Any student with adequate playing ability on a band instrument is eligible for membership. The Orchestra meets twice a week throughout the year and presents concerts both on the campus and throughout the state. It joins each year with the choral groups to present a Christmas program. Any student with a reasonable degree of proficiency in the playing of some orchestral instrument is eligible for membership.

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 maintain a high standard of choral ensemble singing. Each year they make a number of appearances on the campus and before high schools and other organizations. The Auxiliary Choir is designed for students of less choral experience. Many from this organization find their way into the Men's and Women's Glee Clubs and the College Choir.

DEBATING

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

Freshmen are eligible for intercollegiate debate.
INTERCOLLEGIATE ATHLETICS AND PHYSICAL EDUCATION

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

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

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

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

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

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

STUDENT PUBLICATIONS

The Brown and Gold is the college yearbook published each spring by the students. Guidance is furnished by the committee on student publications of the faculty-student committee on student activities. The editor and business manager are recommended by the committee on student publications and appointed by the faculty-student committee on student activi-
ties. The editor and business manager must conform to eligibility rules for approval.

The *Western Herald* is the weekly newspaper published during the regular academic year by the students. The editor and business manager are recommended by the committee on student publications and appointed by the faculty-student committee on student activities, which committees guide the publication during the year. An interest in journalism and a willingness to work are important prerequisites for the editor; the business manager should have had prior business training. Both must conform to eligibility rules for approval.

The *Student Directory* is published each fall by the Student Council. Included are names, campus addresses, home addresses and telephone numbers of all students and faculty members.

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

**RULES AND REGULATIONS GOVERNING ELIGIBILITY FOR STUDENT PARTICIPATION IN EXTRA-CURRICULAR ACTIVITIES**

Any regularly enrolled undergraduate student is eligible for membership in any organization he wishes to join, except for those organizations that recruit members by invitation.

I. Specific regulations governing positions of leadership

A. A student may hold a maximum of two leadership offices; of these two, only one may be a presidency or a salaried office. A position of leadership is any executive office in a student organization to which a student is elected or appointed according to the established constitution or by-laws of that organization. *For example:* President, Vice President, Secretary, Treasurer, Corresponding Secretary, Standing Committee Chairman, Publications (Regular Editors and Business Managers), House Managers, and any others of comparable position.

B. A student may be appointed or elected to new executive positions of leadership as a result of the annual spring elections on or after April 1 if his current responsibilities terminate with the close of the spring semester.

II. Eligibility

A. To be eligible to hold a leadership position a student must:

1. be an undergraduate carrying 12 or more semester hours of class work for credit (except for seniors in their last semester who have remained with their class and need less than 12 hours to graduate may reduce their load to 10 semester hours. Stu-
STUDENT PARTICIPATION

1. Students who have withdrawn, and subsequently return are considered as remaining with their class.
2. Maintain a "C" average for the preceding semester.
3. Have had a "B" average in his high school work if he is a first semester freshman.
4. Summer Session grades are included in the previous semester's grades in determining eligibility.

B. Eligibility rule, Roman Numeral II, A, applies to temporary leadership positions such as Queens, Kings, Homecoming Chairmen, Chairman of Religious Emphasis Week, Play Casts, Fantasies Cast, Greek Week Chairman, Carnival Chairman, etc.

C. Students on trial or scholastic probation are ineligible for any leadership position.

D. Eligibility shall be checked at the beginning of each semester in the Records Office.

E. Activities for which college credit is given are not included under these regulations.

F. Classification for election to class offices shall be based on the following: Sophomores, 26 semester hours; Juniors, 56 semester hours; Seniors, 88 semester hours.

III. Recommendations

It is recommended that (by September of 1954) organizations plan to have nominations at least one week in advance of elections to check eligibility and thereby prevent embarrassing situations of being declared ineligible after election, provided their constitutions and by-laws permit.

IV. 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.

"In the case of an appeal to the Sub-Committee on Eligibility in Extra-Curricular Affairs, an appeal board consisting of the Dean of Administration, the Faculty Chairman of the Student Activities Committee, and the President of Student Council shall have the final authority in the matter under consideration."

RESPONSIBILITIES OF THE JOINT STUDENT-FACULTY COMMITTEE ON ELIGIBILITY FOR PARTICIPATION IN EXTRA-CURRICULAR ACTIVITIES

I. The co-chairmen of the committee shall publicize fully at the beginning of each semester all rules pertaining to student participation.

II. Student members, student leaders, and sponsors of organizations are held responsible for knowing the rules for participation.

III. The presidents or heads of student organizations shall be responsible for handing to the co-chairman the names of persons with leadership responsibilities as requested at the beginning of each semester.
IV. In cases of infraction of the rules and regulations, the student concerned and/or the organization will be informed by the committee. If the situation is not promptly corrected, the Joint Committee may recommend to the Student Activities Committee the suspension of activities of this organization until such time as this situation is remedied.

V. Requests by students and/or organizations for a change in regulations should be presented in writing directly to a co-chairman of the Joint Student-Faculty Committee for consideration.

VI. The above regulations are only minimum. Any organization may set higher standards if they so desire. These regulations do not apply to membership.
STUDENT AWARDS AND SCHOLARSHIPS

AWARDS AND PRIZES

The following awards and prizes are available:

INSTITUTIONAL

Athletics—Scholarship Award .... A medal to the outstanding athlete who ranks high in scholarship.

The Athletic Board’s annual 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.

Chemistry

This annual award is given at the time of the Honors Convocation to a freshman who has, in the opinion of the Chemistry staff, shown the greatest promise during his first year of college chemistry.

The William McCracken Award in Chemistry is named in honor of the first head of the Chemistry Department at Western and is presented during Honors Convocation to the senior who has shown the greatest aptitude in the field of basic chemistry.

Education................................ ELECTION TO MEMBERSHIP IN KAPPA DELTA PI

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

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.

Mathematics ........................................ The Mathematics Prize

Awarded to the senior student adjudged by the Department of Mathematics to have exhibited the highest proficiency and promise in that field.

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 with 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.
Pulp and Paper Technology
T.A.P.P.I. Award—Award of $100 to the Junior student in the Pulp and Paper Curriculum with the highest scholastic standing.
“Fred C. Boyce” Junior student $200 award.

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

The National Secretaries Association: The Kalamazoo Chapter offers a scholarship of $50 to a student enrolled in the Two-Year Cooperative Secretarial Curriculum the second semester of each year. An additional scholarship of $25 is offered the student the following semester if the student maintains a high record. The awarding of this scholarship is based upon the student's grade record, need and an essay written by the candidate to the National Secretaries Association.

Competitive Science Scholarships. In connection with the annual Science Day at Western, prospective Freshman may compete for two scholarships. One is valued at $150.00 a year, the other at $100.00 a year. The scholarships will be awarded only if the winners actually enroll at Western. These scholarships may be renewed annually for the second, third and fourth years provided the student is enrolled at Western with a major in Science or Mathematics and maintains a satisfactory grade average. Applicants for renewal and interested prospective students are requested to write to Dr. George Mallinson, Western Michigan College.

ORGANIZATIONS

Associated Women Students .... A prize to the outstanding woman student.
Kappa Delta Pi ................. A prize to the outstanding student in academic areas.
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.
Tau Kappa Epsilon ............. Scholarship cup to the outstanding men's organization. Awarded annually by the Committee on Scholarship.
"W" Club ......................... Election to Membership

GRADUATE SCHOLARSHIPS AND FELLOWSHIPS

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

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

STATE BOARD OF EDUCATION SCHOLARSHIPS

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

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

UNDERGRADUATE SCHOLARSHIPS

The Alpha Beta Epsilon Scholarships. Since 1938 the Alpha Beta Epsilon alumnae sorority of Western Michigan College of Education has given scholarships to worthy men and women students. Each of the fourteen chapters of the sorority gives one or more scholarships of varying amounts each year. A student who receives a scholarship must fill the requirements set by the chapter that is sponsoring him. He is judged on scholarship, leadership, character, and need. The one common purpose in awarding this scholarship is to help a worthy student who would be unable to attend college without financial aid.
The Credit Bureau of Kalamazoo Honorary Scholarship. The Credit Bureau of Kalamazoo offers one scholarship of $100 to any young man or woman who has successfully completed three semesters in the Retail Curriculum. He must have an excellent scholastic ability, strong character, and have a real interest in credit sales management. The fund is administered by the Dean of Administration-Registrar, the manager of the Credit Bureau of Kalamazoo, and the Supervising Coordinator of Distributive Education.

The Durametallic Scholarship in Industrial Supervision. The Durametallic Corporation offers $250 per semester to a student who has completed two years of a technical program at WMC and elects to go into Industrial Supervision which leads to a degree. Applications should be made two weeks before the end of the semester to Dr. J. W. Giachino, Head of the Vocational-Industrial, and Technical Education Department.

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 Central High School or State High School art student. Administration of this fund is in charge of the Art Department.

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

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

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

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

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

Industrial Arts Scholarships. Two Atlas Press Company Scholarships in Industrial Arts. Each is worth a total of $500 for the four years of college. Open to all high school students in Michigan. Make application to the Dean of Administration before March 1, 1954.

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

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

The Librarianship Scholarships. Ten special scholarships are being offered to qualified graduates in the June classes of the Junior Colleges of Michigan. The scholarships will cover the cost of tuition and a portion of the students' fees. They will be available only to candidates who qualify for a major in librarianship as evidenced by academic record, health, and personality. Candidates must have maintained a "B" average or better during their first two years of college work. Written application must be made on official blanks to the Department of Librarianship by April 1. A personal interview will be required. Appointments for interviews should be arranged with the Director of the Department before May 20. These scholarships are valid for one college year of two semesters, and are renewable for a second year, provided the students' records prove satisfactory.
The Music Scholarships. From special funds available to the college, Western Michigan College of Education offers the following scholarships, which are available each year: four in voice, four in piano, four in stringed instruments, two in brass instruments, and two in woodwind instruments. These scholarships, which cover the cost of the student's comprehensive tuition fee, are available only to candidates for the Bachelor of Music degree. The need for the assistance of such a scholarship must be established. These applied music scholarships are awarded on a competitive basis, the applicants performing before the Committee on Music Scholarships.

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

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

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 for three additional successive years, provided the student's record proves satisfactory.

Occupational Therapy Alumni Association Scholarships. An annual award of $25 and a letter of commendation are given at Honors Convocation by the Occupational Therapy Alumni Association to an outstanding Senior in this department who has shown perseverance in completing her studies and who gives promise of being a superior Occupational Therapist.

The Occupational Therapy Alumni Association scholarship is awarded annually to a first or second semester Freshman student who is enrolled or is enrolling as a prospective O.T. student (30 semester hours of college credit must be earned before a student is admitted to the O. T. Department).

The scholarship is a grant of $100, to be applied by the student as needed. All such grants must be refunded to the alumni association if the student later changes to some other major field of study.

Written application for this scholarship may be made on special blanks secured from Miss Marion R. Spear, O.T.R.—Director of O.T. Department, Western Michigan College.

The Orthopedic Frame Company's Industrial Arts Scholarship. Effective in the fall of 1953 and annually thereafter for a minimum period of three years, unless not renewed, the Orthopedic Frame Company of Kalamazoo will grant to one outstanding student a scholarship valued at $500, spread over a three-year period, and payable fractionally as follows: $200 for the first year and $100 for each succeeding year as long as the student con-
tinues a successful program in the Industrial Arts Department and a successful part-time employment program at the Orthopedic Frame Company.

The Scholarship is open to all graduating seniors in all schools in Michigan who have had at least one course in Industrial Arts. Application must be made to the Dean of Administration on a standard scholarship application form. The top applicant will be selected by the faculty of the Industrial Arts Department of Western Michigan College. This student will be invited to come to the campus on or before May 1, for an interview with an official of the Orthopedic Frame Company. If his qualifications are satisfactory to the faculty and the Orthopedic Frame Company, he will be awarded the scholarship.

Pulp and Paper Technology Scholarships. Students in the Pulp and Paper Technology Curriculum interested in obtaining scholarships should contact the head of that department, Dr. Alfred H. Nadelman, Western Michigan College.

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

The Rural Elementary Scholarships. Scholarships covering tuition charges for the two years are available for students who enroll in the Rural Elementary Curriculum. Applications for these State Board of Education scholarships should be addressed to the Dean of Administration, W.M.C.

The Student Council Scholarships. The Student Council has established and will maintain a student Council Scholarship Fund. The Scholarships hereby established are administered by the Committee on Scholarships, Loans, and Grants-in-aid of the College with the following provisions:

The Scholarships will be available to all students of Western Michigan College who are enrolled in a full time course of study (12 semester hours or more). But first semester Freshmen are not eligible.

The Scholarships are renewable provided the recipients attain and maintain at least a 2.0 scholastic average the semesters following the award.

The Scholarship recipients must have attained a minimum of 1.8 scholastic average the semester immediately prior to the application.

Eligibility for the Scholarships centers about the student’s need; his character; his participation in the school community; and his potential ability as determined through interviews, references, and other investigations.

The amount to be awarded in a given Scholarship is determined according to each prospective recipient’s need, but not to exceed $200. The amount is decided upon by the Committee on Scholarships, Loans and Grants-in-Aid.

The Scholarship money may be used for any school expense deemed worthy by the Committee (i.e., tuition, enrollment fees, room, board,
books, etc.). Accounting for these expenditures must be filed with the Committee by the recipient as requested.

A prospective recipient may apply for the Scholarships at any time during a semester for a maximum of seven semesters. No one student can receive more than one Scholarship award from this Fund in any semester. Separate application must be made for each Scholarship.

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

The 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 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 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.

Grand Rapids Panhellenic Society Loan Fund. Grand Rapids Penhellenic Society has established a permanent Student Loan Fund for emergency or long term loans available to deserving women students to continue their education. It is preferred that this fund be loaned to sorority members but if they have no use for it, it can be loaned to any needy woman student.

The Helen Statler Fund was established in 1944 by Mrs. Frederick C. Fischer 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 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
until his death was 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.

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

The Sigma Tau Gamma Memorial Loan Fund. Chi chapter of Sigma Tau Gamma fraternity established this memorial loan fund to perpetuate the memory of Ode Custer, Elmer Stillwell, Harry Karnemont, Robert Fletcher, and Robert Harvey who made the supreme sacrifice in defense of their country in World War II. Loans from this fund may be obtained by any male upper classman with a point-hour ratio of at least 1.5. The loans are of the non-interest bearing variety, and the terms of the loans are left to the discretion of the College Student Loan Fund Committee.

Sophia Reed—Mary Moore Home Economics Loan Fund. The Home Economics Club of Western Michigan College set up the loan fund in 1953 in honor of Miss Sophia Reed and Miss Mary Moore who served on the home economics faculty for many years.

Senior majors and minors in home economics, with preference to majors in the case of equal need, may apply for this loan. The maximum amount per applicant will be $50.00. This is a non-interest loan to be paid back within a year of the recipient’s graduation date. To obtain this loan application shall be made to the head, or the acting head of the home economics department who, with the aid of the faculty will make the recommendation. The student must present a letter from her parents indicating financial need. She must have maintained a 1.0 scholastic average. She shall sign a promissory note when the loan is granted. The money will be deposited in the comptroller’s office to be withdrawn with the consent of the head of the home economics department or the authorized substitute in her absence.

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 Lucindia Hinsdale Stone Chapter of the Daughters of the American Revolution.

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 5% is charged; and notes not exceeding one year are accepted. Applications for loans should be made to the Student Loan Fund Committee, of which the Dean of Administration-Registrar is Chairman.

The William McCracken Loan Fund in Chemistry was established in 1945 through a gift of $1000 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 granted to worthy and needy students majoring in chemistry. Preference will be given students who have proven their ability through courses taken in chemistry at Western Michigan College. The application for a loan should be made to the head of the Department of Chemistry.
UNDERGRADUATE DIVISION
Rules and Regulations
Curricula
Description of Courses

FOR GRADUATE DIVISION DATA
See Pages 374 to 389
UNDERGRADUATE DIVISION
Rules and Regulations
ADMISSION REQUIREMENTS

Students may be admitted at the opening of any semester or summer session.

CRITERIA: Health, character, scholarship, special aptitudes and general intelligence are considered in determining an applicant's qualifications for admission.

GENERAL QUALIFICATIONS

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

CREDENTIALS SHOULD BE SENT IN ADVANCE

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

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

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

Matriculation at a college is a privilege and carries with it certain responsibilities. The college reserves to itself and the student concedes to it, the right to cancel matriculation and to require withdrawal whenever it becomes evident that the student is not conforming to the standards of scholarship and conduct established by the college.

Information to Students and Principals: The student will no doubt agree that the following procedures of admission are liberal and fair. At the outset he may think that graduation from high school will assure college admission. This may or may not be true.

To derive the greatest benefit from college a high school student should carry a liberal program of studies and achieve a good quality of work. If he is planning a program of study in college which requires specific high school subjects as prerequisites, he should include those subjects in
his preparation for college. He may be admitted to college without them but he may not be admitted fully to his chosen curriculum. For example, if he is planning an engineering course he should take the prescribed high school mathematics to prepare him for that curriculum in college. In the event he does not take these prerequisites in high school, it will be necessary for him to make them up in high school or take them in college before he can proceed on his chosen college curriculum. This is costly in time and money because it may extend his stay in college by a semester or longer.

In order to plan well he should study the curriculum of his choice as listed in the college catalogue to determine the specific prerequisites he should take to be admitted to that curriculum. In addition, he should consult his principal or counselor about his program of study in relation to his curriculum in college and choice of vocation. By achieving a good quality of work in high school he will be prepared to do a better quality of work in college. Good planning in secondary school will smooth the road to his ultimate goal.

Students may be admitted in any one of the following ways:

I. ADMISSION BY CERTIFICATE: A graduate of a high school, academy or equivalent may be admitted upon presentation of an acceptable written official record.

II. ADMISSION BY EXAMINATION: A person who does not qualify for admission by certificate may be admitted by passing satisfactorily examinations prescribed by the college.

III. ADMISSION UNDER THE SECONDARY SCHOOL-COLLEGE AGREEMENT: A graduate qualified under this agreement will be admitted provided he is recommended by the school as having shown evidence of being reasonably certain to handle college studies satisfactorily.

IV. ADMISSION BY ADVANCED STANDING: A student transferring from an accredited college, university, or junior college may be admitted upon presentation of an acceptable written official transcript of credits showing honorable dismissal. A graduate of a Michigan county normal, having completed the four-year high school course may also be admitted upon presentation of an acceptable written official transcript of credits showing honorable dismissal.

V. ADMISSION AS A SPECIAL STUDENT: A person who holds a Bachelor's Degree or a higher degree for which it is prerequisite, may be admitted to the college as a special student upon presentation of credentials showing that he holds such degree or degrees. A person twenty-one years of age or older who wishes to study at this college may be admitted by the Supervisor of Admissions with the approval of the President, provided he is unable to furnish other credentials upon which his admission might be based. Before any special student can receive a degree or certificate from this college, he must have met the requirements for admission prescribed under the other admission procedures numbered I-IV above.
VI. ADMISSION AS A GUEST: One who is regularly matriculated at another college may be admitted as a guest student. The student assumes full responsibility for determining whether or not the courses he takes at this college will apply on his program of study. A guest matriculant is urged to have the courses to be taken approved in advance by the Registrar of the college to which the credits are to be transferred. The principal or counselor of the student will be asked to recommend him only with respect to his moral character.

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. Each case is handled on an individual basis.

The maximum amount of credit which may be accepted from a junior college is 60 semester hours in addition to physical education.

Credits earned at an accredited college are treated as accredited only during the period or periods when the college is or was officially accredited by the North Central Association of Colleges and Secondary Schools, by an equivalent organization or by the Michigan College Association. (This action refers only to colleges not to county normals, admission from which is treated under Roman IV on Admission Requirements.)

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, (2) statements of honorable dismissal from the institutions attended, (3) and latest address and name. It is also necessary for the student to submit a personal application blank and to request his high-school principal to submit an official statement of his preparatory record. Blanks for personal application and for the high-school record may be secured from the admission officer named above. Consideration of admission on transfer is on the basis of the entire record of the student, both high-school and collegiate. No part of the record may be disregarded. There are no exceptions to this regulation. Students applying for admission for the first semester are urged to submit their credentials as early as possible.

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

Students with unsatisfactory scholarship or conduct records may not be admitted.
STUDENTS TEMPORARILY TRANSFERRING TO W.M.C.

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

TRANSFER TO OTHER COLLEGES AND UNIVERSITIES

Graduates who have received the former five-year certificate or the new State Limited Certificate usually are granted junior standing in colleges and universities. They are able to fulfill the requirements for a degree by an additional two years of work. Senior standing usually is granted to graduates who have received a life certificate. A student who desires to earn a provisional certificate in the college and then complete the work for a degree in some other college or university should plan his work with the requirements of the particular institution in mind.

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

TRANSCRIPTS

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

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

IDENTIFICATION PHOTOGRAPH

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

COLLEGE-ABILITY TESTS

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 of service in advising students regarding their scholastic work and therefore are to be taken before the student is counseled.
These 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 examinations do not deal with specific subject-matter areas and no intensive preparation should be made by the examinee.

Credits will be withheld from students for whom there is no record of such college-ability tests acceptable to this institution.

REGISTRATION, CLASSIFICATION, ENROLLMENT, 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 or session. The completion of the foregoing constitutes registration in this college.

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

GENERAL INSTRUCTIONS FOR ENROLLMENT

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

CLASS LOAD

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

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

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

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

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

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

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

No student may enroll at any time in more than two courses offered by the Extension Division.
Students who attend a summer session will not be granted credit for more than 15 semester hours in one calendar year in courses offered by the Extension Division.

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

CLASSIFICATION OF STUDENTS

Students at Western Michigan College of Education are classified officially as follows:
- Freshmen—Students credited with 0-30 semester hours inclusive.
- Sophomores—Students credited with 30-60 semester hours inclusive.
- Juniors—Students credited with 60-90 semester hours inclusive.
- Seniors—Students credited with more than 90 semester hours.

The above classification relates to eligibility for participation:
- a. In class activities
- b. As officers
- c. In social affairs

WITHDRAWAL FROM COURSES

1. Necessary changes in enrollment must have been made by the end of the first complete week of a semester.
2. Permission to drop courses will be given to upperclassmen for adequate reasons through the third complete week of a semester; to freshmen, through the fourth week.

Deviations from this regulation may be permitted by the Dean of Administration in unusual circumstances.
3. A mark of "W" will be recorded for a subject dropped after the above time limits, if the student is then doing passing work; a mark of "E", if the student is then failing; and a mark of "E", if the course is dropped without the written permission of the Dean of Administration.

ABSENCES AND EXCUSES

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

1. Students are responsible directly to their instructors for class and laboratory attendance as well as for petitions for excuses for absences.
2. Instructors must file weekly with the Deans detailed records of absences for a given week.
3. The Deans will maintain a cumulative record of absences, but will not issue excuses. These absences will be recorded also on the permanent record and in the Placement Bureau.

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

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

Recipients of honors receive their degrees:

- **Cum laude** When having a point-hour ratio of 2.5 to 2.69 inclusive
- **Magna cum laude** When having a point-hour ratio of 2.7 to 2.89 inclusive
- **Summa cum laude** When having a point-hour ratio of 2.9 to 3.0 inclusive

In figuring point-hour ratios the following method will be used:

- For all students attending from the beginning of the freshman or the sophomore year, semesters 3 to 7 inclusive will be counted.
- For all students a minimum of 120 honor points earned here will be required.
- Credits earned in correspondence and extension classes and transferred credits will not be counted toward honors.

REGULATIONS RELATING TO EXAMINATIONS

1. A final examination is given in every course in accordance with the official schedule issued each semester. No examination may be held except as announced in this schedule, and no date of examination may be changed without special permission of the Examination Schedule Committee.
2. Students are required to take the examination in all courses except such as they may have dropped with consent of the Dean of Administration.
3. Students should not plan to be examined at any other time than that set for the examination of the class in which the work has been done. In case of unavoidable conflicts, a special examination may be arranged by the instructor with the consent of the Dean of Administration.
4. A student desiring to take a second examination in a given subject must make formal application to the Dean of Administration at least ten days before the time for the second examination.

MARKING SYSTEM

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

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

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

*For Directed Teaching only.
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. Freshman grades are mailed directly to parents by the registrar.

ATTENDANCE AT COMMENCEMENT

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

SCHOLARSHIP INDEX

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

STANDARD FOR GRADUATION

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

HIGH SCHOLARSHIP LIST

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

LOW SCHOLARSHIP LIST

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

2. Any student beyond freshman standing whose point-hour ratio for any semester or summer session falls below 0.8, shall be automatically placed on probation. If he fails to maintain a 1.0 ratio during the first semester of probation but achieves a ratio of 0.8 or higher, he may, at the discretion of the Dean of Administration, be granted one more semester of probation.
3. No student may be restored to good standing until the point-hour ratio for any probationary semester has been raised to a minimum of 1.0.
4. No student may be granted a third consecutive semester of probation.
5. Any student who receives E in 75 percent or more of the work attempted during a semester shall be automatically dropped from college.
6. In the case of a student who is dropped, at least one full semester shall elapse before the student is eligible for consideration for re-admission.
7. In administering the above regulations, the Dean of Administration has authority to permit deviations in unusual circumstances. He will, each semester, report to the President the progress of students granted such special dispensation.

CREDIT FOR BAND, GLEE CLUB, AND ORCHESTRA WORK

1. A maximum of two semester hours of academic credit annually is given for one year's regular participation in each of the following activities: Band, Glee Club, Orchestra, College Choir, and Auxiliary Choir.
2. Eight semester hours of academic credit is the maximum allowed for participation in any one of the five activities indicated.
3. A grand total of not to exceed twelve semester hours of academic credit is allowed for participation in the five activities noted.
4. Participation in Band may be substituted for physical education credit up to a maximum of three semester hours. A minimum of one semester hour of credit must be earned by actual participation in general physical education classes by each student who is participating in Band. Substitution of Band participation for physical education credit during second semester is possible only if the student has participated in the marching Band during the first semester.
5. Official enrollment cards must bear notations of the work in music the student wishes to carry. Semester-hour values must be indicated.

SIGNIFICANCE OF COURSE NUMBERS

I. Course numbering and availability

1. Courses numbered
   a. 100-199, inclusive, are primarily for freshmen;
   b. 200-299, inclusive, are primarily for sophomores;
   c. 300-399, inclusive, are primarily for juniors and seniors;
   d. 400-499, inclusive, are for qualified juniors, seniors and graduate students;
   e. 500-599, inclusive, are for graduate students.
   f. 600-699, inclusive, are for graduate students.

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

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

2. All fundamental, consecutive, coherent courses are numbered as follows:
   a. The number 100 is reserved for fundamental courses having no high-school prerequisite.
   b. The number 101 is reserved for fundamental courses having as prerequisite one year (or fraction thereof) of high-school work.
   c. The number 102 is reserved for fundamental courses having as prerequisite two years of high-school work.
   d. The number 103 is reserved for fundamental courses having as prerequisite three years of high-school work.
   e. The number 104 is reserved for fundamental courses having as prerequisite four years of high-school work.

3. All other courses primarily intended for freshmen are numbered serially beginning with 105.

4. Prerequisites for all courses numbered 200-499, inclusive, may be found in the Description of Courses as printed in the current college catalog.

5. All consecutive courses are numbered sequentially.

6. Numbers 300-302 inclusive are reserved for methods courses which are offered in departments other than the Department of Education, the so-called "professional courses."

7. Courses offered as subdivisions of a given department are designated by numbers grouped by decades.

8. To the number of a course offered by extension for residence credit in the field there is added R.Cl.

9. To the number of a course available by class extension there is added Cl.

10. To the number of a course available by correspondence there is added Co.

CREDIT IN SEMESTER HOURS

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

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

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

Classes which meet three hours a week for one regular semester will be given 3 semester hours of credit.
Classes which meet four hours a week for one regular semester will be given 4 semester hours of credit.

A minimum of 62 semester hours of credit is required for a State Limited Certificate in the two-year Rural Elementary Curriculum, and 124 semester hours of credit for the A.B. or the B.S. degree.

**OFFICIAL SCHEDULE OF FINAL EXAMINATIONS**

**Semester I, 1954-1955**

**I. UNDERGRADUATE CLASSES**

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Examination Period</th>
<th>For Classes with Initial Weekly Recitations or Lecture Periods as Shown Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday</td>
<td>January 20</td>
<td>7:00- 9:30 p.m.</td>
<td>Uniform Rhetoric Examination for all classes</td>
</tr>
<tr>
<td>Friday</td>
<td>January 21</td>
<td>8:00-10:00</td>
<td>Monday, 9:00 and 9:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10:30-12:30</td>
<td>Tuesday, 9:00 and 9:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:00- 4:00</td>
<td>Monday, 1:00 and 1:30</td>
</tr>
<tr>
<td>Monday</td>
<td>January 24</td>
<td>8:00-10:00</td>
<td>Monday, 10:00 and 10:30</td>
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<td>2:00- 4:00</td>
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<tr>
<td>Tuesday</td>
<td>January 25</td>
<td>8:00-10:00</td>
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<td>10:30-12:30</td>
<td>Tuesday, 2:00 and 2:30</td>
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<td></td>
<td></td>
<td>2:00- 4:00</td>
<td>Monday, 11:00 and 11:30</td>
</tr>
<tr>
<td>Wed'day</td>
<td>January 26</td>
<td>8:00-10:00</td>
<td>Tuesday, 1:00 and 1:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10:30-12:30</td>
<td>Monday, 3:00 and 3:30</td>
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<td></td>
<td></td>
<td>2:00- 4:00</td>
<td>Tuesday, 10:00 and 10:30</td>
</tr>
<tr>
<td>Thursday</td>
<td>January 27</td>
<td>8:00-10:00</td>
<td>Tuesday, 11:00 and 11:30</td>
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<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
<td>2:00- 4:00</td>
<td>Tuesday (a) 3:00 and 3:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(b) conflicts and all others</td>
</tr>
<tr>
<td>Friday</td>
<td>January 28</td>
<td>8:00-10:00</td>
<td>Tuesday, 12:00 and 12:30</td>
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<td>10:30-12:30</td>
<td>Monday, 4:00 and 4:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:00- 4:00</td>
<td>Tuesday, 4:00 and 4:30</td>
</tr>
</tbody>
</table>

**II. GRADUATE CLASSES**

1. Classes open to graduate students and upper classmen ("400 courses") will follow the above schedule.

2. Classes for graduate students only ("500 courses") will be scheduled for final examinations during the last regular meeting of the classes.
III. Students in On-Campus Extension Classes will have their final examinations during the last regular meeting of the classes.

N.B. Deviations from this schedule may be made by instructors only upon the approval of the Committee on Final Examinations; by students, only with the approval of the Dean of Administration.

OFFICIAL SCHEDULE OF FINAL EXAMINATIONS
Semester II, 1954-1955

I. UNDERGRADUATE CLASSES

<table>
<thead>
<tr>
<th>Day</th>
<th>Date</th>
<th>Examination Period</th>
<th>For Classes with Initial Weekly Recitations or Lecture Periods as Shown Below</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thursday</td>
<td>June 2</td>
<td>7:00-9:30 p.m.</td>
<td>Uniform Rhetoric Examination for all classes</td>
</tr>
<tr>
<td>Friday</td>
<td>June 3</td>
<td>8:00-10:00</td>
<td>Monday, 9:00 and 9:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10:30-12:30</td>
<td>Tuesday, 9:00 and 9:30</td>
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<tr>
<td></td>
<td></td>
<td>2:00-4:00</td>
<td>Monday, 1:00 and 1:30</td>
</tr>
<tr>
<td>Monday</td>
<td>June 6</td>
<td>8:00-10:00</td>
<td>Monday, 10:00 and 10:30</td>
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<td>10:30-12:30</td>
<td>Tuesday, 8:00 and 8:30</td>
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<td>2:00-4:00</td>
<td>Monday, 2:00 and 2:30</td>
</tr>
<tr>
<td>Tuesday</td>
<td>June 7</td>
<td>8:00-10:00</td>
<td>Monday, 8:00 and 8:30</td>
</tr>
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<td></td>
<td></td>
<td>10:30-12:30</td>
<td>Tuesday, 2:00 and 2:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:00-4:00</td>
<td>Monday, 11:00 and 11:30</td>
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<tr>
<td>Wed' day</td>
<td>June 8</td>
<td>8:00-10:00</td>
<td>Tuesday, 1:00 and 1:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10:30-12:30</td>
<td>Monday, 3:00 and 3:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:00-4:00</td>
<td>Tuesday, 10:00 and 10:30</td>
</tr>
<tr>
<td>Thursday</td>
<td>June 9</td>
<td>8:00-10:00</td>
<td>Tuesday, 11:00 and 11:30</td>
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<td></td>
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<tr>
<td></td>
<td></td>
<td>2:00-4:00</td>
<td>Tuesday (a) 3:00 and 3:30 (b) conflicts and all others</td>
</tr>
<tr>
<td>Friday</td>
<td>June 10</td>
<td>8:00-10:00</td>
<td>Tuesday, 12:00 and 12:30</td>
</tr>
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<td></td>
<td></td>
<td>10:30-12:30</td>
<td>Monday, 4:00 and 4:30</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2:00-4:00</td>
<td>Tuesday, 4:00 and 4:30</td>
</tr>
</tbody>
</table>

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N.B. Deviations from this schedule may be made by instructors only upon the approval of the Committee on Final Examinations; by students, only with the approval of the Dean of Administration.

EXPENSES

FEES FOR UNDERGRADUATES

Schedule of Fees effective Semester I, 1954-55.

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Tuition Fees</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Resident</td>
<td>Non-Resident</td>
</tr>
<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 hrs.</td>
<td>37.50</td>
<td>75.00</td>
</tr>
</tbody>
</table>

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

Residence Requirements

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

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

The residence of wives shall follow that of their husbands.

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

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

*These local fees are collected each semester for the support of student activities, health service, student union, library purposes, departmental laboratories, identification photograph, cap and gown, diplomas, etc.
"The decision rendered by the designated officer will be based upon the interpretation of the rules stated above, the regulations of the Board of Control, and the evidence submitted by the student certifying his intention as regards residence in the State of Michigan."

**Late Enrollment Fee**

By action of the State Board of Education all students who enroll after the established registration days of a semester will be charged an additional fee of $5.00. The penalty for late pre-enrollment is $2.00.

**Auditor's Fees**

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

**Refunds—Regular School Year**

State Tuition and College Fee—A student who withdraws from school will be granted a refund according to the following schedule:

1. Seven calendar days or less after the last official registration day—90% of total.
2. More than 7 calendar days and less than 22 days after the last official registration day—60% of total.
3. More than 21 calendar days and less than 36 days after the last official registration day—40% of total.
4. More than 35 calendar days and less than 50 days after the last official registration day—20% of total.
5. No refund will be made to a student eligible for benefits under Act 245 of the Public Acts of 1935, as amended, unless request is made not more than one week after registration.

Note:  A. No refund will be granted if the student withdraws after the 49th calendar day after the last official registration day.
B. No refund will be granted unless applied for by the 56th calendar day after the last official registration day of the semester in which the student withdraws.

**Estimate of Expense**

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

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

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

1. A thorough grounding in such fields of study as may lead to the intellectual growth of the student.

2. A thorough grounding in the science and art of teaching attained by sufficient actual teaching under direction.

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

1. To provide the student with essential factual information; to give him an introduction to methods of thought and work and to provide such opportunities for study and growth as may lead to a well-rounded general education.

2. To prepare the student for undertaking the more advanced and specialized work embraced in the curricula of the third and fourth years of the Colleges of Education or for more advanced work elsewhere.

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

**DEGREES DEFINED**

**BACHELOR OF ARTS (WITH OR WITHOUT TEACHING CERTIFICATE)**

The student who regularly completes a curriculum conforming to the degree requirements and embracing at least 70 semester hours from Groups I, II, and III, including at least 8 semester hours in one foreign language,
is eligible for the degree of Bachelor of Arts. If two or more units of one foreign language are presented for entrance, the requirements for foreign language may be waived.

**BACHELOR OF BUSINESS ADMINISTRATION**

This degree will be conferred upon completion of the Business Administration curriculum as outlined in this catalog.

**BACHELOR OF SCIENCE (WITH OR WITHOUT TEACHING CERTIFICATE)**

1. The student who regularly completes a curriculum conforming to the degree requirements and embracing 38 semester hours or more in the first three groups (the minimum group requirements in Groups I, II, III) is eligible for the degree of Bachelor of Science.

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

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

**BACHELOR OF MUSIC (WITHOUT TEACHING CERTIFICATE)**

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

**GENERAL DEGREE (WITHOUT TEACHING CERTIFICATE)**

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

**SECOND BACHELOR’S DEGREE**

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

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

Group I (Including College Writing) at least 14 semester hours
Group II at least 12 semester hours
Group III at least 12 semester hours
Group IV at least 20 semester hours
Physical Education 4 semester hours

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

1. Not more than 40 semester hours may be taken in any one subject, unless required by the curriculum.
2. At least two-thirds of the work beyond the second year must be in courses not open to first-year students.
3. The student must complete a major subject of at least 24 semester hours and at least two minor subjects of not less than 15 semester hours. (A candidate for the elementary provisional certificate may present, instead, 4 minors, 15 semester hours each.) Credits in the required English Composition and credits in Education which are required in general on all curricula do not count toward majors or minors.
4. Minimum residence requirements: (a) every candidate for the bachelor's degree or full certification must have earned at least thirty semester hours of credit on the campus; and (b) must offer residence credit as the final work required during the last semester or summer session preceding graduation. Final residence may be satisfied by attending a six weeks' summer session at any one of the four Michigan Colleges of Education. (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.

Summary of General Education Requirements

Western Michigan College of Education is interested not only in the training of students for specific skills, but in the development of their general education. To that end, the following minimum requirements are operative beginning with the Fall of 1954.

(These requirements are for candidates for the B.A., B.B.A., or B.S. degree)
Minimum General Education Requirements

GROUP I—Language and Literature—12 Semester Hours

Student to choose one of the following:
- Communication—8 semester hours, plus
  Literature or Foreign Language,
  total 12 semester hours.
  or
- College Writing—6 semester hours, plus
  Literature or Foreign Language,
  total 12 semester hours.
  Either College Writing or
  Communications should be taken in the Freshman year.

GROUP II—Science—8 Semester Hours

Student to choose 8 semester hours from the following courses:
- Physical Science 100A—4 semester hours
- Physical Science 100B—4 semester hours
- Biological Science 102—4 semester hours
- Human Geography 105—4 semester hours

If the student demonstrates proficiency in any of the above subjects, he
may elect other courses from the division upon recommendation of his
counselor.

GROUP III—Social Science—8 Semester Hours

Student to choose one of the following:
- Foundations of Western Civilization—8 semester hours.
  or
- Man and Society—8 semester hours.
  Either course should be taken during the Freshman or Sophomore years;
  Western Civilization preferably taken the Freshman year.

GROUP VII—Physical Education—4 Semester Hours

Should be taken in the Freshman and Sophomore years.

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.
1. General Degree (without Teaching Certificate). The academic training shall include a major and two minors.

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

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

REGULATIONS AND SUGGESTIONS

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

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

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

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

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

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

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

8. Students who wish to major in any of the "special" fields (art, business education, home economics, industrial arts education, librarianship, music, occupational therapy, physical education, and special education) are advised to follow the same procedure as indicated in item 1.
Attention is called to the regulation of the State Board of Education as to the “special” fields which lead to certification in both elementary and secondary grades, when the candidate qualifies in both fields. In respect to this, the Western Michigan College of Education at present prepares students in the fields of art, music, physical education for women, librarianship, speech correction, occupational therapy and teaching of mentally handicapped.

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 DEGREES

1. Bachelor of Arts
2. Bachelor of Business Administration
3. Bachelor of Music
4. Bachelor of Science

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

1. Credits satisfying a prescribed curriculum for a total of 124 semester hours, including required physical education.
2. Thirty semester hours of satisfactory work in residence on campus at this institution.
3. The final six hours required for graduation may be taken in residence at any of the four Michigan Colleges of Education.

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.

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

II. PROVISIONAL TEACHING CERTIFICATES

The following types of teaching certificates are granted:

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

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

2. State Secondary Provisional Certificate
   a. This certificate qualifies the holder to teach for a period of five years from date of issue in the secondary grades (seventh to twelfth) in any public school in Michigan, in subjects or subject fields indicated on the certificate.
   b. The candidate must meet the requirements for a degree as defined above.
   c. The holder of the State Secondary Provisional Certificate may be issued the State Secondary Permanent Certificate provided the candidate shall have met the following conditions:
1) Application must be made to the college within one year following the expiration of the State Secondary Provisional Certificate.

2) The candidate must submit satisfactory evidence that he has taught successfully during the life of the certificate for not less than three years in secondary schools.

3) The candidate must have earned in addition 10 semester hours of acceptable college credit.

d. For procedure for permanent certification see below.

3. State Limited Certificate
   a. This certificate qualifies the holder to teach in the state of Michigan for a period of three years from date of issue in any school district except a school district which maintains an approved high school.
   b. The candidate shall present credits satisfying a prescribed curriculum aggregating 62 semester hours.
   c. The candidate shall have satisfactorily completed in residence on campus at this institution 15 semester hours.
   d. The candidate shall have been in residence at this institution the semester or summer session immediately preceding graduation.

III. PROCEDURE FOR PERMANENT CERTIFICATION

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

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

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

1. A candidate presenting credits as a graduate of a Michigan County Normal School and who in addition thereto presents entrance credits satisfying the requirements of this institution shall be granted:
   a. toward the Provisional Certificate, 25 semester hours;
   b. toward the State Limited Certificate, 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. Each student enrolling for credit in correspondence courses after December 31, 1951, shall be limited to 15 hours on a degree program or 8 hours on a State Limited Certificate program. Students having completed more than 15 hours but not to exceed 30 hours on a degree program, or 8 hours and not to exceed 15 hours on a State Limited Certificate program are entitled to such credit if used prior to June 30, 1957.

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

4. No teacher's certificate will be granted to any person who is not a citizen of the United States or who has not declared his intention of becoming a citizen.

5. A person who holds an expired provisional certificate on either the elementary or the secondary level may renew such certificate and restore it to good standing by completing ten semester hours of acceptable college work. Application for reinstatement must be made through the institution upon whose recommendation the certificate was issued. For an application for reinstatement, please write to John C. Hoekje, Dean of Administration.

6. The State Board of Education has approved a plan whereby credit may be earned in Directed Teaching by a course offered in the field, as a part of the requirement for the provisional and limited certificates. The student should consult with the Director of Teacher Education before enrolling in this course.

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 cancelled.

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

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

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

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

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

1. The holder of a County Limited Certificate may be issued (two times) a County Limited Renewal Certificate, each valid for two years provided the candidate shall have met the following conditions:

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

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

1. 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.

2. 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.

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

4. 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.

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

6. All students must take the equivalent of six hour lectures in political science. This is a legal requirement.

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.
# LIST OF THE CURRICULA

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<td>Journalism</td>
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<td>Law</td>
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<td>Librarianship</td>
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<td>Medicine</td>
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<td>Music</td>
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<th>IV. Vocational and Practical Arts Education Curricula</th>
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<td>Aircraft Maintenance Engineering</td>
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<td>Airline Hostess</td>
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<tr>
<td>Air Transportation</td>
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<td>Automotive Transportation</td>
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<td>Business Administration</td>
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<td>Dietetics</td>
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<td>Drafting and Design Technology</td>
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<td>Electrical and Electronics Technology</td>
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<td>Homemaking</td>
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<td>Industrial Supervision</td>
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REQUIREMENTS OF THE VARIOUS CURRICULA

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

GROUP REQUIREMENTS

Group I. Language and Literature to total 14 semester hours.
Student to choose one of the following:

Communications—8 semester hours, plus Literature, Foreign Language or Speech—6 semester hours; or Rhetoric—6 semester hours, plus Literature, Foreign Language, or Speech—8 semester hours.

Either Rhetoric or Communications should be taken in the Freshman year.

Group II. Science to total 12 semester hours.
Student to choose 8 semester hours from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Science 100A</td>
<td>4</td>
</tr>
<tr>
<td>Physical Science 100B</td>
<td>4</td>
</tr>
<tr>
<td>Biological Science 102</td>
<td>4</td>
</tr>
<tr>
<td>Human Geography 105</td>
<td>4</td>
</tr>
</tbody>
</table>

Electives—4 semester hours—to be chosen in cooperation with the counselor from courses in any department within the Division of Science and Mathematics, including the above courses. The student must present work in at least two departments in the division.

If the student demonstrates proficiency in any of the above subjects, he may elect other courses from the division upon recommendation of his counselor.

Group III. Social Science to total 12 semester hours.
Student to choose one of the following

Foundations of Western Civilization—8 semester hours and Political Science—2 semester hours; or Man and Society—8 semester hours.

Either course should be taken during the Freshman or Sophomore years; Western Civilization preferable taken during the Freshman year.
Group VII. Physical Education—4 semester hours
(Remaining semester hours to 124, including major and minors, and electives.)

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 I. Language and Literature</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>College Writing 106A, B (6) and Elective (2)</td>
<td>6</td>
</tr>
<tr>
<td>Literature, Speech, or Foreign Language</td>
<td></td>
</tr>
</tbody>
</table>

| Group II. Science                                                    |                |
| Biological Science 102                                               | 4              |
| Human Geography 105                                                  | 4              |
| Physical Science 100A                                                | 4              |
| If the student demonstrates proficiency in any of the above subjects, he may elect other courses from the division upon recommendation of his counselor. |

| Group III. Social Science                                            |                |
| Foundations of Western Civilization 100A, B*                         | 8              |
| Introduction to Contemporary Society 101A, B                        | 4              |
| Elective                                                             |                |

| 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 370A, B, C .......................... 15
Groups V and VI. Fine Arts (Art, Music) and Practical Arts** 12

Group VII. Physical Education and Health ..................... 4
Elective .................................................................. 46

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.

*Students electing the Foundations course (100A, B) must take an additional two semester hours in political science.
**Includes at least one course in Art, one course in Music, and one course in Practical Arts.

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

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

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

---

SECONDARY CURRICULUM

A.B. or B.S. Degree
State Secondary Provisional Certificate
(For preparation of teachers of Grades 7, 8, 9, 10, 11, 12)

Group Requirements

<table>
<thead>
<tr>
<th>Group I. Language and Literature</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication 104A, B ...........</td>
<td>14</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>College Writing 106A, B(6) and Elective (2)</td>
<td>8</td>
</tr>
<tr>
<td>Literature, Speech, or Foreign Language</td>
<td>6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group II. Science</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student to choose 8 semester hours from the following courses:</td>
<td>12</td>
</tr>
<tr>
<td>Physical Science 100A</td>
<td>4</td>
</tr>
<tr>
<td>Physical Science 100B</td>
<td>4</td>
</tr>
<tr>
<td>Biological Science 102</td>
<td>4</td>
</tr>
<tr>
<td>Human Geography 105</td>
<td>4</td>
</tr>
<tr>
<td>Electives—4 semester hours—to be chosen in cooperation with the counselor from courses in any department within the Division of Science and Mathematics, including the above courses.</td>
<td></td>
</tr>
</tbody>
</table>

The student must present work in at least two departments in the division.
Group III. Social Science

Foundations of Western Civilization 100A, B* ........................................ 8

or

Introduction to Contemporary Society 101A, B ........................................ 4

Group IV. Education

Human Growth and Development 251 ..................................................... 3

Introduction to Directed Teaching 351 ..................................................... 3

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

Group VII. Physical Education and Health .................................................. 4

Elective ........................................................................................................ 61

*Students electing the Foundations Course (100A, B) must take an additional two semester hours in political science.

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

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

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

4. Candidates for the secondary provisional certificate must present a methods course in a major or minor field.

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

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

SPECIAL EDUCATION CURRICULUM—MENTALLY HANDICAPPED

B.S. Degree

State Elementary Provisional Certificate

(For the preparation of teachers of mentally handicapped children)

<table>
<thead>
<tr>
<th>Group I. Language and Literature</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication 104A, B</td>
<td>14</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>College Writing 106A, B, (6) and Elective (2)</td>
<td>8</td>
</tr>
<tr>
<td>Literature for Children 203</td>
<td>3</td>
</tr>
<tr>
<td>Literature, Speech, or Foreign Language</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group II. Science</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Biology 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Healthful Living 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>
Group III. Social Science
   Introduction to Contemporary Society 101A, B .......................... 8
   Elective ............................................................................. 4

Group IV. Education
   Human Growth and Development 251 ...................................... 3
   Introduction to Special Education 231 ................................. 2
   or
   Education of Exceptional Children 431 ............................... 2
   Psychology of Reading 212 .............................................. 3
   Mental Deficiency 434 .................................................. 3
   Introduction to Mental Hygiene 235 .................................... 3
   or
   Mental Hygiene of Childhood and Adolescence 436 ............. 2
   Education and Control of Mental Deviates 432 ................. 3
   Methods of Teaching Mentally Handicapped Children 437 ....... 2
   Introduction to Directed Teaching 351 ............................... 3
   Directed Teaching, Laboratory in Education, and General Educa-
   tional Problems 370A, B, C ............................................. 15

Group V & VI. Fine Arts (Art, Music) and Practice Arts* ............. 12

Group VII. Physical Education and Health ................................. 4
   Elective ............................................................................. 33 or 34

Note.—The academic training shall include a major in Special Education (mentally handi-
capped) and two minors. The equivalent of two minors must be in subjects or subject
fields taught in the elementary grades or in special classes for mentally retarded children.
Courses included in the major in Special Education must be elected under guidance, and
must include those subjects, groups and hours required by the Department of Public In-
struction for certification.

*SPECIAL EDUCATION CURRICULUM—OCCUPATIONAL THERAPY

B.S. Degree and Diploma

State Elementary Provisional Certificate

(For the preparation of teachers of occupational therapy)

Group I. Language and Literature
   Communication 104A, B .................................................. 8
   or
   College Writing 106A, B (6) and Fundamentals of Speech (3) .... 9
   Literature for Children 203 ............................................. 3
   Introduction to or Principles of Speech Correction 250 or 251 .... 3
   Literature, Speech, or Foreign Language ............................ 3

Group II. Science
   Biology 102 ....................................................................... 4
   Nature Study 231A or B .................................................. 4
Anatomy 211A ........................................ 4
Physiology 211B ...................................... 4
Kinesiology 216A ...................................... 2
Applied Kinesiology 216B .......................... 2
General Psychology 200 .............................. 3
Abnormal Psychology 305 .......................... 3
*Neurology and Psychiatry 330 .................... 3

Group III. Social Science
Foundations of Western Civilization 100A, B, or Introduction to Contemporary Society 101A, B ........ 8
Hospital Case Studies 352 ......................... 4

Group IV. Education
Theory of Occupational Therapy 210A, B and 410A ................ 6
Theory of Occupational Therapy (Medical Lectures) 410B ...... 3
Human Growth and Development 251 ....................... 3
Introduction to Directed Teaching 351 ..................... 3
General Education Problems 370C ....................... 3
Directed Teaching 374 ................................ 5

Group V. Fine Arts
Elementary Design 215 ................................ 3
Ceramics and Jewelry 425 ................................ 2
Weaving 428 ........................................... 4
Minor Crafts 225 ...................................... 3
Art Structure 106 ..................................... 3
Elective .................................................. 1

Group VI. Practical Arts
O. T. General Shop 167 ................................ 3
O. T. Special Education Shop 308 ....................... 3
Printing 144 ........................................... 3
Therapeutic Crafts 224 or Minor Crafts 225 ................ 2
Stitchery 223 .......................................... 3
Clothing 203 .......................................... 2
Recreational Therapy 222 .............................. 2

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

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

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

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

*This course is offered at the Kalamazoo State Hospital.
### Undergraduate Division—Curricula

#### 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>
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<tbody>
<tr>
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<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>College Writing 106A, B (6) and Elective (2)</td>
<td>3</td>
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<td>Introduction to Speech Correction 250</td>
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<td>Principles of Speech Correction 251</td>
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<td>Basic Voice and Speech Science 451</td>
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</tr>
<tr>
<td>Stuttering and Allied Disorders 452</td>
<td>3</td>
</tr>
<tr>
<td>Applied Speech Correction 453</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group II. Science</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Biology 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Physical Science 100A, B (8) with Healthful Living 112 (2)</td>
<td>10</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. Social Science</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Contemporary Society 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>Marriage and the Family 345</td>
<td>3</td>
</tr>
<tr>
<td>Elective</td>
<td>2-3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group IV. Education</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Problems of the Deaf and Hard of Hearing 251</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Mental Hygiene 235</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Mental Hygiene of Childhood and Adolescence 436</td>
<td>2</td>
</tr>
<tr>
<td>Introduction to Special Education 231</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 370A, B, C</td>
<td>15</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Group VII. Physical Education and Health</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elective</td>
<td>4</td>
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</tbody>
</table>

MUSIC CURRICULUM

B.M. Degree with a major in Public School Music

State Elementary or Secondary Provisional Certificate

(For Instrumental or Vocal Supervisor)

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Major Performance</td>
<td>4</td>
</tr>
<tr>
<td>*English Diction and Song Literature 122</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>Piano Class 117A, B</td>
<td>2</td>
</tr>
<tr>
<td>String Class 118A, B</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education or Band</td>
<td>2</td>
</tr>
<tr>
<td>Elective (non-music)</td>
<td>6</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Performance</td>
<td>4</td>
</tr>
<tr>
<td>*Italian Diction and Song Literature 222</td>
<td>0</td>
</tr>
<tr>
<td>Advanced Music Reading 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>†Instrumental Methods and Materials 209A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Piano Class 217A, B</td>
<td>2</td>
</tr>
<tr>
<td>Woodwind Class 219A, B</td>
<td>2</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education or Band</td>
<td>2</td>
</tr>
<tr>
<td>Elective (non-music)</td>
<td>5</td>
</tr>
</tbody>
</table>

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Performance</td>
<td>4</td>
</tr>
<tr>
<td>**Major Performance Literature 323</td>
<td>0</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>*French Diction and Song Literature 322</td>
<td>0</td>
</tr>
<tr>
<td>†Junior and Senior High School Methods and Materials 301A, B</td>
<td>6</td>
</tr>
<tr>
<td>†Instrumental Methods and Materials 209A, B</td>
<td>6</td>
</tr>
<tr>
<td>Instrumental Conducting 311B</td>
<td>1</td>
</tr>
</tbody>
</table>
Choral Conducting 311A ........................................... 1
Brass Class 320A, B ............................................ 2
Percussion Class 321 ............................................. 1
Introduction to Directed Teaching 351 ................................ 3
American National and State Government 230A .......................... 3
or
Survey of American Government 234 ................................... 2
Elective (non-music) ............................................. 11-12

Fourth Year

Major Performance ........................................... 4
**Major Performance Literature 323 ................................... 0
or
*German Diction and Song Literature 324 .......................... 0
History of Music 357A, B ......................................... 6
Integrated Professional Education 370A, B, C ....................... 15
Elective (non-music) ............................................. 7

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

MUSIC CURRICULUM

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

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 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 110</td>
<td>2</td>
</tr>
<tr>
<td>Piano Class 117A, B</td>
<td>2</td>
</tr>
<tr>
<td>String Class 118A, B</td>
<td>2</td>
</tr>
<tr>
<td>**English Diction and Song Literature 122</td>
<td>0</td>
</tr>
<tr>
<td>Physical Education or Band</td>
<td>2</td>
</tr>
<tr>
<td>***Elective (non-music)</td>
<td>6</td>
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</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Performance</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Music Reading 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>†Instrumental Methods and Materials 209A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Piano Class 217A, B</td>
<td>2</td>
</tr>
</tbody>
</table>
**LIBRARIANSHIP CURRICULUM**

**B.A. or B.S. Degree With Librarianship Sequence**

**State Elementary or Secondary Provisional Certificate**

**For Teacher-Librarians**

<table>
<thead>
<tr>
<th>First Year</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>106 or 104 College Writing or Communication</td>
<td>6-8</td>
</tr>
<tr>
<td>100 Physical Science Survey</td>
<td>8</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>102 Biological Science</td>
<td>4</td>
</tr>
</tbody>
</table>

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**First Year**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing or Communication</td>
<td>6-8</td>
</tr>
<tr>
<td>Physical Science Survey</td>
<td>8</td>
</tr>
<tr>
<td>Biological Science</td>
<td>4</td>
</tr>
</tbody>
</table>

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**Second Year**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing or Communication</td>
<td>6-8</td>
</tr>
<tr>
<td>Physical Science Survey</td>
<td>8</td>
</tr>
<tr>
<td>Biological Science</td>
<td>4</td>
</tr>
</tbody>
</table>

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**Third Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodwind Class 219A, B</td>
<td>2</td>
</tr>
<tr>
<td>Italian Diction and Song Literature 222</td>
<td>0</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education or Band</td>
<td>2</td>
</tr>
<tr>
<td>Elective (non-music)</td>
<td>5</td>
</tr>
</tbody>
</table>

**Major Performance**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Performance Literature 323</td>
<td>0</td>
</tr>
</tbody>
</table>

**or**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>French Diction and Song Literature 322</td>
<td>0</td>
</tr>
<tr>
<td>Instrumental Methods and Materials 209A, B</td>
<td>6</td>
</tr>
<tr>
<td>†Junior and Senior High School Methods and Materials 301A, B</td>
<td>6</td>
</tr>
<tr>
<td>Instrumental Conducting 311B</td>
<td>1</td>
</tr>
<tr>
<td>Choral Conducting 311A</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>
<tr>
<td>American National and State Government 230A</td>
<td>3</td>
</tr>
</tbody>
</table>

**or**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey of American Government 234</td>
<td>2</td>
</tr>
<tr>
<td>Elective (non-music)</td>
<td>14-15</td>
</tr>
</tbody>
</table>

---

**Fourth Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Performance Literature 323</td>
<td>0</td>
</tr>
</tbody>
</table>

**or**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>German Diction and Song Literature 324</td>
<td>0</td>
</tr>
<tr>
<td>History of Music 357A, B</td>
<td>6</td>
</tr>
<tr>
<td>Methods in Major Performance Medium</td>
<td>3</td>
</tr>
<tr>
<td>Integrated Professional Education 370A, B, C</td>
<td>15</td>
</tr>
<tr>
<td>Elective (non-music)</td>
<td>4</td>
</tr>
</tbody>
</table>

---

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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</thead>
<tbody>
<tr>
<td>105  Human Geography</td>
<td>4</td>
</tr>
<tr>
<td>100  Foundations of Western Civilization</td>
<td>8</td>
</tr>
<tr>
<td>100  Modern Language</td>
<td>8</td>
</tr>
<tr>
<td>100  Physical Education</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>200  General Psychology</td>
<td>3</td>
</tr>
<tr>
<td>230  American National and State Government</td>
<td>3</td>
</tr>
<tr>
<td>203  Literature for Children</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>15</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>English electives</td>
<td>6</td>
</tr>
</tbody>
</table>

(It is recommended that students continue a second year of modern language).

#### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>251  Human Growth and Development</td>
<td>3</td>
</tr>
<tr>
<td>212  Psychology of Reading</td>
<td>3</td>
</tr>
<tr>
<td>351  Introduction to Directed Teaching</td>
<td>3</td>
</tr>
<tr>
<td>313  Michigan History</td>
<td>3</td>
</tr>
<tr>
<td>360  Organization of Library Materials</td>
<td>2</td>
</tr>
<tr>
<td>302A, B Books and Related Materials for School Libraries</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

#### Fourth Year

##### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>470  Introduction to Classification and Cataloging</td>
<td>3</td>
</tr>
<tr>
<td>438  Audio-visual Education</td>
<td>3</td>
</tr>
<tr>
<td>406  Story-telling</td>
<td>2</td>
</tr>
<tr>
<td>405  Curriculum Enrichment Materials</td>
<td>2</td>
</tr>
<tr>
<td>361  Administration of School Libraries</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

##### Second Semester

Direct Teaching 370A, B, C                     | 15      |

(Half the semester field work is spent in school library)

### HOME ECONOMICS CURRICULUM

**B.S. Degree**

State Secondary Provisional Certificate and State Vocational Homemaking (Smith-Hughes) Certificate for Preparation of Home Economics Teachers

#### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing and Textiles 103</td>
<td>3</td>
</tr>
<tr>
<td>Elementary Design 105</td>
<td>2 or 3</td>
</tr>
<tr>
<td>Principles of Food Preparation 111</td>
<td>3</td>
</tr>
</tbody>
</table>

*To be elected by those in elementary curriculum in place of 405.*
HOME ECONOMICS

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 105A, B</td>
<td>8</td>
</tr>
<tr>
<td>Problems of Consumers 142</td>
<td>3</td>
</tr>
<tr>
<td>Effective Living 145</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>2</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Costume Design 209</td>
<td>2</td>
</tr>
<tr>
<td>Biology 100A or 102</td>
<td>4</td>
</tr>
<tr>
<td>Clothing 205</td>
<td>3</td>
</tr>
<tr>
<td>Nutrition 211</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Food Preparation and Table Service 311</td>
<td>3</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100A, B or Man and Society 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Principles of Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
</tr>
</tbody>
</table>

Chosen from Home Furnishings 211, Home Nursing 223, Human Growth and Development 251, and English or Literature.

Home Economics Major With a Minor in Clothing

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>American National or State and Local Government 230A or B</td>
<td>3</td>
</tr>
<tr>
<td>(If Foundations of Western Civilization was chosen)</td>
<td></td>
</tr>
<tr>
<td>Home Management 322</td>
<td>2</td>
</tr>
<tr>
<td>Home Management Practice 324</td>
<td>3</td>
</tr>
<tr>
<td>Family Clothing 305</td>
<td>2</td>
</tr>
<tr>
<td>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
<tr>
<td>Problems in Home Economics Education 300</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>12-14</td>
</tr>
</tbody>
</table>

Including those named in second year and not taken.

Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing (Draping and Flat Patterns) 306</td>
<td>2</td>
</tr>
<tr>
<td>Quantity Foods Management 312</td>
<td>2</td>
</tr>
<tr>
<td>Tailoring 404</td>
<td>3</td>
</tr>
<tr>
<td>Directed Teaching 370A</td>
<td>8</td>
</tr>
<tr>
<td>Laboratory in Education 370B</td>
<td>4</td>
</tr>
<tr>
<td>General Educational Problems 370C</td>
<td>3</td>
</tr>
<tr>
<td>Marriage and Family Relations 325</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>6-8</td>
</tr>
</tbody>
</table>

Including Housing 421, Experimental Foods 419, Food Demonstration 318 or Advanced Nutrition 416.
Home Economics Major With a Minor in Foods

Third Year

American National or State and Local Government 230 A or B 3
(If Foundations of Western Civilization was chosen)
Home Management 322 2
Home Management Practice 324 3
Family Clothing 305 2
Food Demonstration 318 2
Quantity Foods Management 312 2
Problems in Home Economics Education 300 3
Introduction to Directed Teaching 351 3
Physical Education
Electives 10

Including those named in the second year and not taken.

Fourth Year

Experimental Food Study 319 or
  Advanced Nutrition 416 2 or 3
Directed Teaching 370A 8
Laboratory in Education 370B 4
General Education Problems 370C 3
Marriage and Family Relations 325 2
Electives 10 or 11

Including Housing 421, Clothing 306, Tailoring 404 or Recent Trends in Textiles 403.

General Home Economics Major

Third Year

American National or State and Local Government 230A or B 3
(If Foundations of Western Civilization was chosen)
Home Management 322 2
Home Management Practice 324 3
Quantity Foods Management 312 2
Family Clothing 305 2
Problems in Home Economics Education 300 3
Introduction to Directed Teaching 351 3
Physical Education 1
Electives 12

Including those named in the second year and not taken.

Fourth Year

Directed Teaching 370A 8
Laboratory in Education 370B 4
General Education Problems 370C 3
Electives 16
INDUSTRIAL ARTS CURRICULUM

B.S. Degree

State Secondary Provisional Certificate

(For the preparation of Industrial Arts teachers for the secondary schools)

The curriculum meets the needs of students who plan to teach industrial arts in junior and/or senior high schools. Students who complete these requirements will be qualified to teach in a general shop and in one of the following area shops: metals, woods, drawing, electricity, printing or graphic arts, and arts and crafts.

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication 104A, B or College Writing 106A, B</td>
<td>6 or 8</td>
</tr>
<tr>
<td>Drawing 120</td>
<td>2</td>
</tr>
<tr>
<td>Woods 100</td>
<td>2</td>
</tr>
<tr>
<td>Introductory Electricity 150</td>
<td>2</td>
</tr>
<tr>
<td>Metals 130</td>
<td>3</td>
</tr>
<tr>
<td>Graphic Arts 140A</td>
<td>2</td>
</tr>
<tr>
<td>Introduction to Industrial Arts 160</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Physical Science 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Electives</td>
<td>6 to 8</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Design 266</td>
<td>2</td>
</tr>
<tr>
<td>Advanced Electricity 350</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 226</td>
<td>3</td>
</tr>
<tr>
<td>Metal Elective</td>
<td>3</td>
</tr>
<tr>
<td>Wood Elective</td>
<td>3</td>
</tr>
<tr>
<td>Man and Society 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>8 to 10</td>
</tr>
</tbody>
</table>

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Teaching of I.A. and I.V.E. 348</td>
<td>3</td>
</tr>
<tr>
<td>Plan and Organization of a School Shop 347</td>
<td>2</td>
</tr>
<tr>
<td>Course Making in Industrial Education 351</td>
<td>2</td>
</tr>
<tr>
<td>Shop Electives</td>
<td>7 to 9</td>
</tr>
<tr>
<td>Electives</td>
<td>14 to 16</td>
</tr>
</tbody>
</table>

Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduction to Directed Teaching 351</td>
<td>3</td>
</tr>
<tr>
<td>Integrated Professional Education 370A, B, C</td>
<td>15</td>
</tr>
<tr>
<td>Shop Electives</td>
<td>5 to 7</td>
</tr>
<tr>
<td>Electives</td>
<td>7 to 9</td>
</tr>
</tbody>
</table>
VOCATIONAL INDUSTRIAL CURRICULUM

B.S. Degree

State Secondary Provisional Certificate, and State Trade and Industrial Certificate

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

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

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

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>Physical Science 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>*Mechanical Drawing 170A</td>
<td>2</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Coordinated Industry 150 and 152</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester 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>Coordinated Industry 250 and 252</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Man and Society 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>Electives</td>
<td>11</td>
</tr>
</tbody>
</table>

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan and Organization of a School Shop 347</td>
<td>2</td>
</tr>
<tr>
<td>Course Making in Industrial Education 351</td>
<td>2</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Labor Problems 421A</td>
<td>2</td>
</tr>
<tr>
<td>Coordinated Industry 350, 352</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>17</td>
</tr>
</tbody>
</table>

*Students with one year of high school drafting may substitute some other technical shop course.
Fourth Year

Teaching of Vocational Industrial Education 352 ........................................... 3
Introduction to Directed Teaching 351 .................................................. 3
Integrated Professional Education 370A, B, and C .................................. 15
Testing and Grading in Industrial Education 474 ...................................... 2
Electives ................................................................................................. 9
Total Semester Hours for Graduation ...................................................... 128

Major—Vocational-Industrial Education .................................................. 31
First Minor—Industrial Arts ................................................................... 20
Second Minor—Elective ........................................................................ 9

---

VOCATIONAL DISTRIBUTIVE EDUCATION CURRICULUM

B.S. Degree

State Secondary Provisional Certificate

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

The prerequisites to admission to this curriculum are:

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

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

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

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication 104B</td>
<td>4</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>College Writing 106B</td>
<td>3</td>
</tr>
<tr>
<td>Physical Science 100A and B</td>
<td>8</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Biological Science 102</td>
<td>4</td>
</tr>
<tr>
<td>and</td>
<td></td>
</tr>
<tr>
<td>Human Geography 105</td>
<td>4</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100A and B</td>
<td>8</td>
</tr>
<tr>
<td>Man and Society 101A and B</td>
<td>8</td>
</tr>
<tr>
<td>Electives (Group I)</td>
<td>0–6</td>
</tr>
<tr>
<td>Electives (Group II)</td>
<td>0–4</td>
</tr>
<tr>
<td>Electives (Group III)</td>
<td>0–4</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>
VOCATIONAL OFFICE TRAINING CURRICULUM

B.S. Degree

State Secondary Provisional Certificate

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

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

Courses required unless previously taken to meet minimum group requirements:

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Correspondence 232</td>
<td>3</td>
</tr>
<tr>
<td>Electives (Group I)</td>
<td>0-12</td>
</tr>
<tr>
<td>Electives (Group II)</td>
<td>0-10</td>
</tr>
<tr>
<td>Electives (Group III)</td>
<td>0-6</td>
</tr>
<tr>
<td>Electives (Groups V-VI)</td>
<td>6</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>

Summer

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coordinated Office Experience 300</td>
<td>2</td>
</tr>
</tbody>
</table>
Fourth Year

Principles of the Practical Arts and Vocational Education 470 2
Methods of Teaching Business Subjects 346 2
Cooperative Education in the Secondary School 460 2
Introduction to Directed Teaching 351 3
Directed Teaching 370A 8
Laboratory in Education 370B 4
Physical Education 1
Electives 9

COMMUNITY COLLEGE

COLLEGE OF EDUCATION COOPERATIVE TEACHER TRAINING—SEE PAGE 390

RURAL ELEMENTARY CURRICULUM (Two Years)

Two-year—62 semester hours—curriculum which satisfactorily completed meets requirements for the State Limited Certificate which is valid for three years "and qualifies holder to teach in any Primary School District, or in any Graded School District not maintaining grades above the eighth."* This curriculum includes the foundation courses for the degree, and students are encouraged to complete one of the four-year rural curricula—elementary or secondary—at the earliest possible time.†

<table>
<thead>
<tr>
<th>Group</th>
<th>Subject</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>English</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>College Writing 106A (in addition)</td>
<td>3</td>
</tr>
<tr>
<td>II</td>
<td>Science</td>
<td>8</td>
</tr>
<tr>
<td>III</td>
<td>Social Sciences</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Rural Sociology 220</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Rural Economics 230</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>IV</td>
<td>Education</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Curriculum 140</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Introduction to Directed Teaching 240</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Directed Teaching 241</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Rural School Administration 340</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td>V</td>
<td>Fine and Practical Arts</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Fine Arts</td>
<td>1</td>
</tr>
<tr>
<td>VI</td>
<td>Practical Arts</td>
<td>1</td>
</tr>
<tr>
<td>VII</td>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Men: General Physical Education 102A, B or 103A, B</td>
<td>233</td>
</tr>
<tr>
<td></td>
<td>Women: Physical Education 100, Rural School Physical Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>12</td>
</tr>
</tbody>
</table>

Note.—†This "limited-time" curriculum is necessary because of the acceptance of a double standard, despite the call for equal educational opportunity, in the professional preparation of teachers for rural and urban schools. It has been arranged to assist students in

obtaining as broad and, at the same time, as specific and practical a professional preparation for working with children in farm and rural non-farm communities, as is possible in a period of two years.

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

1. Fundamentals of Speech 105A; American Literature 221A, 221B; Literature for Children 203.

2. Rural School Agriculture 105; Teaching of Elementary Science 203; Nature Study 231A or Nature Study 231B; Human Geography 106A; Health Education 285.

3. United States History 201B and "... a course of six one hour lectures or the equivalent shall be given in political science ..."—Michigan School Laws, Section 898: Revision of 1940.

4. Arithmetic 101; Psychology of Reading 212; Human Growth and Development 251. Those selected students permitted to do Directed Teaching 241 in the field while in residence there for six weeks receive 5 instead of 4 semester hours credit.


7. These electives may well be chosen from the preferred courses listed in the above notes (1 to 6) not used to meet minimum group requirements, supplemented if necessary from such courses as follow: Rhetoric 106B; Fundamentals of Speech 105B; Reading Interests of Children 202; Literary Interpretation 210; The Familiar Essay 212; The English Bible 218A, 218B; Principles of Speech Correction 230; Regional Geography 105B; Physical Science 100A, 100B; United States History 201A; Illustrative Handwork 107.

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DEGREES IN RURAL LIFE AND EDUCATION

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

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

Students preparing to work in the secondary schools choose majors, minors, and additional subject matter areas with thought to the variety of teaching and extra-curricular demands to be met in the smaller high schools.

Majors (24 semester hours) and minors (15 semester hours) in Rural Life and Education are provided further to facilitate students choosing from among those courses that will in their judgment most nearly prepare them to serve both personally and professionally in schools in rural communities. These majors and minors are open to students whether or not they
are enrolled in either the rural elementary or the rural secondary degree curricula.

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

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

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

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

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

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

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

**First Year**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>General Biology 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Animal Husbandry 107, 108, 109</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Elective (to be selected from Foundations of Western Civilization, 100A, B; Trigonometry and College Algebra 103A; or Trigonometry 100C)</td>
<td>9-10</td>
</tr>
</tbody>
</table>

**Second Year**

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

### BUSINESS ADMINISTRATION

Western Michigan College confers a Bachelor of Business Administration 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>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106A, B or Communication 104A, B</td>
<td>6-8</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>
</tbody>
</table>
SELECTED COURSES FOR PRE-DENTISTRY

All Pre-Dental students should have a catalog from the Dental School of their choice. The requirements vary to some extent from college to college and it is your responsibility to see that you meet your particular school's requirements.

In general, the following program should be followed:

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Biology 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 100A, B or 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>Man and Society 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>or Foundations of Western Civilization 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education 103A, B or R.O.T.C.</td>
<td>2-3</td>
</tr>
<tr>
<td>Trigonometry (If none in high school)</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physics 102A, B</td>
<td>8</td>
</tr>
<tr>
<td>Organic Chemistry 306A, B</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education 203A, B or R.O.T.C.</td>
<td>2-3</td>
</tr>
<tr>
<td>Language, Literature, or Speech</td>
<td>6-8</td>
</tr>
<tr>
<td>Electives</td>
<td>6-8</td>
</tr>
</tbody>
</table>

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zoology</td>
<td>8</td>
</tr>
<tr>
<td>Psychology</td>
<td>6</td>
</tr>
<tr>
<td>Electives (complete minors)</td>
<td></td>
</tr>
</tbody>
</table>
# Undergraduate Division—Curricula

## Engineering

(Combined Curriculum in Letters and Engineering)

University of Michigan

### First Year

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

### Second Year

#### Chemical and Metallurgical

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus 205A, B</td>
<td>8</td>
</tr>
<tr>
<td>Mechanics, Heat and Sound 103A, Electricity and Light 103B</td>
<td>10</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 311</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>

### Third Year

#### Chemical and Metallurgical

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

### Second Year

#### Aeronautical, Civil, Electrical, Marine, and Mechanical

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calculus 205A, B</td>
<td>8</td>
</tr>
<tr>
<td>Mechanics, Heat and Sound 103A, Electricity and Light 103B</td>
<td>10</td>
</tr>
<tr>
<td>Engineering Materials 210</td>
<td>3</td>
</tr>
<tr>
<td>Metal Processing 311</td>
<td>2</td>
</tr>
<tr>
<td>Fundamentals of Speech 105A</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives from Group I</td>
<td>6-8</td>
</tr>
</tbody>
</table>
FORESTRY

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

Principles of Economics 220A, B ........................................... 6
Foreign Language ............................................................... 8
or
Electives from Group III .................................................. 6
Differential Equations 321 or elective ................................. 3
Statics 320 or elective ....................................................... 3
Theoretical Mechanics 325 or elective ................................. 3
Electives to total ............................................................... 34

Note.—1. Language requirement: one year of a foreign language is required unless two years of a single foreign language were presented for entrance.
2. All students must have 12 semester hours in Group III (Social Science), including two hours of political science.
4. Civil Engineering requires Surveying.

FORESTRY
(Two year program approved by the University of Michigan)

Students planning to transfer to the University of Michigan at the end of the second year must plan on attending the University's summer camp before beginning work on the Ann Arbor campus.

First Year

Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106A</td>
<td>3</td>
</tr>
<tr>
<td>or Communication 104A</td>
<td>4</td>
</tr>
<tr>
<td>General Chemistry 100A</td>
<td>4</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100A</td>
<td>4</td>
</tr>
<tr>
<td>or Man and Society 101A</td>
<td>4</td>
</tr>
<tr>
<td>General Biology 100A</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>15 or 16 hrs</td>
</tr>
</tbody>
</table>

Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106B</td>
<td>3</td>
</tr>
<tr>
<td>or Communication 104B</td>
<td>4</td>
</tr>
<tr>
<td>General Chemistry 100B</td>
<td>4</td>
</tr>
<tr>
<td>Trigonometry 100C</td>
<td>3</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100B</td>
<td>4</td>
</tr>
<tr>
<td>or Man and Society 101B</td>
<td>4</td>
</tr>
<tr>
<td>General Biology 100A</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>15 or 16 hrs</td>
</tr>
</tbody>
</table>
Second Year

Semester I

Geology 230A .................................................. 4
Physics 103A .................................................. 5
Soils 200 ....................................................... 3
Economics 220A ................................................ 3

Semester II

Surveying 210 .................................................. 3
Botany 221B ..................................................... 4
Botany 223 ...................................................... 2
Economics 220B ................................................ 3

15 hrs

FORESTRY

(Two year program approved by Michigan State)

First Year

Semester I

College Writing 106A ........................................... 3
Speech 105A .................................................... 3
Physical Science 100A ........................................... 4
Mathematics ...................................................... 3, 4 or 5
Soils 200 ....................................................... 3
Phys. Ed. ......................................................... 1

Semester II

College Writing 106B ........................................... 3
Drawing 221 ..................................................... 3
Biological Science 102 ......................................... 4
Mathematics ...................................................... 3, 4 or 5
Comparative Arts 215 .......................................... 4

Second Year

Semester I

Man and Society 101A ........................................... 4
Foundations of Western Civilization 100A ..................... 4
Botany 221A ..................................................... 4
Chemistry 101A .................................................. 4
Phys. Ed. ......................................................... 1

Semester II

Man and Society 101B ........................................... 4
Foundations of Western Civilization 100B ..................... 4
Botany 221B ..................................................... 4
Chemistry 101B .................................................. 4
### JOURNALISM

(University of Michigan)

**First Year**

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106A</td>
<td>3</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100A</td>
<td>4</td>
</tr>
<tr>
<td>General Biology 100A</td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>4</td>
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</table>

<table>
<thead>
<tr>
<th>Semester II</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106B</td>
<td>3</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100B</td>
<td>4</td>
</tr>
<tr>
<td>General Biology 100B</td>
<td>4</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>4</td>
</tr>
</tbody>
</table>

**Second Year**

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journalism 201A</td>
<td>3</td>
</tr>
<tr>
<td>Genetics 305</td>
<td>3</td>
</tr>
<tr>
<td>Sociology (Intro) 241</td>
<td>3</td>
</tr>
<tr>
<td>Economics 220A</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Political Science 230A</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journalism 201B</td>
<td>3</td>
</tr>
<tr>
<td>Evolution 306</td>
<td>3</td>
</tr>
<tr>
<td>Gen. Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Economics 220B</td>
<td>3</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Political Science 230B</td>
<td>3</td>
</tr>
<tr>
<td>Electives from Mathematics, Philosophy, U.S. History</td>
<td>15 hours each semester</td>
</tr>
</tbody>
</table>

### JOURNALISM

(Michigan State College)

**First Year**

<table>
<thead>
<tr>
<th>Semester I</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106A</td>
<td>3</td>
</tr>
<tr>
<td>Speech 105A</td>
<td>3</td>
</tr>
<tr>
<td>Physical Science 100A</td>
<td>4</td>
</tr>
<tr>
<td>Military Science</td>
<td>2</td>
</tr>
</tbody>
</table>
## Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106B</td>
<td>3</td>
</tr>
<tr>
<td>Biology Survey 102</td>
<td>4</td>
</tr>
<tr>
<td>Man and Society 101B</td>
<td>4</td>
</tr>
<tr>
<td>Military Science</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

## Second Year

### Semester I

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journalism 201A</td>
<td>3</td>
</tr>
<tr>
<td>U.S. History 201A</td>
<td>3</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100A</td>
<td>4</td>
</tr>
<tr>
<td>Comparative Arts 215</td>
<td>4</td>
</tr>
<tr>
<td>Military Science</td>
<td>2</td>
</tr>
</tbody>
</table>

### Semester II

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Journalism 201B</td>
<td>3</td>
</tr>
<tr>
<td>U.S. History 201B</td>
<td>3</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100B</td>
<td>4</td>
</tr>
<tr>
<td>Electives</td>
<td>4</td>
</tr>
<tr>
<td>Military Science</td>
<td>2</td>
</tr>
</tbody>
</table>

## LAW

(Combined Curriculum in Letters and Law)

College of Law, University of Illinois

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

### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics</td>
<td>8–10</td>
</tr>
<tr>
<td>or Laboratory Science</td>
<td>8</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Literature</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</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>
PRE-MED STUDENTS

American National and State Governments 230A, B ....................... 6
Principles of Sociology 241 ................................................. 3
Modern Social Problems 242 ................................................. 3
Public Finance 420 ............................................................. 3
Elective (to be selected from Speech 105A, B; Money and Credit 321A, B; language or literature, or laboratory science) ...................... 1-5

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

PRE-MED STUDENTS

Students seeking admission to a medical school should make application prior to January 1 for the following fall semester. Most schools require a non-refundable fee at the time the application is made, to defray the cost of processing the application. Most schools require a partial payment of the first year's tuition upon notification of acceptance.

All applicants should take the Medical College Admission Test given in the fall at Kalamazoo College or during the spring semester at Western Michigan College. For further information see Dr. Frederick, 105 Health Service Building.

Four scores from this test are reported to the medical schools; namely, a score in what is known as the verbal factor, one in quantitative ability, one on social science and one in science. These scores are never divulged to the students.

Major and minor fields should be selected during the sophomore year on campus. Consult your pre-med counselor who will direct you and assist you. Many medical schools accept pre-med students with ninety semester hours credit while a few recommend a bachelor's degree.

It is your responsibility to obtain a catalog from three medical schools of your choice and to meet their requirements.

The following schedules of courses will in most instances satisfy medical school requirements:

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>First Sem.</th>
<th>Second Sem.</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106A, B</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Biology 100A, B</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry 100A, B or 101A, B</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Language</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education or R.O.T.C.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qual. and Quant. 201-202</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Physics 102A, B</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Language (not required)</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Man and Society 101A, B</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education or R.O.T.C.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Third Year

Zoology 242A, B ........................................ 4 4
Organic Chemistry 306A, B .......................... 4 4
Group III .................................................. 3 3
Group I or V ............................................. 3 3
Electives .................................................. 2 2

Summer

Emb. 342 or Histology 341 .............................

Fourth Year

(If four-year pre-med is taken then omit summer session above.)

Complete major and minor requirements and other degree requirements. Take electives in Art, Music, Literature, Speech and Social Sciences.

MEDICAL TECHNOLOGY

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 the Registry of the American Society of Clinical Pathologists. Upon successful completion of the fourth year, the student may be granted the degree of Bachelor of Science, if all requirements have been satisfied for a general degree.

Minors should be established in biology and chemistry and final counseling should be obtained upon completion of forty-five semester hours. The major is "Medical Technology", 335, thirty semester hours taken during the fourth year at a recognized hospital for training Med-Tech students or at the Michigan Department of Health. State tuition must be paid during the senior year while on affiliation.

First Year

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology 100A, B</td>
<td>3-5</td>
<td>4</td>
<td>3-5</td>
</tr>
<tr>
<td>College Writing 106A, B</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry 100A, B, or 101A, B</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics or Man and Society</td>
<td></td>
<td>3-5 %</td>
<td>3-5 %</td>
</tr>
<tr>
<td>P.E.</td>
<td></td>
<td>3-5 %</td>
<td></td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Qual. and Quant. 201-202</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Bacteriology 312A</td>
<td>4</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Physiology 211B</td>
<td></td>
<td>3-4</td>
<td></td>
</tr>
<tr>
<td>Man and Society 101A, B, or Government</td>
<td>4</td>
<td>4</td>
<td>3-4</td>
</tr>
<tr>
<td>Group I</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>P.E.</td>
<td></td>
<td>3-4 %</td>
<td></td>
</tr>
</tbody>
</table>
Third Year

Physics 102A, B ........................................ 4
Zoology 242B ........................................ 4
Organic Chemistry 306A ............................. 4
Biochemistry 350-351 ................................. 4
Electives Group I-II-III .............................. 6

To total at least .................................... 92 S.H.

Fourth Year

Medical Technology 335 ......................... 30

IN CO-OPERATION WITH THE NURSING COUNSELOR, STUDENTS SHOULD PLAN WITH CARE TO MEET THE ADMISSION REQUIREMENTS OF THE SCHOOL THEY WISH TO ATTEND.
GENERAL DEGREE WITH A MAJOR IN NURSING

B.S. Degree

Upon completion of a two-year program meeting degree requirements at the college, graduation from an accredited school of nursing and qualifying as a registered nurse, the student may become eligible for a Bachelor of Science degree with a major in nursing. This is a liberal arts degree and not a degree in nursing education.

Students may take either one or two years of college work before entering the school of nursing, or complete their college work for a degree after three years in the school of nursing. They will make application directly to the accredited school of nursing* of their own choice.

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

1. Approved pattern of subjects from an accredited high school which conforms to the requirements as established by the Michigan State Board of Education.
2. Minimum units in high school science must be presented as follows: Chemistry, 1 unit; plus either General Biology, 1 unit, or Physics, 1 unit.
3. Must stand in the upper one-half of the high school graduating class.
4. Take a college ability test before final recommendation on admission will be made.

Minimum required program includes:

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Rhetoric 106A, B, or Communications 104A, B</th>
<th>6-8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science</td>
<td></td>
<td>12-16</td>
</tr>
<tr>
<td>Biology 100A, B</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry 100A, B, or 101A, B</td>
<td>Or, other science courses approved by counselor</td>
<td></td>
</tr>
<tr>
<td>American, National and State Governments 230A (or equivalent)</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Literature or Language</td>
<td>6-8</td>
<td></td>
</tr>
<tr>
<td>Sociology</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Electives</td>
<td>To total 124</td>
<td></td>
</tr>
</tbody>
</table>

*(See pages 104-105 for details re: minors and other specific degree requirements.)*

*Bronson Methodist Hospital (Kalamazoo) School of Nursing students receive their basic science courses on the campus at Western.*
## OCCUPATIONAL THERAPY

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106A, B and Fundamentals of Speech 105A</td>
<td>9</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Communications 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>Man and Society 101A, B</td>
<td></td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Foundations of Western Civilization 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Biological Science 102</td>
<td>4</td>
</tr>
<tr>
<td>Outdoor Science 232</td>
<td>4</td>
</tr>
<tr>
<td>Art Structure 106</td>
<td>3</td>
</tr>
<tr>
<td>Printing 144</td>
<td>3</td>
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<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31-34</strong></td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anatomy 211A</td>
<td>4</td>
</tr>
<tr>
<td>Physiology 211B</td>
<td>4</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Theory of Occupational Therapy 210A, B</td>
<td>4</td>
</tr>
<tr>
<td>Neurology and Psychiatry 330</td>
<td>3</td>
</tr>
<tr>
<td>O. T. General Shop 167</td>
<td>3</td>
</tr>
<tr>
<td>Therapeutic Crafts 220</td>
<td>2</td>
</tr>
<tr>
<td>Stitchery 223</td>
<td>3</td>
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<tr>
<td>Minor Crafts 225</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
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### Third and Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Literature or Foreign Language</td>
<td>3</td>
</tr>
<tr>
<td>Literature for Children 203</td>
<td>3</td>
</tr>
<tr>
<td>Kinesiology 216A</td>
<td>2</td>
</tr>
<tr>
<td>Applied Kinesiology 216B</td>
<td>2</td>
</tr>
<tr>
<td>Theory of O. T. (Med. Lectures) 410B</td>
<td>3</td>
</tr>
<tr>
<td>Abnormal Psychology 305</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Speech Correction 250 or Principles of Speech Correction 251</td>
<td>3</td>
</tr>
<tr>
<td>Theory of Occupational Therapy 410A</td>
<td>2</td>
</tr>
<tr>
<td>Recreational Therapy 222</td>
<td>2</td>
</tr>
<tr>
<td>O. T. Special Wood Shop 308</td>
<td>3</td>
</tr>
<tr>
<td>Weaving 428</td>
<td>4</td>
</tr>
<tr>
<td>Elementary Design 215</td>
<td>3</td>
</tr>
<tr>
<td>Ceramics and Jewelry 425</td>
<td>2</td>
</tr>
<tr>
<td>Clothing 203</td>
<td>2</td>
</tr>
<tr>
<td>Hospital Case Histories 352</td>
<td>3</td>
</tr>
<tr>
<td>Clinical Practice 311</td>
<td>5</td>
</tr>
</tbody>
</table>
Note.—1. Thirty semester hours of college credit (as listed in first year above) must be earned before the student is admitted to the Department of Occupational Therapy. This admittance is based on the approval of the applicant by the Coordinating Committee of the department, on the basis of general aptitude for the work and the scholastic record submitted with the special application blank.

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

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

*O. T. Biology 103 (4) and O. T. Nature Study 232 (4) to substitute for Physical Science Survey (8) or Biological Science Survey (8).

SOCIAL WORK

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

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

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>Biological Science 102, or equivalent</td>
<td>4</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100A, B (recommended)</td>
<td></td>
</tr>
<tr>
<td>or Man and Society 101A, B or equivalent</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>10</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>Psychology of Personality 207</td>
<td>4</td>
</tr>
<tr>
<td>or Introduction to Mental Hygiene 235</td>
<td>3</td>
</tr>
<tr>
<td>or Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>Economics of Consumption 223 or Principles of Economics 220A</td>
<td>3</td>
</tr>
<tr>
<td>Principles of Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>Modern Social Problems 242</td>
<td>0-3</td>
</tr>
<tr>
<td>Social Psychology 243</td>
<td>3</td>
</tr>
<tr>
<td>Fields of Social Work 255</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>9-13</td>
</tr>
</tbody>
</table>

Third and Fourth Years

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Hygiene 212 or Genetics 305</td>
<td>3-2</td>
</tr>
<tr>
<td>A minimum of eight hours from the following sociology courses:</td>
<td></td>
</tr>
<tr>
<td>Rural Sociology 220</td>
<td>3</td>
</tr>
<tr>
<td>The City 247</td>
<td>2</td>
</tr>
<tr>
<td>Cultural Anthropology 248</td>
<td>3</td>
</tr>
</tbody>
</table>
MUSIC

Criminology 342 ........................................ 3
Marriage and the Family 345 .......................... 3
Industrial Sociology 346 ............................. 2
Race Relations 347 ..................................... 2
Social Pathology and Personal Deviation 442 .... 2
Population Problems 443 .............................. 3
Juvenile Delinquency and the Community 446 ... 3
Comparative Culture Studies 448 ..................... 2
Contemporary Social Movements 449 ................. 2
American National, and State and Local Government 230A, B 6
Introduction to Social Research 348 ............... 3
Family and Child Adjustment 351 ..................... 3
Introduction to Public Welfare 353 .................. 3

or
Community Welfare Organization 357 ............... 2
Principles of Social Case Work 355 .................. 2

or
Principles of Social Group Work 356 ................ 2
Orientation to Field Work 358A .................... 2
Supervised Field Work 358B ....................... 3
Electives ............................................... 31-35

Note.—1. This curriculum 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 basic 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 curricula provide for a social science major of 34 or 37 semester hours and a minor in social work of 17 or 18 semester hours. Some 55 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 Management 322, Community Recreation, Scouting and Campfire 276, Laboratory Psychological Testing 402, Clinical Psychology 309, and Labor Problems 421A, B.

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>College Writing 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Voice 45A, B</td>
<td>6</td>
</tr>
<tr>
<td>Freshman Theory 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Elementary Acoustics 110</td>
<td>2</td>
</tr>
<tr>
<td>Piano Class 117A, B</td>
<td>2</td>
</tr>
<tr>
<td>English Diction and Song Literature 122</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>8</td>
</tr>
</tbody>
</table>

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

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

### Third Year

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

### Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Voice 48A, B</td>
<td>6</td>
</tr>
<tr>
<td>Orchestration 355A, B</td>
<td>6</td>
</tr>
<tr>
<td>History of Music 357A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Conducting 451A, B</td>
<td>2</td>
</tr>
<tr>
<td>German Diction and Song Literature 324</td>
<td>0</td>
</tr>
<tr>
<td>American National and State Governments 230A, B</td>
<td>6</td>
</tr>
<tr>
<td>or Survey of American Government 234</td>
<td>2</td>
</tr>
<tr>
<td>or Man and Society 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>Elective</td>
<td>6-10</td>
</tr>
</tbody>
</table>

---

### MUSIC

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

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

* 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.
<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Second Year</td>
<td></td>
</tr>
<tr>
<td>Major Performance, level 6, A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Music Reading 205A, B</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Harmony 206A, B</td>
<td>6</td>
</tr>
<tr>
<td>Music Literature 207A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Piano Class 217A, B</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>6</td>
</tr>
<tr>
<td>Third Year</td>
<td></td>
</tr>
<tr>
<td>Major Performance, level 7, A, B</td>
<td>6</td>
</tr>
<tr>
<td>Counterpoint 305A, B</td>
<td>6</td>
</tr>
<tr>
<td>Composition 306A, B</td>
<td>6</td>
</tr>
<tr>
<td>Style and Structure 310A</td>
<td>3</td>
</tr>
<tr>
<td>Contemporary Music 310B</td>
<td>3</td>
</tr>
<tr>
<td>Conducting 311A, B</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>6</td>
</tr>
<tr>
<td>Fourth Year</td>
<td></td>
</tr>
<tr>
<td>Major Performance, level 8, A, B</td>
<td>6</td>
</tr>
<tr>
<td>Major Performance Literature</td>
<td>0</td>
</tr>
<tr>
<td>Orchestration 455A, B</td>
<td>6</td>
</tr>
<tr>
<td>History of Music 357A, B</td>
<td>6</td>
</tr>
<tr>
<td>American National and State Governments 230A, B</td>
<td>6</td>
</tr>
<tr>
<td>or Survey of American Government 234</td>
<td>2</td>
</tr>
<tr>
<td>or Man and Society 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>Elective</td>
<td>8-12</td>
</tr>
</tbody>
</table>

MUSIC

B.M. Degree with a major in Composition*

First Year

<table>
<thead>
<tr>
<th>Semester</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 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>Elementary Acoustics 110</td>
<td>2</td>
</tr>
<tr>
<td>String Class 118A, B</td>
<td>2</td>
</tr>
<tr>
<td>Piano Class 117A, B</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Elective</td>
<td>14</td>
</tr>
</tbody>
</table>

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

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Music</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Music Reading 205A, B</td>
<td>4</td>
</tr>
<tr>
<td>Advanced Harmony 206A, B</td>
<td>6</td>
</tr>
<tr>
<td>Music Literature 207A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Piano Class 217A, B</td>
<td>2</td>
</tr>
<tr>
<td>Woodwind Class 219A, B</td>
<td>2</td>
</tr>
<tr>
<td>Style and Structure 310A</td>
<td>3</td>
</tr>
<tr>
<td>Contemporary Music 310B</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
</tbody>
</table>

## Third Year

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

## Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied Music</td>
<td>6</td>
</tr>
<tr>
<td>Orchestration 455A, B</td>
<td>6</td>
</tr>
<tr>
<td>Advanced Composition 456A, B</td>
<td>6</td>
</tr>
<tr>
<td>History of Music 357A, B</td>
<td>6</td>
</tr>
<tr>
<td>American, National and State Governments 230A, B</td>
<td>6</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Survey of American Government 234</td>
<td>2</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Man and Society 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>Elective</td>
<td>2-6</td>
</tr>
</tbody>
</table>
## LIBRARIANSHIP CURRICULUM

### A.B. or B.S. DEGREE WITH MAJOR IN LIBRARIANSHIP

Public, County and Regional Library Service

### First Year

<table>
<thead>
<tr>
<th>Semester Hours</th>
<th>Course Name and Selection(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-8</td>
<td>College Writing or Communication</td>
</tr>
<tr>
<td>8</td>
<td>Physical Sciences Survey</td>
</tr>
<tr>
<td>8</td>
<td>Biological Science and Human Geog.</td>
</tr>
<tr>
<td>8</td>
<td>Foundations of Western Civilization</td>
</tr>
<tr>
<td>8</td>
<td>Modern Language</td>
</tr>
<tr>
<td>2</td>
<td>Electives</td>
</tr>
</tbody>
</table>

### Second Year

| 3              | General Psychology |
| 3              | Sociology |
| 3              | Economics |
| 3              | Journalism |
| 3              | Literature for Children |
| 3              | Reading Interests of Children |
| 3              | Michigan History |
| 9              | Electives |

### Third Year

| 3              | Human Growth and Development |
| 3              | Modern Social Problems |
| 2              | Organization of Library Materials |
| 3              | Reference Service |
| 2              | Reading Interests of Adults |
| 3              | Rural and Urban Library Administration |
| 2              | Storytelling |
| 12             | Electives |

### Fourth Year

| 2              | Reading Interests of Young Adults |
| 3              | Selection of Reading Materials |
| 4              | Intro. to Classification and Cataloging |
| 3              | Field Assignment and Laboratory |
| 2              | Library in the Modern Community |
| 2              | Audio-visual Education |
| 6              | English Electives |
| 8              | Electives |

*Includes three weeks of field work in a county, or small public library selected in consultation with departmental adviser.*
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 wide range of instructional programs offered in Business Studies, Home Economics, and Industrial Education. The primary objective of these curricula is teacher education, but they also include training for vocational competency. Some of the courses of study are open to youths and adults whose academic background does not necessarily include subject matter sequences required for regular college admission. However, the student should present evidence of high school graduation, and recommendation of the high school principal.

BUSINESS STUDIES

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

1. The Business Teacher Training Curriculum prepares for the following fields: Secretarial, Accounting, Salesmanship and Retailing, General Business and Vocational Coordinators. The students must meet the B.S. requirements.

2. The Business Administration Curriculum: The student working toward a Bachelor of Business Administration has the opportunity for preparation for vocational and professional positions in business and industry. The major vocational areas which the student may elect are: Accounting, Economics, General Business, Secretarial Administration, and the following management areas: Office Management, Personnel Administration, Sales Management, Retail Store Management, Small Business Management and Industrial Management.

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

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

The Cooperative Curricula: The two-year Cooperative Retailing Program and Cooperative Secretarial Training Program are on a work-and-school basis. This gives the student an outstanding opportunity to meet, on a
practical work-for-pay basis, the requirements of the full-time job for which he is preparing.

DISTRIBUTIVE EDUCATION

Western Michigan College is the designated teacher-education institution for distributive education. It has provided a qualified teacher-education service available to school, individual teachers, and coordinators who desire aid in the improvement of methods of instruction, or in planning more effective instructional materials.

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

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

HOME ECONOMICS

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

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

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

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

INDUSTRIAL ARTS EDUCATION

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

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

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

All of the elementary courses are open to women.

VOCATIONAL INDUSTRIAL TEACHER EDUCATION

This curriculum provides for a combination work-study program, specifically for the preparation of trade and industrial teachers. It leads to a B.S. degree, a secondary provisional certificate, and a vocational trade and industrial certificate. Coordinated practical work experience in industry or
UNDERGRADUATE DIVISION—CURRICULA

its equivalent is mandatory. It is necessary for a student to work a total of at least four years. In general, the type of industry selected is governed by the nature of the student’s interest in the industrial phase which he expects to teach.

INDUSTRIAL TECHNICAL EDUCATION

The current postwar years present a world of new inventions and technical processes, new achievements in the satisfaction of human wants, and new demands for competence in citizenship, home relationships, and community living.

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

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

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

1. These curricula are open to any recommended high-school graduate who has demonstrated his scholastic ability, and who shows sufficient maturity and aptitude to profit by such a program of study.
2. Occupational preparation, largely industrial-technical in character, is recognized as the primary purpose and as the principal objective which prompts students to enroll in technical curricula.
3. Instruction is related to general fields, as well as in shop areas, and is given for the adequate personal, social, and occupational development of the individual.

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

AVIATION EDUCATION

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

1. To provide occupational training for those expecting to enter the aviation field, and
2. To enable prospective and in-service teachers to secure a better understanding of the implications of the air age on our modern society.

Air Transportation

This curriculum is four years in length, leading to a B.S. degree. It is designed to train students to manage and operate airports, and for various administrative, supervisory, and sales positions in the business field of aviation. It requires concentration in four areas—mechanics, pilot training, business administration, and airport operation. Sufficient work is given
in mechanics to meet the requirements for a CAA airplane and/or engine mechanic's license. A minimum of 35 hours of flight training leading to a private pilot's license is required for all students.

**Pilot Training**

This is available to any student on campus, regardless of curriculum, who wishes to gain some flight experience, or secure a private, commercial, or instructor's license.

**Aviation Teacher Education**

The courses listed in this curriculum are intended for any elementary or secondary students preparing for teaching, who wish to learn some of the basic fundamentals of aviation and its effect on the social, economic, and political structure of the world at large. All teachers should have some understanding of aviation in order that they may better infuse pertinent aviation materials in the courses which they expect to teach.

Those who are particularly interested in aviation may secure a minor sequence in this area. For many students, one or two aviation courses are sufficient.

Industrial-arts students are especially urged to take 409 Education in an Air Age or 210 Model Airplane Construction.

**PAPER TECHNOLOGY**

This vocational and scientific curriculum is four years in length, leading to a B.S. degree. The purpose is to prepare students for work in the paper industry in the technical, manufacturing, sales, and executive areas. It is foundational in character, and provides for actual work experience during the summers in the paper mills. The plan provides for operating cooperatively through the use of an advisory committee composed of seven members from the industry and three from Western Michigan College. This curriculum is jointly sponsored by the Division of Vocational Education and the Department of Chemistry.

**BUSINESS ADMINISTRATION**

**Bachelor of Business Administration Degree**

An integrated curriculum requiring students to obtain a major in the Department of Business Studies and a minor in the Department of Economics, or a major in the Department of Economics while fulfilling the requirements of the Business Administration Curriculum. In addition to a minor in Economics a student under the Business Administration Curriculum must have a minimum of at least thirty semester hours in the field of Business Administration and a minimum of forty-eight hours in the fields of Business and Economics. Besides meeting the requirements of the curriculum as stated below, the student must plan to meet the general degree requirements for the degree desired. The maximum number of semester
hours a student may present for graduation is 45 in the Department of Business Studies.

**BUSINESS ADMINISTRATION**

**First and Second Years**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications 104A, B or</td>
<td>8</td>
</tr>
<tr>
<td>College Writing 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Fundamentals of Speech, 105A, B</td>
<td>6</td>
</tr>
<tr>
<td>Language or Literature</td>
<td>6-8</td>
</tr>
<tr>
<td>Man and Society 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>Economics 220A, B or equivalent</td>
<td>6</td>
</tr>
<tr>
<td>*Business Statistics 235</td>
<td>3</td>
</tr>
<tr>
<td>Accounting Principles 210A, B</td>
<td>6</td>
</tr>
<tr>
<td>Business Correspondence 232</td>
<td>3</td>
</tr>
<tr>
<td>**Math. Sequence A or B, or Bus. Math. 120A, B</td>
<td>4-8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Elective (See Major and Minor requirements)</td>
<td>2-4</td>
</tr>
</tbody>
</table>

**Third and Fourth Years**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Science 100A, B or Biological Science 102 and</td>
<td></td>
</tr>
<tr>
<td>Human Geography 105A</td>
<td>8</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Survey of Business Insurance 322</td>
<td>3</td>
</tr>
<tr>
<td>Business Law 320A, B</td>
<td>6</td>
</tr>
<tr>
<td>Management Problems 339</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives (See Major and Minor requirements)</td>
<td>30-34</td>
</tr>
</tbody>
</table>

**Recommended Electives:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economic Geography 218</td>
<td>3</td>
</tr>
<tr>
<td>Economic History of United States 312</td>
<td>3</td>
</tr>
<tr>
<td>Psychological Aspects of Business 210</td>
<td>3</td>
</tr>
<tr>
<td>Applied Psychology 204</td>
<td>2</td>
</tr>
<tr>
<td>American National and State Governments 230A</td>
<td>3</td>
</tr>
<tr>
<td>Survey of American Government 234</td>
<td>2</td>
</tr>
<tr>
<td>Principles of Sociology 241</td>
<td>3</td>
</tr>
</tbody>
</table>

** Majors in Business Administration **

I. Accounting: Accounting 210A, B; Intermediate Accounting 310A, B; Cost 411, Tax 412, Auditing 313, Accounting Theory and Problems 314. All courses listed are major requirements, and should be taken, insofar as possible, in the sequence listed. Students are admitted to a Major in Accounting only upon approval of the Accounting Staff. Students planning on majoring in Accounting should take

*Mathematics minors waive this requirement.
**Accounting majors are requested to take Mathematics, Sequence A or B.
Other majors in Business Administration may elect Mathematics, Sequence A or B.
210A, and B in their Freshman year. Mathematics minor required. Sequence A or B.

II. Air Transportation: (Students under the Air Transportation curriculum may major in Business Administration.)

Note.—1. Mathematics. Sequence A is based upon one or one and a half years of high-school algebra and one year of high-school geometry and consists of (a) Trigonometry and College Algebra 105A, B, ten hours, or College Algebra and Analytic Geometry 104A, B, eight hours; (b) Mathematics of Finance 227A, B, 6 hours; (c) Statistics 209 or 473, three hours.

2. Mathematics. Sequence B is for those students who present at least one year, but less than two years, of high-school mathematics, and consists of (a) Introduction to College Mathematics 105A, B, eight hours; (b) Mathematics of Finance 227A, three hours, Mathematics of Finance 227B, two hours; (c) Statistics 209 or 473, three hours.

III. Economics: (See Economics Department for fulfilling Economics Major.)

IV. General Business: Elect any sequence of courses from the Department of Business Studies which meets the students’ vocational interests and needs.

V. Insurance: Insurance Principles 322; Life Insurance 423; Property Insurance 324; Casualty Insurance and Suretyship 326. Majors intending to enter the agency phase of insurance will also be required to take Salesmanship 340, and Advertising 342 or Small Business Management 237. Those intending to enter the home office phase will also be required to take Office Management 439, and Business Report Writing 433 or Records Administration 101, and show proficiency in Typewriting or take Typewriting 101A.

VI. Secretarial Administration: Secretarial Science 130A, B; Office Machines 230A, B; Office Organization 239; Filing Techniques 101, Personnel Administration 436; Business Report Writing 433. (Required courses on the Business Administration Curriculum may be waived in order to meet the needs of the Secretarial Administration program.)

VII. Management:

1. Office Management: Accounting 310A and B or 311 and 312; Survey of Office Machines 230; Office Management 439; Personnel Administration 436; Filing Principles and Techniques 101; Proficiency in Typewriting or 101A and 101B; Business Report Writing 433. (Minor in Psychology recommended.)


3. Sales Management: Salesmanship 340; Sales Management 341; Credit Management 345; Advertising 342; Personnel Administration 436; Small Business Management 237; Purchasing 348.

4. Retail Store Management: Retail Salesmanship 150; Fundamentals of Retailing 140; Merchandise Information 151A or 151B;
Retail Merchandise Mathematics 111; Retail Advertising 240; Retail Credit and Collections 241 or Credit Management 345.

5. Small Business Management: Salesmanship 340; Sales Management 341; Credit Management 345; Real Estate Fundamentals 350; Advertising 342; Personnel Administration 436; Small Business Management 237.

6. Industrial Management: Purchasing 348; Cost Accounting 411; Personnel Administration 436; Business Report Writing 433; Industrial Organization and Management 343; Industrial Management Problems 344; Introduction to Industrial Psychology 300. Student is required to take a minor in Vocational Industrial to be approved by the Major and Minor advisors.

VIII. Business Teacher Training.

1. For majors and minors in the field of Business Teachers Education refer to the Business Teacher Training Curriculum in the catalog.

TECHNICAL BUSINESS CURRICULA (Two Years)

The Technical Business Curricula have been specifically designed for those students who are planning on attending college for a two-year period. The program, which is designed to provide the student with an effective training for the many beginning occupations in business and industry, is divided into two major areas: the cooperative work-and-study programs now found in the Retailing Curriculum and the Secretarial Curriculum, and the regular college classroom programs. Although the enrollment in the cooperative curricula is limited, the student is urged to qualify for these fields whenever possible.

Any high-school graduate is eligible for admission to the Technical business Curricula provided he has been recommended by his high-school principal. Students who wish to qualify for the cooperative program must meet certain standards as established by the Division of Vocational Education. Courses taken either in the cooperative or non-cooperative programs may be applied toward degree requirements provided regular college-entrance requirements are met.

All graduates of the two-year Technical Business Curriculum receive a certificate indicating the field of specialization they have completed.

General Requirements for All Enrollees on the Regular (Non-cooperative) Technical Business Curricula

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications 104A, B or</td>
<td>8</td>
</tr>
<tr>
<td>College Writing 106A, B</td>
<td>6</td>
</tr>
<tr>
<td>Industrial and Business World 135A, B</td>
<td>4</td>
</tr>
<tr>
<td>Business Mathematics 120A, B</td>
<td>4</td>
</tr>
<tr>
<td>Principles of Accounting 210A, B</td>
<td>6</td>
</tr>
</tbody>
</table>
COOPERATIVE PROGRAM IN RETAILING

Business Correspondence 232 ........................................ 3
Physical Education ....................................................... 1
Electives ................................................................. 5-7

Second Year

Man and Society 101A, B or ........................................... 8
Principles of Economics 220A, B ....................................... 6
Business Statistics 235 .................................................. 3
Survey of Business Insurance 322 .................................... 3
Small Business Management or Management Elective ............ 3
Business Law 320A ....................................................... 3
Physical Education ...................................................... 1
Electives ................................................................. 10-12

Fields of Specialization in Technical Business Curriculum

1. Clerical Accounting: Select from Accounting 310A, B; Pay Roll and Social Security Accounting 215; Office Machines 230A, B; Business Law 320A, B; Office Organization 239; or other Business Studies on consent of class instructor; Proficiency in Typewriting or Typewriting 101A, B.
2. General Business: Select courses in keeping with students' vocational interests with consent of counsellor.
3. Secretarial Training: *Secretarial Science 130A, B; Office Machines 230A, B; Filing Techniques 101; Office Organization 239; General Psychology 200.
4. Salesmanship: Salesmanship 340; Advertising 342; Small Business Management 237; Sales Management 341; Credit Management 345.
5. General Clerical: Office Machines 230A, B; Typewriting 101A, B; Filing Techniques 101; Office Organization 239; Industrial Cost Accounting 316A, B; Pay Roll and Social Security Accounting 215.
6. Small Business Management: Accounting 210A, B; Small Business Management 237; Advertising 342; Salesmanship 340; Credit Management 345; Real Estate Fundamentals 350.

COOPERATIVE PROGRAM IN RETAILING (Two Years)

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

Students enrolled in this curriculum will have the opportunity, in addition to taking the specialized courses in retailing, to elect such other college courses as will fit their needs and as their schedules, abilities, and work programs will permit.

*Students who wish to elect the Technical Secretarial Training or Retail Curricula must, at the present time, qualify for the Cooperative work-study curricula described below. Since the enrollment in the work-study curricula is definitely limited, students should make application at least thirty days before the date of actual matriculation.
### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Salesmanship 150</td>
<td>3</td>
</tr>
<tr>
<td>Fundamentals of Retailing 140</td>
<td>3</td>
</tr>
<tr>
<td>Merchandise Information (Non-textiles) 151A</td>
<td>2</td>
</tr>
<tr>
<td>Business Mathematics 120</td>
<td>2</td>
</tr>
<tr>
<td>College Writing 106A</td>
<td>3</td>
</tr>
<tr>
<td>Merchandise Information (Textiles) 151B</td>
<td>2</td>
</tr>
<tr>
<td>Retail Merchandise Mathematics 111</td>
<td>3</td>
</tr>
<tr>
<td>Business Correspondence 232 or College Writing 106B</td>
<td>3</td>
</tr>
<tr>
<td>Coordinated Business Experience 100</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td></td>
</tr>
</tbody>
</table>

### Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Credit and Collections 241</td>
<td>3</td>
</tr>
<tr>
<td>Store Organization 251</td>
<td>2</td>
</tr>
<tr>
<td>Retail Advertising 240</td>
<td>3</td>
</tr>
<tr>
<td>Retail Personnel Management 252</td>
<td>2</td>
</tr>
<tr>
<td>Color and Design in Retailing 142</td>
<td>3</td>
</tr>
<tr>
<td>Coordinated Business Experience 200A, B</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>12</td>
</tr>
</tbody>
</table>

Recommended Electives: Selling Fashion Merchandise 141, Selling Home Furnishings 242, Interior and Window Display (T) 224, Retail Accounting 211A, B, Retail Buying Techniques 243, Coordinated Business Experience 200A, B.

### COOPERATIVE PROGRAM IN SECRETARIAL TRAINING (Two Years)

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

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

### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Writing 106A, B or Communications 104A, B</td>
<td>6–8</td>
</tr>
<tr>
<td>Industrial and Business World 135A, 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>
</tbody>
</table>

*Students who have not had shorthand or typewriting in high school should register for Shorthand and Typewriting 100A.*
HOMEMAKING CURRICULUM

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Living 145</td>
<td>2</td>
</tr>
<tr>
<td>Clothing and Textiles 103</td>
<td>3</td>
</tr>
<tr>
<td>Food for the Family 118</td>
<td>2</td>
</tr>
<tr>
<td>Elementary Design 105</td>
<td>2 or 3</td>
</tr>
<tr>
<td>Communications 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>Healthful Living 112</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>10 or 11</td>
</tr>
</tbody>
</table>

(To be selected from history, English, speech, business education, science, and home economics)

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing 205</td>
<td>3</td>
</tr>
<tr>
<td>Costume Design 209</td>
<td>2</td>
</tr>
<tr>
<td>Everyday Nutrition 222</td>
<td>2</td>
</tr>
<tr>
<td>Human Growth and Development 251</td>
<td>3</td>
</tr>
<tr>
<td>(Home Economics Section)</td>
<td></td>
</tr>
<tr>
<td>Home Furnishings 221</td>
<td>2</td>
</tr>
<tr>
<td>Home Nursing 223</td>
<td>2</td>
</tr>
<tr>
<td>American, National and State Governments 230A, B</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
</tbody>
</table>

(To be selected from sociology, business education, speech, English, and home economics)

DIETETICS CURRICULUM

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective Living 145</td>
<td>2</td>
</tr>
<tr>
<td>Foods 111</td>
<td>3</td>
</tr>
</tbody>
</table>

**Students should consult their faculty adviser before making their selections for electives.
<table>
<thead>
<tr>
<th>First Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Clothing and Textiles 103</td>
<td>3</td>
</tr>
<tr>
<td>Elementary Design (art) 105</td>
<td>2 or 3</td>
</tr>
<tr>
<td>Communication 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 101A, B or 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>8 or 4</td>
</tr>
</tbody>
</table>

**Second Year**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sociology 241</td>
<td>3</td>
</tr>
<tr>
<td>Nutrition 211</td>
<td>3</td>
</tr>
<tr>
<td>Advanced Food Preparation and Table Service 311</td>
<td>3</td>
</tr>
<tr>
<td>Biology 100A</td>
<td>4</td>
</tr>
<tr>
<td>Organic Chemistry 306A</td>
<td>4</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Foundations of Western Civilization 100 A, B</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>2</td>
</tr>
</tbody>
</table>

**Third Year**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Economics 220A</td>
<td>3</td>
</tr>
<tr>
<td>Quantity Food Management 312</td>
<td>3</td>
</tr>
<tr>
<td>Bacteriology 312A</td>
<td>4</td>
</tr>
<tr>
<td>Biochemistry 350, 351</td>
<td>4</td>
</tr>
<tr>
<td>American National Government 230 A</td>
<td>3 or 4</td>
</tr>
<tr>
<td>Advanced Nutrition 416</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>10 or 11</td>
</tr>
</tbody>
</table>

**Fourth Year**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Diet and Disease 317</td>
<td>2</td>
</tr>
<tr>
<td>Physiology 211B</td>
<td>3</td>
</tr>
<tr>
<td>Problems in Home Economics Education 300</td>
<td>3</td>
</tr>
<tr>
<td>Institutional Management 423</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>19</td>
</tr>
</tbody>
</table>

Recommended minors: Chemistry and Combined Social Science. Each student is required to work twelve months in a hospital approved by the American Dietetics Association.

Recommended electives: Second year, General Biology 100B; Third year, Home Management 322, Consumer Buying 439; Fourth year, Home Management Practice 324, Experimental Food Study 419, Housing and House Planning 421.
PAPER TECHNOLOGY
(Vocational and Scientific Curriculum)
Sponsored Jointly by the Division of Vocational Education
and
The Department of Chemistry

B.S. Degree

This curriculum is intended to prepare students for work in the paper industry in the technical, manufacturing, sales, and executive areas. It is foundational in nature, and provides for actual work experience during the summers in the paper mills. It is expected that the student will work in the mills at least two of the three summers indicated. The plan operates cooperatively through the use of an advisory committee composed of eight members from the industry and four members from Western Michigan College. Option I stresses preparation for production and technical areas, whereas Option II prepares students for sales and management areas in the paper industry.

OPTION ONE
(Preparation for Technical and Manufacturing Areas in the Paper Industry)

First Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication 104A</td>
<td>4</td>
</tr>
<tr>
<td>Trigonometry and College Algebra 103A</td>
<td>5</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>College Algebra 104A</td>
<td>4</td>
</tr>
<tr>
<td>General Chemistry 100A or 101A</td>
<td>4</td>
</tr>
<tr>
<td>Mechanical Drawing 121 or 221</td>
<td>2-3</td>
</tr>
<tr>
<td>Orientation to Pulp Technology 130A</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication 104B</td>
<td>4</td>
</tr>
<tr>
<td>College Algebra and Analytic Geometry 103B</td>
<td>5</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Analytic Geometry 104B</td>
<td>4</td>
</tr>
<tr>
<td>General Chemistry 100B or 101B</td>
<td>4</td>
</tr>
<tr>
<td>Orientation to Paper Technology 130B</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

Summer

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mill Practice 131</td>
<td>2</td>
</tr>
</tbody>
</table>
### Second Year

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 220A</td>
<td>3</td>
</tr>
<tr>
<td>Calculus 205A</td>
<td>4</td>
</tr>
<tr>
<td>Mechanics, Sound and Heat 103A</td>
<td>5</td>
</tr>
<tr>
<td>Qualitative Analysis 201</td>
<td>4</td>
</tr>
<tr>
<td>Pulp Manufacture 230A</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
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</tr>
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</table>

#### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Economics 220B</td>
<td>3</td>
</tr>
<tr>
<td>Calculus 205B</td>
<td>4</td>
</tr>
<tr>
<td>Electricity and Light 103B</td>
<td>5</td>
</tr>
<tr>
<td>Quantitative Analysis 202</td>
<td>4</td>
</tr>
<tr>
<td>Paper Manufacture 230B</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
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</tr>
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#### Summer

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mill Practice 231</td>
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</tr>
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</table>

### Third Year

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man and Society 101A</td>
<td>4</td>
</tr>
<tr>
<td>*Language and Literature</td>
<td>3-4</td>
</tr>
<tr>
<td>Organic Chemistry 306A</td>
<td>4</td>
</tr>
<tr>
<td>Pulp Testing 332A</td>
<td>2</td>
</tr>
<tr>
<td>Fiber Microscopy 333</td>
<td>1</td>
</tr>
<tr>
<td>Elements of Industrial Chemistry 334A</td>
<td>2</td>
</tr>
</tbody>
</table>

#### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Man and Society 101B</td>
<td>4</td>
</tr>
<tr>
<td>*Language and Literature</td>
<td>3-4</td>
</tr>
<tr>
<td>Organic Chemistry 306B</td>
<td>4</td>
</tr>
<tr>
<td>Paper Testing 332B</td>
<td>2</td>
</tr>
<tr>
<td>Elements of Industrial Chemistry 334B</td>
<td>2</td>
</tr>
<tr>
<td>Wood Chemistry 335</td>
<td>2</td>
</tr>
<tr>
<td>Coloring and Filling of Paper 336</td>
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#### Summer

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mill Practice 331</td>
<td>2</td>
</tr>
<tr>
<td>Mill Inspection Trip 337</td>
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</table>

*Recommended courses: Third year, German; fourth year, Scientific German.*
### Fourth Year

#### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Language and Literature</td>
<td>3-4</td>
</tr>
<tr>
<td>Physical Chemistry 303A</td>
<td>5</td>
</tr>
<tr>
<td>Bleaching, Pulp Purification, and De-inking 432</td>
<td>2</td>
</tr>
<tr>
<td>Auxiliary Equipment for Pulp and Paper Mills 433</td>
<td>1</td>
</tr>
<tr>
<td>Thesis 436A</td>
<td>2</td>
</tr>
<tr>
<td>Chemistry and Technology of Plastics 434</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
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#### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>*Language and Literature</td>
<td>3-4</td>
</tr>
<tr>
<td>Physical Chemistry 403B</td>
<td>5</td>
</tr>
<tr>
<td>Converting of Paper 435</td>
<td>1</td>
</tr>
<tr>
<td>Thesis 436B</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
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</tbody>
</table>

Recommended electives: Slide Rule 200; Engineering Materials 210; Accounting 210; Metal Processing 211; Business Correspondence 232; Business Report Writing 233; Personnel Relations 279; Industrial Cost Accounting 316; Business Law 320; Foremanship Training 353; Time Study and Job Analysis 354; Production Control 356; Introduction to Electronics 361; Electrical Measurement 362; Statistical Methods for Industry 373.

### OPTION TWO

(Preparation for Sales and Management Areas in the Paper Industry)

#### First Year

##### First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Communication 104A</td>
<td>4</td>
</tr>
<tr>
<td>Trigonometry and College Algebra 103A</td>
<td>5</td>
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<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>College Algebra 104A</td>
<td>4</td>
</tr>
<tr>
<td>General Chemistry 100A or 101A</td>
<td>4</td>
</tr>
<tr>
<td>Mechanical Drawing 121 or 221</td>
<td>2-3</td>
</tr>
<tr>
<td>Orientation to Pulp Technology 130A</td>
<td>1</td>
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<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
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##### Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Communication 104B</td>
<td>4</td>
</tr>
<tr>
<td>College Algebra and Analytic Geometry 103B</td>
<td>5</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Analytic Geometry 104B</td>
<td>4</td>
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</table>

*Recommended courses: Third year, German; fourth year, Scientific German.*
<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Chemistry 100B or 101B</td>
<td>4</td>
</tr>
<tr>
<td>Orientation to Paper Technology 130B</td>
<td>1</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>Summer</strong></td>
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<tr>
<td>Mill Practice 131</td>
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**Second Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
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<tbody>
<tr>
<td>Man and Society 101A</td>
<td>4</td>
</tr>
<tr>
<td>Business Studies</td>
<td>3</td>
</tr>
<tr>
<td>General Physics 102A</td>
<td>4</td>
</tr>
<tr>
<td>Qualitative Analysis 201</td>
<td>4</td>
</tr>
<tr>
<td>Pulp Manufacture 230A</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Man and Society 101B</td>
<td>4</td>
</tr>
<tr>
<td>Business Studies</td>
<td>3</td>
</tr>
<tr>
<td>General Physics 102B</td>
<td>4</td>
</tr>
<tr>
<td>Quantitative Analysis 202</td>
<td>4</td>
</tr>
<tr>
<td>Paper Manufacture 230B</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
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<tr>
<td><strong>Summer</strong></td>
<td></td>
</tr>
<tr>
<td>Mill Practice 231</td>
<td>2</td>
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</table>

**Third Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Language and Literature</td>
<td>3-4</td>
</tr>
<tr>
<td>Organic Chemistry 306A</td>
<td>4</td>
</tr>
<tr>
<td>Pulp Testing 332A</td>
<td>2</td>
</tr>
<tr>
<td>Fiber Microscopy 333</td>
<td>1</td>
</tr>
<tr>
<td>Elements of Industrial Chemistry 334A</td>
<td>2</td>
</tr>
<tr>
<td>Business Studies</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>2</td>
</tr>
<tr>
<td><strong>Second Semester</strong></td>
<td></td>
</tr>
<tr>
<td>Language and Literature</td>
<td>3-4</td>
</tr>
<tr>
<td>Organic Chemistry 306B</td>
<td>4</td>
</tr>
<tr>
<td>Paper Testing 332B</td>
<td>2</td>
</tr>
<tr>
<td>Coloring and Filling of Paper</td>
<td>1</td>
</tr>
<tr>
<td>Elements of Industrial Chemistry 335B</td>
<td>2</td>
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<tr>
<td>Business Studies</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>2</td>
</tr>
</tbody>
</table>

**Summer**

- Mill Practice 331 | 2
- Mill Inspection Trip 337 | 1

**Fourth Year**

**First Semester**

- Language and Literature | 3-4
- Auxiliary Equipment for Pulp and Paper Mills 433 | 1
- Chemistry and Technology of Plastics 434 | 2
- Economics 220A | 3
- Business Studies | 5
- Electives | 3

**Second Semester**

- Language and Literature | 3-4
- Converting of Paper 435 | 1
- Economics 220B | 3
- Business Studies | 5
- Electives | 5

Suggested Courses in Business Studies: Accounting 210; Intermediate Accounting 310; Advanced Accounting 410; Industrial Cost Accounting 316; Cost Accounting 411; Business Correspondence 232; Business Report Writing 433; Business Statistics 235; Office Organization 239; Business Law 320; Business Insurance 322; Personnel Administration 436; Management Problems 339; Salesmanship 340; Sales Management 341; Advertising 342; Credit Management 345; Marketing and Market Analysis 347; Purchasing Principles and Practices 348; Office Management 439; Advanced Salesmanship 440; Job Analysis and Training Programs 435.

Recommended Electives: Slide Rule 200; Engineering Materials 210; Metal Processing 211; Personnel Relations 279; Introduction to Industrial Psychology 300; Foremanship Training 353; Time Study and Job Analysis 354; Production Control 356; Introduction to Electronics 361; Electrical Measurement 362; Elementary Statistical Practice 209; Introduction to Statistical Theory 473.

**AIRLINE HOSTESS CURRICULUM**

A program for women desiring a practical educational background to qualify as airline hostesses or for various office positions with commercial airlines. In addition to being high-school graduates, candidates for this curriculum must meet special airline physical requirements pertaining to height, eyesight, voice, and appearance.
First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Communication 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>Physical Science 100A, B or General Biology 100A, B</td>
<td>8</td>
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<tr>
<td>Business Mathematics 120</td>
<td>2</td>
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<tr>
<td>Human Geography 105A</td>
<td>4</td>
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<tr>
<td>Elementary Aviation 110</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
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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>Psychology of Personality 207</td>
<td>4</td>
</tr>
<tr>
<td>First Aid 171</td>
<td>2</td>
</tr>
<tr>
<td>Foods for the Family 218</td>
<td>2</td>
</tr>
<tr>
<td>Personality Development 224</td>
<td>3</td>
</tr>
<tr>
<td>The Airline Hostess 207</td>
<td>2</td>
</tr>
<tr>
<td>Man and Society 101A, B</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
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<tr>
<td>Electives</td>
<td>6</td>
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Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Sociology 241</td>
<td>3</td>
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<tr>
<td>American National Government 230</td>
<td>3</td>
</tr>
<tr>
<td>Business Correspondence 232</td>
<td>3</td>
</tr>
<tr>
<td>Navigation and Communication 301</td>
<td>2</td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
<tr>
<td>Aeronautical Meteorology 302</td>
<td>3</td>
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<tr>
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Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
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<tbody>
<tr>
<td>Airline Traffic 304</td>
<td>3</td>
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<tr>
<td>Airline Operations 305</td>
<td>2</td>
</tr>
<tr>
<td>Airline Administration 306</td>
<td>2</td>
</tr>
<tr>
<td>Pilot Training and Flight Theory 214A, or D</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>21</td>
</tr>
</tbody>
</table>

1. Required one major and two minors.
2. Major to consist of 24 semester hours in one of the following areas: Secretarial, General Business, Personnel, Office Supervision.
3. One minor of 19 hours to be in Aviation.
5. Total of 124 hours for graduation.

Major Sequences

**Secretarial Administration**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Secretarial Science 130A, B</td>
<td>10</td>
</tr>
<tr>
<td>Office Machines 230A, B</td>
<td>4</td>
</tr>
</tbody>
</table>
AIR TRANSPORTATION CURRICULUM

Office Organization and Management 239 ....................................................... 3
Filing Techniques 103 .................................................................................. 2
Personnel Administration 436 ....................................................................... 3
Business Correspondence 232 ....................................................................... 3

or

Business Report Writing 433 ........................................................................... 2
Shorthand 100A, B .......................................................................................... 6
Secretarial Accounting 211A, B ................................................................. 6
Typewriting 101A, B ....................................................................................... 4

(Other courses in business may be elected with consent of adviser.)

Personnel Administration

Management Problems 339 ............................................................................... 3
Personnel Administration 436 ......................................................................... 3
Office Organization and Management 239 .................................................. 3
Business Correspondence 232 ........................................................................ 3

or

Business Report Writing 433 ........................................................................... 2
Electives—Business Courses ......................................................................... 12

Office Supervision

Office Machines 230A, B ................................................................................ 4
Office Organization 239 ................................................................................. 3
Personnel Administration 436 ......................................................................... 3
Filing Techniques 103 .................................................................................... 2
Typewriting 101A, B ....................................................................................... 4
Business Correspondence 232 ....................................................................... 3

or

Business Report Writing 433 ........................................................................... 2
Electives—Business Courses ......................................................................... 5

General Business

Any courses in business.

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 prepare men for various positions with commercial airlines and aircraft industries. 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 transportation. Sufficient work is given in mechanics to meet the requirements for a CAA airplane and engine mechanic’s 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>
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</thead>
<tbody>
<tr>
<td>College Writing 106A, B</td>
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<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Speech 105A</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics of Buying and Investment 200</td>
<td>2</td>
</tr>
<tr>
<td>Aircraft Structures 103</td>
<td>3</td>
</tr>
<tr>
<td>Elementary Aviation 110</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
<tr>
<td>Engine Assembly and Disassembly 106</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>5</td>
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</tbody>
</table>
Second Year

Principles of Economics 220A, B ........................................ 6
Accounting 210A or ...................................................... 3
Industrial Cost Accounting 316A, B .................................. 4
General Psychology 200 .................................................. 3
Psychology of Personality 207 .......................................... 4
Survey of American Government 234 ............................... 2
*Business Statistics 235 ................................................. 3
Pilot Training and Flight Theory 214A ............................... 2
Aircraft Sheetmetal 102 .................................................. 2
Welding 274A ............................................................... 2
Aircraft Hydraulics and Instruments 200 ......................... 3
Physical Education ......................................................... 2

Third Year

Industrial Organization and Management 343 ....................... 3
*Cost Accounting 411 ..................................................... 3
Labor Problems 421A ..................................................... 2
Business Correspondence 232 .......................................... 3
*Income Tax Accounting 412 .......................................... 3
Navigation and Communications 301 ............................... 2
Aeronautical Meteorology 302 ......................................... 3
Carburetion and Lubrication 104 ..................................... 2
Engine Overhaul 206 ..................................................... 3
Electricity and Ignition 105 ............................................. 3
Electives ........................................................................ 5

Fourth Year

Personnel Administration 436 ........................................... 3
Airport Selection, Layout, and Management 303 ................. 3
Airline Traffic 304 .......................................................... 3
Airline Operation 305 ....................................................... 2
Airline Administration 306 .............................................. 2
Air Traffic Control Procedures 307 .................................. 2
Engine Operation 204 ...................................................... 3

*The following courses may be substituted for the starred courses:
  237 Small Business Management
  340 Salesmanship
  341 Sales Management
  342 Advertising
  345 Credit Management
  433 Business Report Writing
  347 Marketing
  348 Purchasing Principles
  344 Industrial Management Problems

Aircraft Maintenance 203 ................................................. 3
Propellers 205 ................................................................ 2
INDUSTRIAL SUPERVISION CURRICULUM

Personnel Relations 279 ........................................ 3
Electives .............................................................. 6

Note: The following courses are optional if a student does not intend to qualify for his CAA—A and E license; however, a major of at least 40 semester hours in aviation must be met.

203 Aircraft Maintenance
206 Engine Overhaul
104 Carburetion and Lubrication
274A Welding
208 Jet Engines

Total Semester Hours for Graduation ........................................ 128
Major—Aviation .............................................................. 40
First Minor—Business Administration ...................................... 21
Second Minor—Psychology, Economics or Industrial Supervision ...... 15

INDUSTRIAL SUPERVISION CURRICULUM

B.S. Degree

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

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

Third 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 207</td>
<td>4</td>
</tr>
<tr>
<td>Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Fundamentals of Industrial Supervision 353</td>
<td>2</td>
</tr>
<tr>
<td>Business Correspondence 232</td>
<td>3</td>
</tr>
<tr>
<td>Modern Marriage 245</td>
<td>2</td>
</tr>
<tr>
<td>Plant Maintenance and Safety 355</td>
<td>2</td>
</tr>
<tr>
<td>Survey of American Government 234</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>6</td>
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</table>

Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Occupational Analysis and Classification 404 or</td>
<td>2</td>
</tr>
<tr>
<td>Vocational Psychology 406</td>
<td>2</td>
</tr>
<tr>
<td>Personnel Administration 436</td>
<td>3</td>
</tr>
<tr>
<td>Labor Problems 421A, B</td>
<td>4</td>
</tr>
<tr>
<td>Industrial Cost Accounting 316A, B</td>
<td>4</td>
</tr>
<tr>
<td>Quality Control 354</td>
<td>3</td>
</tr>
<tr>
<td>Production Control 356</td>
<td>3</td>
</tr>
<tr>
<td>Introduction to Industrial Psychology 300</td>
<td>2</td>
</tr>
</tbody>
</table>
Business Report Writing 433 ............................................. 2
Time and Motion Study 358 .............................................. 3
Electives .................................................................. 8

Total of 128 semester hours for graduation.
1. Major—30 to 35 semester hours in technical shop work.
2. First minor—16 hours in industrial supervision.
3. Second minor—15 hours in social studies, economics, mathematics, psychology, or business.

AIRCRAFT MAINTENANCE ENGINEERING (Two Years)

This two-year curriculum is offered to students who wish to enter the field of aviation for their life work. Special preparation is given for service and maintenance positions with the airlines, repair depots, and commercial and private owners of aircraft.

Twenty-five to thirty hours per week in shop work and related subjects are offered in a modern, well-equipped, government-approved repair station located in the Mechanical Trades Building. All repair work on airplane engines and aircraft structures is supervised by licensed mechanic instructors. A major part of the instruction is given on aircraft to be re-licensed after repairs and the overhaul are completed. Facilities leased at the Municipal Airports 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.

First Year

First Semester

Elementary Aviation 110 .............................................. 3
Aircraft Structures 103 .............................................. 3
Applied Mathematics 112 ................................ .......... 3
Basic Metal Work 175 ................................................. 2
Communication 104A .................................................. 4
Welding 274A .............................................................. 2

Second Semester

Engine Assembly and Disassembly 106 ................................ 3
Applied Physics 173 .................................................... 3
Welding 274B .............................................................. 2
Communication 104B .................................................... 4
Drawing 170A ............................................................ 2
Electricity 174 ............................................................ 2
REFRIGERATION AND AIR CONDITIONING

Second Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft Hydraulics and Instruments</td>
<td>3</td>
</tr>
<tr>
<td>Aircraft Sheetmetal</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Engine Overhaul</td>
<td>3</td>
</tr>
<tr>
<td>Jet Engines</td>
<td>2</td>
</tr>
<tr>
<td>Electricity and Ignition</td>
<td>3</td>
</tr>
<tr>
<td>Carburetion and Lubrication</td>
<td>2</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inspection Regulations</td>
<td>2</td>
</tr>
<tr>
<td>Personnel Relations</td>
<td>3</td>
</tr>
<tr>
<td>Engine Operations</td>
<td>3</td>
</tr>
<tr>
<td>Aircraft Maintenance</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Aircraft Sheetmetal</td>
<td>2</td>
</tr>
<tr>
<td>Propellers</td>
<td>2</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</td>
<td>4</td>
</tr>
<tr>
<td>Pilot Training A, B, C, or D</td>
<td>2</td>
</tr>
</tbody>
</table>

---

REFRIGERATION AND AIR CONDITIONING

REFRIGERATION AIR CONDITIONING, HEATING TECHNOLOGY (Two Years)

This curriculum is offered to students who wish to enter the field of refrigeration and air conditioning in such capacities as sales engineers, commercial installers, or repairmen. The refrigeration phase covers both domestic and commercial systems with emphasis placed on heat load calculation and selection of equipment.

The air conditioning and heating phase covers the cooling, heating, humidification, dehumidification, cleansing and distribution of air for healthful living. Emphasis is placed on selection of equipment, installation, and service.

First Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Domestic Refrigeration 115A</td>
<td>5</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
<tr>
<td>Communication 104A</td>
<td>4</td>
</tr>
</tbody>
</table>
Second Semester

Commercial Refrigeration 115B ........................................ 5
Applied Physics 173 ....................................................... 3
Electricity 174 ............................................................. 2
Intermediate Algebra 100A ................................................ 3
Communication 104B ....................................................... 4

Second Year

First Semester

Air Conditioning and Heating 215A .................................. 5
Technical Physics 273 ....................................................... 3
Trigonometry 100C .......................................................... 3
Sheetmetal 275 ............................................................. 2
Basic Metal Work 175 ...................................................... 2
Physical Education .......................................................... 1

Second Semester

Air Conditioning and Heating 215B .................................. 5
Principles of Industrial Electronics 272 ......................... 3
Personnel Relations 279 .................................................. 3
Welding 274A ............................................................... 2
Testing of Materials 178 .................................................. 3

DRAFTING—DESIGN TECHNOLOGY (Two Years)

A two-year curriculum offered to students wishing to enter the specialized fields of drafting and design.

First Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafting 124A</td>
<td>5</td>
</tr>
<tr>
<td>Basic Metal Work 175</td>
<td>2</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Communications 104A</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafting 124B</td>
<td>5</td>
</tr>
<tr>
<td>Machine Shop 176</td>
<td>2</td>
</tr>
<tr>
<td>Intermediate Algebra 100A</td>
<td>3</td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
</tr>
<tr>
<td>Communications 104B</td>
<td>4</td>
</tr>
</tbody>
</table>
PRINTING TECHNOLOGY

Second Year

First Semester

Drafting 224A ........................................ 5
Technical Physics 273 ................................ 3
Trigonometry 100C .................................. 3
Basic Metallurgy 231 ................................. 3
Sheetmetal 275 ....................................... 2
Physical Education .................................... 1

Second Semester

Drafting 224B ........................................ 5
Personnel Relations 279 ............................ 3
Welding 274A ......................................... 2
Testing of Materials 178 ............................ 3
Office Machines 230A ............................... 2
or
Production Control 356 ............................. 3

PRINTING TECHNOLOGY (Two Years)

This two-year curriculum is offered to students who wish to enter the printing field. Practical work experience and essential related knowledge are provided in the various areas of printing. Students may elect sufficient business courses to enable them to manage and operate their printing plant.

First Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing 125</td>
<td>5</td>
</tr>
<tr>
<td>Communications 104A</td>
<td>4</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Basic Metal Work 175</td>
<td>2</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printing 127</td>
<td>5</td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
<tr>
<td>Communications 104B</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>
MACHINE TOOL TECHNOLOGY (Two Years)

This two-year curriculum is offered to students who wish to enter the field of industrial machine tool specialization.

First Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Machine Shop 130A</td>
<td>5</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
<tr>
<td>Communications 104A</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Industrial Machine Shop 130B</td>
<td>5</td>
</tr>
<tr>
<td>Intermediate Algebra 100A</td>
<td>3</td>
</tr>
<tr>
<td>Drawing 170B</td>
<td>2</td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
</tr>
<tr>
<td>Communications 104B</td>
<td>4</td>
</tr>
</tbody>
</table>

Second Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tool Fabrication 230</td>
<td>5</td>
</tr>
<tr>
<td>Technical Physics 273</td>
<td>3</td>
</tr>
<tr>
<td>Trigonometry 100C</td>
<td>3</td>
</tr>
<tr>
<td>Tool and Die Designing 270</td>
<td>2</td>
</tr>
</tbody>
</table>
RADIO AND TELEVISION TECHNOLOGY (Two Years)

Basic training and field experience are provided to master the skills necessary to repair, install, and service all types of radio communications and television equipment. Sufficient study is given to qualify for various commercial radio operators' licenses required by the Federal Communications Commission.

First Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory Radio 135A</td>
<td>5</td>
</tr>
<tr>
<td>Electricity 174</td>
<td>2</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Communications 104A</td>
<td>4</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radio Transmission 135B</td>
<td>5</td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
</tr>
<tr>
<td>Intermediate Algebra 100A</td>
<td>3</td>
</tr>
<tr>
<td>Sheetmetal 275</td>
<td>2</td>
</tr>
<tr>
<td>Communications 104B</td>
<td>4</td>
</tr>
</tbody>
</table>

Second Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Principles of Television 235A</td>
<td>5</td>
</tr>
<tr>
<td>Trigonometry 100C</td>
<td>3</td>
</tr>
<tr>
<td>Technical Physics 273</td>
<td>3</td>
</tr>
<tr>
<td>Machine Shop 176</td>
<td>2</td>
</tr>
<tr>
<td>Principles of Industrial Electronics 272</td>
<td>3</td>
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</tbody>
</table>
SECOND SEMESTER

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commercial Radio and Television Techniques 235B</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Welding 274A</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Testing of Materials 178</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**ELECTRICAL AND ELECTRONICS TECHNOLOGY (Two Years)**

This curriculum is offered to students who wish to prepare themselves for a gainful occupation in the electrical fields. The curriculum consists of a study of the generation, transmission and utilization of electrical energy by means of direct and alternating currents. Emphasis is placed upon the fundamental principles and practical applications of electrical circuits and apparatus as employed in industry, communication, and the servicing of electrical appliances.

**First Year**

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Metal Work 175</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Communications 104A</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Fundamentals of Electricity 145</td>
<td>4</td>
<td></td>
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</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intermediate Algebra 100A</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Direct Current Electricity 146</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Communications 104B</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Drawing 170B</td>
<td>2</td>
<td></td>
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</tbody>
</table>

**Second Year**

**First Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trigonometry 100C</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Technical Physics 273</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Welding 274A</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Alternating Current Electricity 245</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Machine Shop 176</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
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</tbody>
</table>

**Second Semester**

<table>
<thead>
<tr>
<th>Course</th>
<th>Sem</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Business Management 231</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>
AUTOMOTIVE TECHNOLOGY (Two Years)

This two-year curriculum is offered to students who wish to specialize in the field of automotive maintenance. The curriculum consists of practical work experience in repairing, inspecting, and servicing automobiles.

First Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Engines and Accessories 155A</td>
<td>5</td>
</tr>
<tr>
<td>Applied Mathematics 112</td>
<td>3</td>
</tr>
<tr>
<td>Communications 104A</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Electricity 174</td>
<td>2</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
</tbody>
</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Chassis and Running Gear 155B</td>
<td>5</td>
</tr>
<tr>
<td>Intermediate Algebra 100A</td>
<td>3</td>
</tr>
<tr>
<td>Basic Metal Work 175</td>
<td>2</td>
</tr>
<tr>
<td>Applied Physics 173</td>
<td>3</td>
</tr>
<tr>
<td>Communications 104B</td>
<td>4</td>
</tr>
</tbody>
</table>

Second Year

First Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Analysis 255A</td>
<td>5</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>2</td>
</tr>
<tr>
<td>Machine Shop 176</td>
<td>2</td>
</tr>
<tr>
<td>Basic Metallurgy 231</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education</td>
<td>1</td>
</tr>
<tr>
<td>Trigonometry 100C</td>
<td>3</td>
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</table>

Second Semester

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Automotive Engine Overhaul 255B</td>
<td>5</td>
</tr>
<tr>
<td>Sheet Metal 275</td>
<td>2</td>
</tr>
<tr>
<td>Technical Physics 273</td>
<td>3</td>
</tr>
<tr>
<td>Testing of Materials 178</td>
<td>3</td>
</tr>
<tr>
<td>Welding 274A</td>
<td>2</td>
</tr>
</tbody>
</table>

AUTOMOTIVE TRANSPORTATION CURRICULUM

B.S. Degree

The Automotive Transportation curriculum is intended for those who wish to prepare themselves for employment in automotive servicing sta-
tions and automotive manufacturing industries. The curriculum is especially planned to train personnel for such positions as automotive service managers, automotive salesmen, and various supervisory and administrative positions in automotive manufacturing industries.

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communications 104A, B</td>
<td>8</td>
</tr>
<tr>
<td>Physical Science 100A, B</td>
<td>8</td>
</tr>
<tr>
<td>Automotive Engine and Accessories 155A</td>
<td>5</td>
</tr>
<tr>
<td>Automotive Body and Running Gear 155B</td>
<td>5</td>
</tr>
<tr>
<td>Electricity 174</td>
<td>2</td>
</tr>
<tr>
<td>Machine Shop 176</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
</tbody>
</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Economics 220A, B</td>
<td>6</td>
</tr>
<tr>
<td>Automotive Electricity and Ignition 255A</td>
<td>5</td>
</tr>
<tr>
<td>Automotive Analysis 255B</td>
<td>5</td>
</tr>
<tr>
<td>General Psychology 200</td>
<td>3</td>
</tr>
<tr>
<td>Applied Psychology 204</td>
<td>2</td>
</tr>
<tr>
<td>Business Correspondence 232</td>
<td>2</td>
</tr>
<tr>
<td>Drawing 170A</td>
<td>3</td>
</tr>
<tr>
<td>Welding 274A</td>
<td>2</td>
</tr>
<tr>
<td>Physical Education</td>
<td>2</td>
</tr>
<tr>
<td>Survey of American Government 234</td>
<td>2</td>
</tr>
</tbody>
</table>

Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personnel Relations 279</td>
<td>3</td>
</tr>
<tr>
<td>Quality Control 354</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Cost Accounting 316A, B</td>
<td>4</td>
</tr>
<tr>
<td>Psychology of Personality 207</td>
<td>4</td>
</tr>
<tr>
<td>Plant Maintenance 355</td>
<td>2</td>
</tr>
<tr>
<td>Sheetmetal 275</td>
<td>2</td>
</tr>
<tr>
<td>Sales Management 341</td>
<td>3</td>
</tr>
<tr>
<td>Salesmanship 340</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>8</td>
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</tbody>
</table>

Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Semester Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time and Motion Study 358</td>
<td>3</td>
</tr>
<tr>
<td>Production Control 356</td>
<td>3</td>
</tr>
<tr>
<td>Labor Problems 321A, B</td>
<td>4</td>
</tr>
<tr>
<td>Introduction to Industrial Psychology 300</td>
<td>2</td>
</tr>
<tr>
<td>Occupational Analysis and Classification 404 or Vocational Psychology 406</td>
<td>2</td>
</tr>
<tr>
<td>Advertising 343</td>
<td>3</td>
</tr>
<tr>
<td>Credit Management 345</td>
<td>3</td>
</tr>
<tr>
<td>Purchasing Principles and Practices 348</td>
<td>3</td>
</tr>
</tbody>
</table>
MILITARY SCIENCE AND TACTICS

Fundamentals of Industrial Supervision 353 ........................................ 2
Industrial Organization and Management 343 ........................................ 3
Automotive Service Management 370 ....................................................... 2
Electives ................................................................................................. 2

Total Semester Hours for Graduation—128
  First Major—Automotive—32 semester hours
  Second Major—Business—25 semester hours
  First Minor—Industrial Supervision—16 semester hours
  Second Minor—Economics or Psychology—15 semester hours

MILITARY SCIENCE AND TACTICS

A four-year curriculum designed for students who wish to prepare themselves for a position of leadership in the Armed Forces.

First Year

Military Science 101 ................................................................. 2
Military Science 102 ................................................................. 2

Second Year

Military Science 201 ................................................................. 2
Military Science 202 ................................................................. 2

Third Year

Military Science 301 ................................................................. 4
Military Science 302 ................................................................. 4
  Attendance at six-week ROTC Summer Camp at end of third year is a
  part of the required course.

Fourth Year

Military Science 401 ................................................................. 4
Military Science 402 ................................................................. 4
DESCRIPTION OF UNDERGRADUATE COURSES

DIVISION OF BASIC STUDIES .................................................. 179

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DIVISION OF BASIC STUDIES
Elsworth P. Woods, Head

The Division of Basic Studies is responsible for coordinating and administering the basic courses in general education. It functions through an Advisory Council which is responsible to the Educational Policies Committee. Within each subject area there is a planning committee which is responsible to the Advisory Council and the Head of the Division. The chairman of each planning committee is chosen by committee members subject to the approval of the Department Heads within the area and the Head of the Division of Basic Studies. Staff members in this division are also members of another department in the college.

The Basic Courses offered under the division include the following areas: (Courses described on pages indicated)

Communications
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The requirements in regard to the courses are found on page indicated.
DIVISION OF FINE ARTS
Lydia Siedschlag, Chairman

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

ART

LYDIA SIEDSCHLAG
HARRY S. HEFNER
JOHN G. KEMPER
HAZEL I. Paden
ELIZABETH SMUTZ
ELAINE L. STEVENSON

Many courses in the Department of Art are designed for students not particularly talented in art, but interested in finding a field of art in which they may do well. Suggested courses which require no prerequisite other than a marked desire to participate in art experiences are: Elementary Design 105, Art Structure 106, Illustrative Handwork 107, Lettering and Poster Making 108, Industrial Art 110, Modeling 211, and Art Appreciation 113A, B.

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

Two points of comparative Arts 212 may be substituted for Art Appreciation 113A and B.

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

Advanced Figure 305, Advanced Design 309, Advanced Composition 308, and electives to make 40 hours.

Art Observation 340 and Supervision 441 are offered as required education courses for art majors.

105 Elementary Design

A fundamental course in art developing design and color theory through problems of various media.

Each semester. Mr. Hefner, Miss Paden. Two or three semester hours.

106 Art Structure

A course giving drawing experience, lettering, figure, color, and design.

Each semester. Miss Stevenson, Miss Paden. Three semester hours.
107 Illustrated Handwork
An elementary craft course with manual problems related to interests in
the primary grades.
Each semester. Mr. Hefner. Three semester hours.

108 Lettering and Poster Making
Emphasis is on lettering and poster making for school and commercial use.
Second semester. Mr. Kemper. Two semester hours.

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

112 Learning Through Art
A course designed for the grade teacher. Art problems are related to the
curricula. Posters, programs, bulletins, decorations for special days are
handled seasonally. No prerequisites.
Each semester. Miss Smutz, Miss Kilroe. Three semester hours.

113A Art Appreciation
This course aims to develop aesthetic judgment. A brief survey of the
history of painting, with special attention to modern painting, is given.
First semester. Mr. Kemper. One semester hour.

113B Art Appreciation
A brief survey of the history of sculpture, architecture, and minor arts is
given. Prerequisite: Art Appreciation 113A.
Second semester. Mr. Kemper. One semester hour.

205 Figure Drawing
Anatomy of the human figure is studied. Rapid sketches, line drawings,
and memory sketches are made, after which the work progresses from
gesture lines, shadow edges, planing and contour drawing to finished draw-
ings. Mediums—pencil and charcoal. Prerequisite: Art Structure 106 or
consent of instructor.
Second semester. Mr. Kemper. Three semester hours.

208 Art Composition
A study of composing within a given space: figures, landscapes, flowers,
birds, and animals, emphasizing unity, spacing, distribution of dark and
light; study of tone relationship and color harmony. Mediums used are
show-card paints, charcoal, pen and ink, and linoleum cuts. Christmas cards
for the annual sale are designed in this class. Prerequisite: Art Structure
106, Elementary Design 105.
Second semester. Miss Paden. Three semester hours.
211 Modeling
The course includes the designing, building, and casting of pottery; and the use of the potter's wheel and kiln for modeling with clay, firing, and glazing. Modeling in the round and bas-relief may be substituted.
First semester. Mr. Hefner. Three semester hours.

212 Handicraft
Includes problems in screen painting, metal, wood, leather tooling, and other handwork. Emphasis on technique. Prerequisite: Art Structure 106, Industrial Art 110, or consent of instructor. A fee of two dollars will be charged for materials.
Mr. Hefner. Three semester hours.

213A History of Art
Study of primitive, Egyptian, Chaldean, Greek, and Roman architecture, sculpture, and painting.
First semester. Mr. Kemper. Three semester hours.

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

214 Commercial Art
This course is designed to offer special work in the study of advertising art. Posters for school, for business activities, lettering, typography, packaging design, and other related subjects are done. Various techniques and media, as well as technical methods used in the reproduction of art work are discussed. Prerequisite: Elementary Design 105 and Art Structure 106.
First semester. Mr. Kemper. Three semester hours.

215 Comparative Arts
The course takes literature, music, and art and endeavors to point out to students, not necessarily specialists in any of the arts, the common core which permeates all the arts. Common expressions such as organization of form, rhythm, repetition, unity, harmony, and tonality are made meaningful through discussion and demonstration by a member of the English, the Music, and the Art Department.
Dr. Matthews, Mr. Kemper, Miss Anton.
Four semester hours. Two hours of credit may be applied on a major or minor in any two of the three arts—Literature, Music or Art.
Each semester.

220 Stage Design
A course for art and speech majors. Class makes practical use of knowledge of scene painting, lighting, and mechanics of staging, in con-
connection with the midwinter play.
First semester. Two semester hours. Dr. York.

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

224 Interior and Window Display
A studio course for art and cooperative retailing students. Window and store display art is studied with emphasis upon color, design, and lettering as related to displays. Attention is given to sources for display materials and services.
Mr. Kemper. Three semester hours.

305 Advanced Figure Drawing
A continuation of Figure Drawing 205, developing technical skill and imagination. Prerequisite: Figure Drawing 205.
Not given 1953-4. Miss Siedschlag. Two semester hours.

306 Demonstration Drawing
A required course for Art majors who expect to teach. Methods and teaching devices are stressed and opportunity given to experiment with new materials. Tentative course of study is made. Prerequisite: Art Structure 106.
Second semester. Miss Paden. Two semester hours.

308 Advanced Art Composition
The work centers about the study of prints and print making, etching, woodblock printing, and oil painting. Prerequisite: Art Structure 106, Elementary Design 105, Art Composition 208.
Second semester. Mr. Kemper. Two semester hours.

309 Advanced Design
First semester. Mr. Hefner. Three semester hours.

Open to Qualified Juniors, Seniors and Graduates

410 Painting
Painting of still life and landscape, in the studio and outdoors. Water colors are used. This course involves the study of composition, color value, and technique. Prerequisite. Art Structure 106, Elementary Design 105, Art Composition 208, or consent of instructor.
First semester. Miss Paden. Two semester hours.
414 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 working drawings.
Second semester. Mr. Kemper. Three semester hours.

441 Art Supervision
A study of the 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, B, Commercial Art 214.
Second semester. Miss Smutz. Three semester hours.

MUSIC

The Department of Music offers courses leading to the Bachelor of Music and Bachelor of Arts degree. The Bachelor of Arts degree is defined on page 97 as to both purposes and requirements. The Bachelor of Music degree is different in that it is very highly professional in its requirement aims and permits the student to do much more of his work in the field of music. Detailed information relative to the Bachelor of Music degree may be had by writing for a Music Supplement Catalog.

Those students who want a music major with teaching certification should work for the Bachelor of Music degree.

Those students who want a music major without teaching certification may work for the Bachelor of Arts degree. Such music majors must complete 16 semester hours of Applied Music (through level 6 in their major performance field); Freshman Theory 106A, B; Advanced Harmony 206A, B; Music History 375A, B; Style and Structure 310A; and one semester of an advanced theory or music literature course.

Minors in music must complete Freshman Theory 106A, B; Advanced Music Reading and Ear-Training 205A, B; Elementary School Methods and Materials 208A, B or Junior and Senior High School Methods and Materials 301A, B or Instrumental Methods and Materials 209A, B.
Credit from another institution in any branch of theory will be accepted only upon satisfactory completion of an examination covering the field for which the student desires transferred credit. All transferred credit is tentative and is conditioned upon the successful completion of a semester's work at Western Michigan College of Education. No credit hours exceeding the number granted for parallel work at Western Michigan College of Education will be accepted for transfer from another institution.

Western Michigan College of Education is a member of the National Association of Schools of Music. The requirements for entrance and for graduation as set forth in this catalog are in accordance with the published regulations of the National Association of Schools of Music.

**MUSIC COURSES**

100A *Music for Classroom Teachers*

This course is designed for the classroom teacher with or without previous music training. It deals with basic musical experiences, some work in sight-singing, music in general education, relationship of music to other subject areas, classroom problems in music education, e.g., listening, singing activities, place of performance, use of radio, and music of the movies. The song materials studied can later be used in directed teaching.

First semester. Dr. Beloof. Three semester hours.

100B *Music for Classroom Teachers*

A continuation of 100A.

Second semester. Dr. Beloof. Three semester hours.

106A *Freshman Theory*

A study of all triads, inversions, dominant and secondary seventh chords, embellishments and modulation to closely related keys. Practical application is emphasized by work in ear training, music reading, melodic, harmonic, and rhythmic dictation, and keyboard harmony. Composing of original music is encouraged.

First semester. Miss Green. Three semester hours.

106B *Freshman Theory*

A continuation of 106A.

Second semester. Miss Green. Three semester hours.

107A *Music Appreciation*

This course, primarily a listening one, is designed for students wishing a general cultural course to increase their knowledge and discrimination of music. Various types of music from the folk song and dance to the symphony, oratorio, and opera are presented and discussed. Concerts and outstanding radio programs are related to the course.

First semester. Mr. Frey. Two semester hours for a campus course; three semester hours by extension.
107B Music Appreciation
A continuation of 107A.
Second semester. Mr. Frey. Two semester hours.

109 Rural School Music Methods and Materials
This course consists of sight reading of unison songs, introduction of part singing, organization of music work in the school and the community. The importance and value of music in the life of school and community are emphasized; materials for the school music program, community singing, and recreation are considered.
First semester. Mrs. Snyder. Three semester hours.

110 Elementary Acoustics
Designed for music majors to acquaint them with the science of sound. No science prerequisite.
Each semester. Dr. Bradley. Two semester hours.

116A Voice Class
This course deals with the fundamental processes of breath control and tone production, provides some individual instruction and an opportunity to study standard song literature. Recommended to voice majors to gain a knowledge of voice class procedures and to candidates for certification as general supervisors to prepare for the basic achievement examinations.
First semester. Mrs. Snyder. One semester hour.

116B Voice Class
A continuation of 116A.
Second semester. Mrs. Snyder. One semester hour.

117A Piano Class
A course designed for students with little or no background in piano. Opportunity is provided for some individual instruction. Recommended to piano majors to gain a knowledge of piano class procedure and to elementary education majors.
First semester. Mrs. Beloof. One semester hour.

117B Piano Class
A continuation of 117A.

118A String Class
The study of a stringed instrument to the extent that the student can demonstrate a knowledge of the basic fundamentals of that instrument. The study of a limited repertoire for that instrument.
First semester. Mr. LaMariana. One semester hour.
118B  String Class  
A continuation of 118A.  
Second semester.  Mr. LaMariana.  One semester hour.

122  English Diction and Song Literature  
Required of all students whose field of concentration is voice. English  
diction and song literature are studied as a class; opportunity is provided  
for solo performance.  
First semester.  Mrs. Faustman.  No credit.

205A  Advanced Music Reading and Ear-Training  
Further work in music reading and ear-training by use of modulation to  
both closely and distantly related keys. Further work in melodic, harmonic  
and rhythmical dictation and aural analysis. Prerequisite: Music 106A, B.  
First semester.  Miss Green.  Two semester hours.

205B  Advanced Music Reading and Ear-Training  
A continuation of 205A.  
Second semester.  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.  Miss Green.  Three semester hours.

206B  Advanced Harmony  
A continuation of 206A.  
Second semester.  Miss Green.  Three semester hours.

207A  Music Literature  
Designed to satisfy the needs of music majors and minors. Some formal  
analysis and historical background of the material studied are included.  
The larger music forms are stressed in the selection of material.  
First semester.  Dr. Matthews.  Three semester hours.

207B  Music Literature  
A continuation of 207A.  
Second semester.  Dr. Matthews.  Three semester hours.

208A  Elementary School Methods and Materials  
The purposes, problems, and procedures of the first six grades, develop-  
ment 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 chil-
dren, the child voice, and directed listening.
First semester. Miss Doty. Three semester hours.

208B Elementary School Methods and Materials
A continuation of 208A.
Second semester. Miss Doty. Three semester hours.

209A Instrumental Methods and Materials
A discussion of the teaching methods for classes in strings and winds,
and an evaluation of the materials suitable for these classes and small and
large ensembles.
First semester. Mr. LaMariana. Three semester hours.

209B Instrumental Methods and Materials
A continuation of 209A.
Second semester. Mr. LaMariana. Three semester hours.

216A Advanced Voice Class
A continuation of 116A, B. Further application of the principles of sing-
ing through more difficult song literature. Recommended to candidates for
certification as general supervisors to prepare for basic achievements exam-
inations. Prerequisite: Voice Class 116A, B.
First semester. Mrs. Snyder. One semester hour.

216B Advanced Voice Class
A continuation of 216A.
Second semester. Mrs. Snyder. One semester hour.

217A Advanced Piano Class
A continuation of 117A, B. Recommended to elementary education ma-
jors. Prerequisite: Piano Class 117A, B.
First semester. Mrs. Beloof. Three semester hours.

217B Advanced Piano Class
A continuation of 217A.
Second semester. Mrs. Beloof. Three semester hours.

219A Woodwind Class
The study of four woodwind instruments—flute, oboe, clarinet, and bas-
soon—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. Mr. Kyser. One semester hour.
219B Woodwind Class
A continuation of 219A.
Second semester. Mr. Kyser. One semester hour.

222 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. Mr. Adams. No credit.

301A Junior High School Methods and Materials
This course involves a study of the place of music in the education of
adolescent youth, the changing voice, voice testing and classification, sing-
ing and instrumental ensembles, the place of music in all types of integrat-
ing courses for secondary schools, and class instruction in voice and the
various instruments.
First semester. Mr. Frey. Three semester hours.

301B Senior High School Methods and Materials
A continuation of 301A on the senior-high-school level.
Second semester. Mr. Frey. Three semester hours.

305A Counterpoint
Modal and harmonic counterpoint as exemplified by the composers of the
fifteenth, sixteenth, seventeenth, and early eighteenth centuries. Modern
counterpoint. Practical application through the writing of strict counter-
point in the five species—double counterpoint, obligatos, descants, canons,
and fugues. Prerequisite: Advanced Harmony 206A, B.
First semester. Dr. Matthews. Three semester hours.

305B Counterpoint
A continuation of 305A.
Second semester. Dr. Matthews. Three semester hours.

306A Composition
Original work in composition, starting with the smaller forms in both the
vocal and instrumental fields. Prerequisite: Advanced Harmony 206A, B.
First semester. Dr. Matthews. Three semester hours.

306B Composition
A continuation of 306A.
Second semester. Dr. Matthews. Three semester hours.

309S Instrumental Organization and Administration in Public Schools
Techniques of marching band, small and large instrumental ensembles.
The organization of equipment, classes, schedules, and library management
and materials. The development of the elementary and secondary school
instrumental programs.
Mr. Meretta. Two semester hours.
310A Style and Structure
A study of the finest musical compositions with particular reference to design. Tracing the development of musical form from the phrase through the sonata form. Particular emphasis on the eighteenth- and nineteenth-century composers. Prerequisite: Advanced Harmony 206A, B.
First semester. Dr. Matthews. Three semester hours.

310B Contemporary Music Literature
Survey of contemporary music literature through listening. Some study of the chronological evolution of modern structure and harmony. Special emphasis on idiom, neo-classicism, polytonality, and atonality.
Second semester. Dr. Matthews. Three semester hours.

311A Choral Conducting
A beginning course 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. Mrs. Snyder. One semester hour.

311B Instrumental Conducting
A continuation of 311A. Application is made by use of easy literature for instrumental ensembles.
Second semester. Mr. Meretta, Mr. Stulberg. 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. 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. Mr. Brown. One semester hour.

320B Brass Class
A continuation of 320A.
Second semester. Mr. Brown. One semester hour.

321 Percussion Class
A survey of the requirements for a percussion player. The student is required to play in an acceptable manner at least one percussion instrument and to demonstrate a working knowledge of three others.
Second semester. Mr. Meretta. One semester hour.
322 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 pro-
vided for solo performance.
   Second semester. Mr. Adams. No credit.

323 Major Performance Literature
   Required of applied-music (except voice) majors for last two years. Lit-
erature for the major performance instrument is studied as a class, and
opportunity is provided for solo performance. (This course may be repeated
for credit not to exceed a total of four semester hours.)
   Each semester. The Staff. One semester hour.

324 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 pro-
vided for solo performance.
   Second semester. Mrs. Faustman. No credit.

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 oratoria; crystallizing of schools of composition and
the place of various composers in this process; use of nationalism in music
and its transition into the music of the twentieth century.
   First semester. Dr. Matthews. Three semester hours.

357B History of Music
   A continuation of 357A.
   Second semester. Dr. Matthews. Three semester hours.

Open to Qualified Juniors, Seniors and Graduates

401 Philosophy and History of Music Education
   A course designed to acquaint the student with the history of the develop-
ment of music education in the United States and how this development is
the reflection of a growing philosophy of music education.
   Miss Green. Two semester hours.

403 Psychology of Music Education
   The purpose of this course is to develop understanding of such problems
as: differences in Musical ability, various music tests, attitudes toward
music and behavior in musical organizations. Materials for the course are
largely drawn from Educational Psychology.
   Dr. Beloof. Two semester hours.
407 Music of Wagner and Beethoven
A course designed to acquaint one with the music of these composers, its style, its place in the field of Music Literature and its relationship to the period in which they lived. Open to any interested senior or graduate student.
Dr. Matthews. Two semester hours.

451 Advanced Instrumental Conducting
Supervised experience in conducting instrumental groups. The student may be called upon to prepare an ensemble for public performance. Prerequisite: Instrumental Conducting 311A, Choral Conducting 311B.
First semester. The Staff. One semester hour.

452 Advanced Choral Conducting
Supervised experience in conducting vocal groups. The student may be called upon to prepare an ensemble for public performance. Prerequisite: Instrumental Conducting 311A, Choral Conducting 311B.
Second semester. The Staff. One semester hour.

455A Orchestration
A study of the characteristics of the various instruments, application in arranging for various instrumental combinations including accompaniments for solos, vocal and instrumental. The course is about evenly divided between arranging for band and for orchestra. Some attention is given to the problems in score reading. Prerequisite: Advanced Harmony 206A, B.
First semester. Dr. Matthews. Three semester hours.

455B Orchestration
A continuation of 455A.
Second semester. Dr. Matthews. Three semester hours.

456A Advanced Composition
Further original work in composition dealing with the larger forms in both vocal and instrumental fields. Prerequisite: Composition 306A, B.
First semester. Dr. Matthews. Three semester hours.

456B Advanced Composition
A continuation of 456A.
Second semester. Dr. Matthews. Three semester hours.

460 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.
DIVISION OF FINE ARTS

For Graduates Only

507 Opera and Oratorio

A course designed to give the graduate student the historical and appreciative background into two of the great vocal forms of music from the 17th century to the present. Style and analysis to be considered.

Dr. Matthews. Two semester hours.

560 Seminar in Music Education

Each participant will be expected to develop a project which is of interest to him but each project will be subject to group discussion, review and analysis. The lectures and reading will be of a general nature referring to the whole field of Music Education.

First semester. Dr. Carter. Two semester hours.

Graduate Instruction in Applied Music

Properly qualified students may take graduate study in the various areas of Applied Music for a total of four semester hours in the major performance area (two semester hours per semester) and for a total of two semester hours in a minor performance area (one semester hour per semester). The usual two digit applied music course number will be preceded by a 6, e.g., 645-private voice. This study involves a minimum of 60 minutes per week of private instruction plus the necessary practice.

Summer Session. Each semester. Staff. Two semester hours or 1 semester hour.

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
DESCRIPTION OF COURSES

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

130 Women's Glee Club ......................................................... Mrs. Snyder
The Women's Glee Club of Fifty is selected by try-outs. The object is to select students for special artistic training in ensemble work. The glee club sings before a number of high schools throughout the state and takes an active part in the musical work on the campus and in the city.

131 Men's Glee Club .............................................................. Mr. Frey
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

The Auxiliary Choir is open to all students (men and women) who wish to obtain a knowledge of choral music. The choir participates in the annual Southwestern Michigan Messiah Festival at Christmas-time and in the Southwestern Michigan College and High School Festival in May.

135 College Choir

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

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
LOIS HAMLIN

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 college graduates. These curricula are approved by the American Medical Association, and graduates are qualified to take the examination for registration in the American Occupational Therapy Association.

Students enrolling in this department will take their major in occupational therapy and their minors in biology and art. It is expected that students will, as far as possible, choose the electives allowed in the curricula from the following allied fields such as music, fine arts, or psychology.


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.
Each semester. Miss Spear. Two semester hours.

210B Theory of Occupational Therapy
Specific instruction in applying occupational therapy in the various fields of service. Survey of public and private agencies offering facilities for the placement of the handicapped.
Each semester. Miss Spear. Two semester hours.

215 Design
A fundamental course in art developing design and color theory, plus additional problems in a wide range of materials and techniques providing experiments in applied designs.
Each semester. Miss Hamlin. 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 and action. This study accompanied by a review of the skeletal and nervous systems, basic termi-
nology and kinesiology, and muscle testing. Prerequisite: Anatomy 211A and Physiology 211B.
   Each semester. Miss Kiss. Two semester hours.

106 Art Structure
   A course giving experience in lettering, drawing, figure, color and design.
   Each semester. Miss Hamlin. Three semester hours.

216B Applied Kinesiology
   Course includes joint measurement, analysis of modalities used in functional treatment, adaptive equipment with special attention to cerebral palsy, polio, multiple sclerosis, and peripheral nerve injuries. Prerequisite: Kinesiology 216A.
   Each semester. Miss Kiss. Two semester hours.

330 Neurology and Psychiatry
   Consists of the history of and clinical demonstration of mental diseases; their causes and methods of readjustment. Study of the application of work to individual needs given during practical training.
   Each semester. Miss Spear. Three semester hours.

352 Hospital Case Studies
   Complete and thorough case histories of typical patients observed in occupational therapy departments. Students must submit 12 or more case histories.
   Each semester. Miss Kiss. Three or four semester hours.

THERAPEUTIC OCCUPATIONS

222 Recreational Therapy
   Course covers planning of recreational activities for patients in hospitals, including musical therapy, dramatic programs, and games.
   Each semester. Miss Hamlin. Two semester hours.

223 Stitchery
   Includes samples of simple and decorative stitches, such as Italian hemstitching, Assisi, Swedish darning, and others; also knitting, crocheting, tatting, and the assembling of projects.
   Each semester. Mrs. Thomas. Three semester hours.

224 Therapeutic Crafts
   Course covers techniques and equipment used in short-time crafts, including hand printing, carving, string and paper work. Emphasis is placed on the application of these techniques to occupational therapy treatment.
   Each semester. Mrs. Thomas. Two semester hours.
225 **Minor Crafts**

A course giving the techniques and equipment used in basketry, bookbinding, leatherwork, and rug making. Special emphasis will be placed on the use of these crafts in occupational therapy treatment.

Each semester. Mrs. Thomas. Three semester hours.

311 **Clinical Practice**

Each student is required by the American Medical Association to complete nine months of clinical training in hospitals arranged by the instructor and supervised by the therapist in charge of the respective Occupational Therapy departments. The types of hospitals in which the student trains are psychiatric, tuberculosis, general, pediatric, and physical disabilities. Comprehensive reports are made by the students and analyzed by the instructor for ultimate consideration when the student graduates and qualifies for the national registration examination given by the American Occupational Therapy Association.

Arranged for by Miss Spear and Miss Kiss. Five semester hours.

Open to Qualified Juniors, Seniors and Graduate Students

410A **Theory of Occupational Therapy**

Correlation of all theory courses in occupational therapy. Specific instruction in the organization and administration of an occupational therapy department. Supplemented by field trips to hospitals, social agencies, and allied industries.

Each semester. Miss Spear. Two semester hours.

410B **Theory of Occupational Therapy. (Medical Lectures)**

A series of lectures on medical and orthopedic conditions. These will be correlated with occupational therapy treatment.

First semester only. Miss Kiss and local physicians. Three semester hours.

425 **Ceramics and Jewelry**

A 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, and wood.

Each semester. Miss Hamlin. Two semester hours on campus. Three semester hours in extension.

428 **Weaving**

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

Each semester. Mrs. Thomas. Four semester hours.
511 Advanced Clinical Training
A specialized course of study in cerebral palsy, poliomyelitis, or physical disabilities. This work must be taken on an advanced level at specified training centers. Prerequisite: Clinical Training 411. Each semester. Miss Spear. Six semester hours.

512 Seminar in Occupational Therapy
Open to advanced students who wish to undertake special studies in this field. Each semester. Miss Kiss. Two semester hours.

515 Advanced Design
A studio course with manual problems designed to meet the needs of graduate students with varied interests. The planning and construction of forms which lend themselves to utility and fabrication. Individual projects in terms of student's interests and abilities. Emphasis on individual expression and development. Second semester. Miss Hamlin. Two semester hours.

528 Advanced Weaving
A continuation of Weaving 428, advancing into variations of overshot work, special tapestry weaves, and summer and winter weave. Work will be adapted to the weaving education and experience of the student. Prerequisite: Weaving 428 or permission of the instructor. First semester. Mrs. Thomas. Two semester hours.
DIVISION OF LANGUAGES AND LITERATURE
Mathilde Steckelberg, Chairman

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

ENGLISH

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<thead>
<tr>
<th>Thelma E. Anton</th>
<th>Helen E. Master</th>
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<tr>
<td>William R. Brown</td>
<td>Ralph N. Miller</td>
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<td>Georgiann Burge</td>
<td>Lucille A. Nobbs</td>
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<td>Lorena M. Gary</td>
<td>Frederick J. Rogers</td>
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<td>Frank C. Householder</td>
<td>Helen G. Sellers</td>
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<td>M. Dezena Loutzenhiser</td>
<td>Ruth Van Horn</td>
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<td>Jean Malmstrom</td>
<td>Louise J. Walker</td>
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The courses in English are planned primarily to meet the needs of students preparing to teach in the various departments of the public schools. Attention is called to the Comparative Arts 215 and Mythology 202. The former may be counted for 2 hours and the latter for 3 hours credit in the English Department.

Freshmen who elect literature in addition to rhetoric may take Introduction to Literature 107A and B or General Literature 124A and B.

Students who intend to have a major or minor in English in any curriculum should confer with the adviser of the department by the third semester. The following general suggestions may assist in planning programs of study:

Students who intend to minor in English in the Elementary curriculum should plan to include in their 15 hours Literature for Children 203; Introduction to Literature 107A and B or General Literature or Literary Interpretation 210, and 3 hours in American Literature. Students in the Elementary curriculum who intend to major in English should add to the above, 3 hours in fiction and 3 hours in drama.

Students who major or minor in English in the Secondary curriculum should have a reading knowledge of some modern language, preferably French or German. Minors must include in their 15 hours 3 hours in Shakespeare, 3 hours in American Literature, 3 hours in fiction; 3 to 6 hours in period courses; and General Literature or Literary Interpre-
tation. Majors in addition to the work required for minors must have Chaucer and two period courses. The student who is now planning a major or a minor in English must include these courses listed for the minor in the secondary education curriculum.

Not more than 6 of the 24 hours for a major and not more than 3 of the 15 hours for a minor may be counted from the following courses: Journalism 201, A and B; Expository Writing 326; Writing by Types 327; and Creative Writing 328.

All majors in English and all minors in English in the Secondary and General Degree Curricula must take in addition to Rhetoric 106A 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**

**Communication 104A**

This course attempts to help the student to understand the nature of language, evaluate communication as inter-action between the individual and other members of society, and acquire skill in using the communication tools. Lectures, reading, tape-recordings, films, and other devices are used to motivate group discussion, informal talks, and written exercises. May be taken as the equivalent of College Writing 106A.

First semester. Miss Anton, Dr. Becker, Dr. C. Brown, Mr. Garneau, Mr. Householder, Dr. Limpus, Mrs. Malmstrom, Mr. McKee, Dr. Miller. Four semester hours credit.

**Communication 104B**

A continuation of 104A. May be taken as the equivalent of College Writing 106B.

Second semester. Miss Anton, Dr. Becker, Dr. C. Brown, Mr. Garneau, Mr. Householder, Dr. Limpus, Mrs. Malmstrom, Mr. McKee, Dr. Miller.

**106A College Writing**

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

Each semester. The Staff. Three semester hours.

**106B College Writing**

A continuation of 106A.

Each semester. The Staff. Three semester hours.

**206A Writing Laboratory**

A course in which students follow individualized programs of reading and writing, with considerable class discussion and evaluation of finished products. This course is designed for second-year students and for freshmen
who have been exempted from College Writing because of superior achievement.

First semester. The Staff. Three semester hours.

206B Writing Laboratory
A continuation of 206A.
Second semester. The Staff. Three semester hours.

201A Journalism
Origins, development, and ethical principles involved in writing and editing American newspapers; and practice in types of journalistic writing and editing are given. Straight news, advance, follow, and sports stories; interviews; informative, human-interest, and entertainment features and columns; ethics of journalism and publicity; copy-editing and headlines are studied.
First semester. Miss Anton. Three semester hours.

201B Journalism
A continuation of 201A. Editorials, opinion columns, critical writing, cartoons, advertising copy and lay-out, typography, and page lay-outs are studied. Prerequisite: English 201A.
Second semester. Miss Anton. Three semester hours.

325 History of the English Language
A course in the development of the language, treating the historic and linguistic forces which have brought about changes in the form, grammar, and vocabulary of English. Required of all English majors and of all minors except in the Elementary Curriculum.
Each semester. Mrs. Burge, Miss Gary, Dr. Limpus, Miss Master, Mr. Smith. Two semester hours on campus. Three semester hours in extension.

326 Expository Writing
An elective course offering practice in the writing of expository papers of all kinds.
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 College Writing 106. Reading and practice in writing with emphasis on literary qualities.
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.
Miss Van Horn. Three semester hours.
329  Modern English Usage

An examination of contemporary language usage for the purpose of understanding current tendencies. Greatest emphasis is placed on an inductive study of modern grammar, based on the actual usage of speakers and writers. Semantic and phonetic processes are also studied.

Each semester. The Staff. Two semester hours on campus. Three semester hours in extension.

Open to Qualified Juniors, Seniors and Graduate Students

410  Literary Criticism

A careful study of the fundamental principles of literary criticism, supplemented with wide reading in English critical essays. Each student writes several short criticisms.

First semester. Dr. Miller. Two semester hours.

425  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. Dr. Limpus. Two semester hours.

401  Teaching of Secondary English

A course in the selection and methods of presentation of literature in high-school.

Second semester. Miss Loutzenhiser. Two semester hours.

LITERATURE

107A  Introduction to Literature

A study of expository writing in the social sciences, natural sciences and philosophy. Limited to freshmen. Prerequisite to 107B.

Each semester. The Staff. Three semester hours.

107B  Introduction to Literature

In the second semester the emphasis is on belles lettres: autobiography, the short story, the novel, and poetry.

Each semester. The Staff. Three semester hours.

124A  General Literature

A careful reading of representative pieces of European literature in translation. First semester, reading in the epic and drama.

First semester. Dr. Brown, Miss Kraft, Mr. Rogers. Three semester hours.
124B General Literature
A continuation of 124A. Readings in prose fiction and the lyric.
Second semester. Dr. Brown, Miss Kraft, Mr. Rogers. Three semester hours.

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

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

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

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

212 The Familiar Essay
This course aims to introduce the student to careful and accurate reading of English literary prose, and to cultivate in him some appreciation of the familiar essay as a type of literature.
Dr. Miller. Two semester hours.

214A Shakespeare
The purpose of the course is to help the student read Shakespeare with better understanding and appreciation. One of the great tragedies and one of the better comedies are carefully studied in class.
First semester. Dr. Brown. Three semester hours.

214B Shakespeare
In this course the remaining plays and the poems of Shakespeare are read and considered in their historical order.
Second semester. Dr. Brown. Three semester hours.
216A Contemporary Literature
A detailed study of the major trends and authors represented by them in English Literature from the beginning of the century to the present time. 216A is not a prerequisite for 216B.
First semester. Mr. Householder, Mr. Rogers. Two semester hours on campus. Three semester hours in extension.

216B Contemporary Literature
A detailed study of the major trends and authors represented by them in American literature from the beginning of the century to the present time.
Second semester. Mr. Householder, Mr. Rogers. Two semester hours on campus. Three semester hours in extension.

218A The English Bible—The Old Testament
In this course an attempt is made to study the Bible as a body of great literature. Facts of history and composition, insofar as they are known, are carefully studied as a background for intelligent interpretation and appreciation of Biblical literature.
First semester. Miss Gary. Two semester hours.

218B The English Bible
Second semester. Miss Gary. Two semester hours.

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

221A American Literature
A survey of American literature from the beginning to the Civil War with special reference to the development of literary movements and types.
First semester. Mr. Householder, Mrs. Burge, Mrs. Malmstrom, Miss Nobbs, Miss Walker. Three semester hours.

221B American Literature
This course is a continuation of American Literature 221A from the Civil War to the present.
Second semester. Mr. Householder, Mrs. Burge, Mrs. Malmstrom, Miss Nobbs, Miss Walker. Three semester hours.

223A English Literature 1660-1730
Literature of the classical period exclusive of Milton.
Dr. Miller. Three semester hours.

223B English Literature 1730-1798
Dr. Miller. Three semester hours.
225 The Ballad
   A study of the form and method of development of the traditional popular ballad.
   Miss Master. Two semester hours.

227A English Literature of the Renaissance
   A study of the non-dramatic poetry and prose of the sixteenth century—Sidney, Spenser, Bacon, and others.
   First semester. Mr. Smith. Three semester hours.

227B English Literature of the Renaissance
   A study of the non-dramatic poetry and prose of the first half of the seventeenth century—Donne, Jonson, Herrick, Bunyan, Browne, and others.
   227A is not a prerequisite for 227B.
   Second semester. Mr. Smith. Three semester hours.

228 Milton
   Milton is approached in this course both as a great literary artist and as one of the most significant liberal thinkers of modern times. *Comus, Paradise Lost, Paradise Regained, Samson Agonistes,* and a selection of his prose are read and discussed.
   First semester. Mr. Smith. Three semester hours.

305A Victorian Literature
   The poetry and prose of the Regency and Early Victorian Periods. For juniors and seniors. Sophomores may enroll with the permission of the instructor.
   Three semester hours. Miss Van Horn.

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).
   Three semester hours. Miss Van Horn.

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.
   Miss Loutzenhiser. Two semester hours.

307A History of English Literature
   This course is intended primarily for third- and fourth-year students who have had no literature in the first and second years. It may be elected by other third- and fourth-year students who have not taken English Literature 207. A study of English epic and lyric poetry.
   First semester. Miss Gary. Three semester hours.
307B History of English Literature
A continuation of 307A. A study of representative English dramas, essays, and novels.
Second semester. Miss Gary. Three semester hours.

308A English Drama
The chief aim of the course is to acquaint the students with both interesting and significant plays by Elizabethan and Jacobean playwrights.
Mr. Smith. Two semester hours on campus. Three semester hours in extension.

308B English Drama
A continuation of 308A. Restoration and eighteenth-century plays by Dryden, Wycherley, Steele, Addison, Gay, Garrick, Sheridan, and others are studied.
Mr. Smith. Two semester hours on campus. Three semester hours in extension.

312 Wordsworth
A study of Wordsworth's poetry and critical theory against the background of the Romantic movement.
Second semester. Mr. Smith. Three semester hours.

313 English Novel
A study of the technique of the novel and its development in England from Defoe to Hardy.
Each semester. Dr. Brown, Miss Loutzenhiser. Three semester hours.

314 Contemporary Novel
A study of the tendencies in English and American prose fiction since 1898, together with wide reading from the chief novelists of the period.
Each semester. Miss Anton, Dr. Brown, Miss Loutzenhiser. Two semester hours on campus. Three semester hours in extension.

315 The European Novel
A study of selected masterpieces of continental fiction in English translation. Major emphasis is placed upon the inter-relation of continental patterns and the development of English fiction.
First semester. Dr. Brown. Three semester hours.
Note.—This course cannot be counted for credit by students who elect General Literature 124B.

322 American Literature
This course is intended for juniors and seniors who have not taken English 221A, B. (This course cannot be counted for credit together with courses 221A, B.)
Each semester. Miss Gary, Dr. Miller, Miss Nobbs. Three 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. 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. Two semester hours.

391 Chaucer
As much as possible of Chaucer's poetry is read in the original with
special attention to pronunciation, grammar, and meter. The life and time
of Chaucer are carefully studied as an aid to the interpretation of his
poetry. Required of Secondary English Majors and an elective for others.
Second semester. Dr. Brown. Three semester hours.

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 teach-
ing of English. This course is strongly recommended for secondary English
majors.
First semester. Miss Walker. Two semester hours.

Open to Qualified Juniors, Seniors and Graduates

403 Source Material for Literature in Elementary Grades
The course aims to acquaint the student with information about books
and materials for children's literature as well as critical and historical liter-
ature of the subject, children's magazines, records of the literature of child-
hood and similar materials. Prerequisite: Literature for Children 203.
Miss Master. Two semester hours.

408 Elizabethan Tragedy
A study of the rise of English tragedy, its theories and variations, to-
gether with a detailed study of plays by Kyd, Marlowe, and Webster, as
well as Shakespeare's Othello.
Mr. Smith. Two semester hours.

409A English Literature of the Romantic Period
A study of the main currents of English literature near the beginning of
the nineteenth century, beginning with Blake and Burns and emphasizing
Wordsworth, Coleridge, Scott, and the major criticism of the period.
First semester. Dr. Limpus. Three semester hours.
409B English Literature of the Romantic Period
A continuation of 309A, emphasizing Byron, Shelley, Keats, Hazlitt, Lamb, and DeQuincey.
Second semester. Dr. Limpus. Three semester hours.

413 The Modern Novel
A study of social interpretation in the English novel from Jane Austen to John Galsworthy, together with parallel reading in contemporary continental authors of the corresponding patterns. Second semester.
Dr. Brown, Miss VanHorn. Two semester hours.

414 Shakespeare's Tragedies
Elective course for graduates and for seniors who wish one term of Shakespeare. Prerequisite: 10 hours of College English Literature.
Dr. Brown. Three semester hours.

415 Shakespeare's Comedies
Elective course for graduates and for seniors who wish one term of Shakespeare. Prerequisite: 10 hours of College English Literature.
Dr. Brown. Three semester hours.

416 English Literature from the Restoration to 1730
The works of leading literary figures of the period, with emphasis on satire.
Dr. Miller. Three semester hours.

417 English Literature from 1730-1798
Dr. Miller. Three semester hours.

421 American Literature
A survey of the literature of the colonial and early national period, including the writings of Freneau, Irving, Bryant, Emerson, Thoreau, Hawthorne, Poe, and Melville.
Second semester. Dr. Miller. Two semester hours.

422 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. Miss Nobbs. Two semester hours.

433 Lives and Letters of English Authors
This course combines a detailed study of the new biography as written by Strachey, Maurois, and Gamaliel Bradford with the reading by each student of outstanding collections of letters, and a written essay by each student on an assigned collection of letters. First semester.
Dr. Brown. Two semester hours.
490 Anglo Saxon

The purpose of Anglo Saxon 490 is to give the student sufficient acquaint-
ance with Old English grammar and Old English forms to read a few
pages of Anglo Saxon prose and the poem *The Battle of Brunanburh.*
Masterpieces of Anglo Saxon literature will be read in translation to illus-
trate the development of various early English patterns. Prerequisite:
eight hours of English literature. An elective for graduates and upper
classmen. First semester.

Dr. Brown. Three semester hours.

Open to Graduates

402 Mythology

This course investigates the origins, elements and interpretation of the
principal myths and legends of Greece and Rome; also their preservation
not only in literature but also in painting, music, and sculpture. A paper
tracing the continued appearance of a specific myth in ancient and modern
literature and art, or investigating the use of myths in a single author is
required.

Second semester. Miss Kraft. Three hours.

510 Poetics

A study of the techniques of poetry and of the mode or poetic discourse
as distinguished from prose. Poems from various periods of English and
American literary history will be examined in terms of subject, diction,
form, imagery, point of view, tone, philosophy. Designed for elementary
and secondary school teachers.

518 The English Epic

The development and nature of English epic poetry, including both
folk and literary epic—*Beowulf, The Faerie Queen, Paradise Lost,* and
*The Idylls of the King.* *Paradise Lost* will be examined in detail. A re-
search paper will be required.

Mr. Smith. Two semester hours.

522 The American Character and Society in American Literature, 1850-
1950

A history of the representation of American character and of the institu-
tions of American society in American literature (1850-1950) by such
major authors as Thoreau, Hawthorne, Melville, Whitman, Twain, *James,
Norris, Crane, Dresser, Mencken, Lewis, Hemingway, Dos Passos, Stein-
beck.*

Second semester. Dr. Miller. Two semester hours.
Twenty-four semester hours are required for a major in foreign languages and fifteen for a minor. A two-hour course numbered above the one-hundreds is required for minors. The minimum requirement does not include the first year of a language, if taken as a part of a curriculum leading to a secondary teaching certificate. No credit will be given for a 100A course unless the 100B course is completed.

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

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

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

FRENCH

100A Elementary French

This course is designed to give the basic foundation needed to read a simple text in French. It aims also, from the outset, to give training in understanding spoken French and an elementary knowledge of pronunciation with the help of records and recorder.

First semester. Dr. Noble, Miss Tamin, Miss Windsor. Four semester hours.

100B Elementary French

This course is a continuation of the basic grammar, pronunciation drill, and work in oral comprehension begun in French 100A. About 150 pages of reading will be used as a basis for conversation practice. French records and the recorder will be used frequently.

Second semester. Dr. Noble, Miss Tamin, Miss Windsor. Four semester hours.

102A Intermediate French

This course consists of a thorough review of French grammar with frequent written and oral exercises aiming at making grammar functional. About 200 pages of texts chosen from literature, novels, short stories and plays are read. The composition consists of reproduction of texts read in class; other texts are read outside for comprehension and enjoyment.

First semester. Dr. Noble, Miss Tamin. Four semester hours.
102B Intermediate French
This is a continuation of 102A. In this semester 300 pages of reading are completed.
Second semester. Dr. Noble, Miss Tamin. Four semester hours.

201A Conversation and Free Composition
This course is intended to develop ease and accuracy in the use of everyday French. Prerequisite: two years of high school French or equivalent.
First semester. Miss Tamin. Two semester hours.

201B Conversation and Free Composition
This is a continuation of 201A.
Second semester. Miss Tamin. Two semester hours.

203A Nineteenth Century French Literature
This course is a study of romanticism and the development of realism, with readings from Chateaubriand, Victor Hugo, Alfred de Vigny, Musset. Prerequisite: Elementary French 100A, B, Intermediate French 102A, B, or equivalent.
First semester. Dr. Noble. Three semester hours.

203B Nineteenth Century French Literature
This is a continuation of 203A. It is a study of naturalism, with readings from Balzac, Flaubert, Zola, Rostand; and the Parnassian and symbolistic schools of poetry.
Second semester. Dr. Noble. Three semester hours.

207A France and the French
This course is required of those specializing in French, but is conducted in English and open to those not in the Department of French. A study is made of geography, art, historical monuments, and contemporary problems of French life.
First semester. Dr. Noble. One semester hour.

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

305 Phonetics
This course is intended to give a corrective description of the difficulties encountered by students of French with Anglo-American habits of pronunciation. Required of all students majoring or minoring in French. Prerequisite: two years of college French or equivalent.
First semester. Miss Tamin. Three semester hours.

306 Advanced Composition and Grammar Review
This course is intended to verify and to strengthen the knowledge of fundamental principles of grammar in those students who are planning to teach French. Prerequisite: two years of college French or equivalent.
Second semester. Miss Tamin. Three semester hours.
307A Contemporary French Literature
A study of a few outstanding novels by leading writers of the period between the two wars, with a definite effort to find out the different trends of thought of contemporary writers. Prerequisite: three years of college French or equivalent.
Not offered in 1954-1955. 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 1954-1955. 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. 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. 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 1954-1955. 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 1954-1955. Miss Tamin. Two semester hours.

Open to Qualified Juniors, Seniors and Graduates

408A Contemporary French Literature
The aim of this course is to study a few outstanding French novelists and essayists of our time: Georges Duhamel, Roger Martin du Gard, Antoine de Saint-Exupéry, Georges Bernanos, François Mauriax, André Malraux, Jean Giono, Albert Camus; to examine the works of the masters of the preceding generation whose ideas have been deeply felt to the present day: Barres, Gide, Proust, Maurras, Claudel, Peguy, Romain-Rolland.
Not offered in 1954-1955. Miss Tamin. Two semester hours.
408B Contemporary French Literature

This is a continuation of French 408A. The aim of this course is to study the history and traditional purpose of the Comédie-Française; and for the student to become fully aware of the renovation of stagecraft in France under the impulse given by such producers as Jacques Copeau, Charles Dullin, Gaston Baty, Louis Jouvet, Jean-Louis Barrault. After having examined a few plays by authors of the late XIXth and XXth centuries, the following dramatists will be studied: Paul Claudel, Jules Romains, Jean Giraudoux, Jean-Jacques Bernard, Henri de Montherlant, Jean-Paul Sartre, Jean Anouilh.

Not offered in 1954-1955. Miss Tamin. Two semester hours.

437 Studies in Contemporary France

This course investigates more deeply some phases of French economic, political, social and educational life which were only mentioned in France and the French (French 207A, B). An effort is made to understand those factors in French thinking which strongly affect international thought today. There is no prerequisite for this course.

Summer Session 1954. Dr. Noble. Two semester hours.

GERMAN

100A Elementary German

This course aims to give the student an understanding of the fundamentals of German grammar, and some facility in speaking and writing the language. Ability to read German is developed by the study of 100 pages of prose. One year of high school German may be applied on the elementary course.

First semester. Dr. Rothfuss, Miss Steckelberg. Four semester hours.

100B Elementary German

This is a continuation of 100A. Approximately 100 pages of prose are read, and grammar, oral work, and composition are correlated. No credit is given for 100A unless 100B is completed.

Second semester. Dr. Rothfuss, Miss Steckelberg. Four semester hours.

102A Intermediate German

This course begins with a review of basic German for the purpose of making it function in speech, composition and reading. A study of cultural material and contemporary prose, such as Schnitzler's "Der blinde Geronimo" with related oral and written composition completes the semester's work. Prerequisite: one year of college German or two years of high school German.

First semester. Dr. Rothfuss, Miss Steckelberg. Four semester hours.

102B Intermediate German

This is a continuation of the reading and related work of 102A. Texts used are "German Heritage" and Albert Schweitzer's "Leben und Denken".
To improve diction, records are used and recordings of student pronunciation are made.

Second semester. Dr. Rothfuss, Miss Steckelberg. Four semester hours.

103A Scientific German
This is a course in the extensive reading of scientific material. Students are given an opportunity for specialization in the field of their major interests. Prerequisite: one year of college German or two years of high school German.
First semester. Miss Steckelberg. Four semester hours.

103B Scientific German
This is a continuation of the extensive reading of scientific material. Unedited material from encyclopedias of science and from current science magazines is introduced.
Second semester. Miss Steckelberg. Four semester hours.

201A German Conversation and Composition
The aim of this course is to supplement the practice in speaking and writing German done in the reading courses. It is required of students majoring in German. Prerequisite: the equivalent of two years of college German.
Not offered in 1954-1955. Dr. Rothfuss. Two semester hours.

201B German Conversation and Composition
This is a continuation of 201A.
Not offered in 1954-1955. Dr. Rothfuss. Two semester hours.

305A German Literature to 1825
This is a survey of German literature through the time of Lessing, with readings from early German epics and lyrics and a detailed study of the times and works of Lessing. Prerequisite: the equivalent of two years of college German.
Not offered in 1954-1955. 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 1954-1955. 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. Dr. Rothfuss. Four semester hours.
306B  German Literature from 1825 to the Present
This course is a continuation of 306A. The work covers German literature from Grillparzer to the present. A study is made of the dramatic, epic, and lyric poetry of the period, with readings from Grillparzer, Hauptmann, Sudermann, Hugo von Hofmannsthal, and other poets.
Second semester. Dr. Rothfuss. Four semester hours.
Open to Qualified Juniors, Seniors and Graduates

407  The Central European Area
This course proposes to investigate cultural aspects necessary for an understanding of the Central European situation which is of such great present day importance. Countries included will be Germany, Austria, Switzerland, and Czechoslovakia. Historical, geographical, social and religious problems will be investigated to give the student an insight into this topic. There is no foreign language prerequisite for the course.
Summer Session 1954. Dr. Rothfuss. Two semester hours.

442  Modern Language Instruction
This is a course for teachers of French, German or Spanish in the high school and grades. Problems common to all three will be considered. The basis for the course will be psychological principles underlying language learning, an evaluation based on them of current methodology, and a critical survey of cultural materials in the three civilizations, suitable for present day school use.
Miss Steckelberg. Two semester hours.

427  Germany Through the Centuries
This course is intended, by means of a study of German cultural history, to give the student an understanding of the vital German problem as it developed through the centuries down to our own day. Geographical, literary, philosophical, educational, and art aspects will be investigated by means of readings and discussions.
Semester I, 1954-1955. Dr. Rothfuss. Two semester hours.

417  Evolution of German Thought
This course is a study of the development of Germany and the German national character. It will include a study of selected authors on history, philosophy and pedagogy as well as German literature in translation. There is no foreign language prerequisite.
Not offered in 1954-1955. Dr. Rothfuss. Two semester hours.

LATIN

100A  Elementary and Second-Year Latin
This course is designed for those students who need two units of Latin for admission to the A.B. curriculum or to a medical, law, or other professional course. With 100B it covers the work of two units of high school language requirement.
First semester. Miss Kraft, Mrs. Vincent. Four semester hours.
100B Elementary and Second-Year Latin

A continuation of 100A.
Second semester. Miss Kraft, Mrs. Vincent. Four semester hours.

Note.—A student may present one unit of high school Latin and enter the course in the second semester.

102A Cicero and Ovid

Orations and letters of Cicero are read. One day each week is devoted to Latin composition. Prerequisite: two units of high school Latin or Elementary and Second-Year Latin 100A, B.
Miss Giedeman. Four semester hours.

102B Cicero and Ovid

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

103A Virgil

The first books of the Aeneid are read and a survey of the whole is begun. A study of Greek and Roman mythology accompanies the reading. Prerequisite: at least two units of high school Latin.
Not offered in 1954-1955. Four semester hours.

103B Virgil

This is a continuation of 103A. Intensive study of the first six books is continued, and the survey of the whole is completed.
Not offered in 1954-1955. Four semester hours.

104A Latin Literature

A survey of Roman literature with reading of representative Latin authors is the aim of this course. Selections from Books I, V, XXI, XXII, XXVII, XXX of Livy are read. Prerequisite: four units of Latin.
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.
Miss Kraft. Four semester hours.

204A Horace

The Odes, Epodes, and Satires are read. A study of the philosophy of Horace accompanies the reading.

204B Horace and Latin Comedy

The epistles of Horace are read, the Ars Poetica acting as an introduction to the study of the rise and development of Latin comedy, which is represented by selected plays of Plautus and Terence.
305 Latin Writing

Practice is given in the fundamental principles of correct expression in Latin. Required of all students majoring in Latin.


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

Selection from these poets and a study of the period in which they wrote.

First semester. Miss Kraft. Two semester hours.

311 Lucretius, Martial, and Juvenal

The study includes selections from the De Rerum Natura of Lucretius, the Epigrams of Martial, and the Satires of Juvenal.

Second semester. Miss Kraft. Two semester hours.

SPANISH

100A Elementary Spanish

This course is planned to give the student a thorough preparation in the fundamentals of Spanish. Careful attention is devoted to both the written and spoken language, with emphasis always on its practical application. The language laboratory is made available for individual development.

Prerequisite: None.

First semester. Mr. Jones, Miss Windsor. Four semester hours.

100B Elementary Spanish

This is a continuation of 100A.

Second semester. Mr. Jones, Miss Windsor. Four semester hours.

102A Intermediate Spanish

A complete review course designed to strengthen the knowledge and abilities acquired in Spanish 100A and, at the same time, enlarge the vocabulary. A contemporary novel is read and composition work is based upon the text. Prerequisite: two years of high school Spanish or Elementary Spanish, 100A, B.

First semester. Mr. Jones, Miss Windsor. Four semester hours.

102B Intermediate Spanish

This is a continuation of 102A.

Second semester. Mr. Jones, Miss Windsor. Four semester hours.
201A Spanish Conversation and Composition
This course is intended to develop ease and accuracy in the use of everyday Spanish. Prerequisite: two years of high school Spanish or Elementary Spanish 100A, B. It will be offered if there is sufficient demand.
Second semester. Mr. Jones. Two semester hours.

201B Spanish Conversation and Composition
This is a continuation of 201A.
Mr. Jones. Two semester hours.

203A Advanced Spanish
Emphasis is placed on developing a greater facility in speaking the language on an advanced level. Original composition is practiced and ease in reading of Spanish literature is developed. It is also the purpose of this course to give a knowledge and understanding of the Spanish-speaking nations. Prerequisite: Elementary Spanish 100B, and Intermediate Spanish 102A, B.
First semester. Mr. Jones. Four semester hours.

203B Advanced Spanish
This is a continuation of 203A.
Second semester. Four semester hours.

207A Latin-American Life and Culture
This course is a survey of the customs, arts, and literature in Latin-American countries, with particular attention to Mexico. It is conducted in English. There is no prerequisite.
First semester. Mr. Jones. Two semester hours.

305A Spanish-American Literature
This is a survey of Spanish-American literature from the pre-Columbian period to the latter part of the nineteenth century, including the literature of the Conquest, the Colonial and Independence period, and that of the Gauchos. Prerequisite: Spanish 203A, B or its equivalent.
Not offered in 1954-1955. Mr. Jones. Two semester hours.

305B Spanish-American Literature
This is a continuation of 305A, bringing the survey to the contemporary writers of Latin America.
Not offered in 1954-1955. Mr. Jones. Two semester hours.

306A Spanish Literature
Readings from Spanish literature from the sixteenth century to the end of the Golden Age are selected for this course. Prerequisite: Spanish 203A, B, or consent of the instructor.
First semester. Mr. Jones. Two semester hours.
220  DESCRIPTION OF COURSES

306A  Spanish Literature

This is a continuation of 306A and includes the literature from the eighteenth century to the present. Prerequisite: 203A, B or its equivalent. Second semester. Mr. Jones. Two semester hours.

SPEECH

ZACK L. YORK  WALLACE L. GARNEAU
ALBERT B. BECKER  DELDEE M. HERMAN
CHARLES T. BROWN  BERNARD JACKSON
CLARA N. BUSH  ANNA E. LINDBLOM
ELIZABETH L. CAUGHRAN  JACK W. MURPHY

CHARLES VAN RIPER

Courses in the speech department are offered with three major responsibilities in mind: to meet the cultural and professional needs of the general student body; to meet the needs of students preparing to teach in the various departments of the public schools; to prepare students to teach speech.

A beginning student in speech, whatever his special interest in the field, shall take one of the following first level courses: Communication 104A and B; Speech for Teachers 105; General Speech 106; Business and Professional Speech 107. These courses may not be counted toward minimum requirements for a major or minor in speech. Credit will be given for no more than two of these first level courses. General Speech 106 is required of all teaching majors and minors.*

A teaching and a non-teaching major are offered. (For speech correction major see Special Education Curriculum—Speech Correction.) Requirements for the teaching major in speech are as follows: General Speech 106; Interpretive Reading 110; Public Speaking 126; Acting 215; Argumentation and Debate 225; Introduction to Speech Correction 250 or Principles of Speech Correction 251; Play Production 320; Teaching of Speech 399; and electives to make a total of 27 semester hours. Requirements for a non-teaching major are courses in the field totaling 27 semester hours planned in consultation with the chairman of the department before the end of the student's sophomore year.

Five minor sequences are offered requiring 15 semester hours each.

I  Teaching minor in dramatics and interpretation: Interpretive Reading 110; Acting 215; Play Production 320; Teaching of Speech 399; Public Speaking 126 or another course in an area other than dramatics and interpretation.

II  Teaching minor in forensics: Public Speaking 126; Argumentation and Debate 225; Direction of Forensic Activities 408; Teaching of Speech 399; Interpretive Reading 110 or another course in an area other than forensics.

III  Teaching minor in general speech: Interpretive Reading 110; Public

*Exceptions may be made upon the recommendation of an instructor and the approval of the chairman of the department.
Speaking 126; Teaching of Speech 399; and electives to make a total of 15 semester hours.

IV Non-teaching minor in radio: Radio Speaking 140; Radio Acting 240; Radio Production 241; Radio Writing 342; Interpretive Reading 110; or another course in an area other than radio.

V Non-teaching minor in general speech: Sequences are planned to meet the personal interests and needs of the student in consultation with the chairman of the department by the end of the sophomore year.

Each major and minor in the department must complete a prescribed program of extra-curricular activities. All students are urged to include in their programs Parliamentary Usage 201 and as many additional courses in speech as possible. Attendance is required of all majors and minors at meetings.

DESCRIPTION OF COURSES

99 Special Speech Problems

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

Each semester. Dr. Van Riper. No credit.

104A, B Communication

For description of course see English Department. Credit for these courses is given in first level requirements for non-teaching speech majors and minors.

105 Speech for Teachers

This is a course designed for on-campus freshmen who plan to get a teaching certificate. Its aims are: to develop standards for good speech; to help the student adjust to the kinds of speech situations he will encounter as a teacher; to improve his ability to organize ideas and use language effectively; to improve his use of voice and body in oral communication. Students participate in formal and informal speech situations in both interpretive and original speech.

Each semester. Staff. Three semester hours.

106 General Speech

This is a beginning course in speech dealing with the study and application of basic principles underlying the use of the body and voice in everyday speech situations. Required as the first level course for all students planning to secure a teaching major or minor in speech.

Each semester. Staff. Three semester hours.

108 Business and Professional Speech

This is a course designed to give experience in the kind of speech situations to be found in the business world. Job interviews, sales interviews,
information-seeking interviews, short speeches of explanation, use of charts and other visual aids will be considered.
Each semester. Staff. Three semester hours.

110 Interpretive Reading I
Analysis and oral interpretation of the more simple types of prose and poetry.
Each semester. Miss Bush, Miss Caughran, Mr. Garneau, Dr. York.
Three semester hours.

126 Public Speaking I
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.
Each semester. Dr. Becker, Dr. C. Brown, Mrs. Herman, Miss Lindblom, Dr. Murphy. Three semester hours.

140 Radio Speaking
A study of radio technique, giving practice in various types of announcing, and adapting interpretive reading and acting to the microphone.
Each semester. Mr. Garneau. 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.
Each semester. Miss Lindblom. One semester hour.

202 Discussion
A study of discussion technique and application of it in various situations from the standpoint of the leader and the discussant. Includes the round table, panel, forum, and committee meeting. Especially planned for those anticipating teaching the social sciences or speech, or engaging in administrative work.
Each semester. Dr. Becker, Dr. C. Brown. 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: Interpretive Reading 110 or consent of instructor.
Second semester. Miss Caughran, Dr. York. Three semester hours.

219 Stagecraft
This is a practical course in the planning and construction of stage scenery and properties. Includes lecture and laboratory work. The class
DIVISION OF LANGUAGES AND LITERATURE

operates in conjunction with campus dramatic productions. No prerequisites. 
Each semester. Dr. York. Two semester hours.

220 Stage Design
A beginning course for all students interested in theatre or who expect 
to participate in planning and executing stage settings. Class makes 
practical application of stage design in painting, lighting, and staging 
campus dramatic productions. No prerequisites. 
Each semester. Mr. Kemper, Dr. York. Two semester hours. 
Note: This course may be counted for credit in either art or speech.

221 Stage Make-up
This is a course in the practical study and application of the principles and 
techniques of stage make-up. Practical experience is provided in class and 
in conjunction with campus dramatic productions. No prerequisites. 
Each semester. Dr. York. One semester hour.

225 Argumentation and Debate
A thorough study of the principles of argumentation and frequent prac-
tice in debating current public questions. Attention is also given to the 
problems of coaching and judging debates. 
First semester. Mrs. Herman, Dr. Murphy. 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. 
Each semester. Mrs. Herman, Dr. Murphy. One or two semester hours. 
Maximum of six semester hours allowed during college course.

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, edu-
cational, and psychological problems resulting from a loss of hearing; 
and the special speech problems encountered. 
First semester. Dr. Van Riper. Three semester hours.

240 Radio Acting
A study of the basic principles of acting and their application to radio. 
Opportunities will be given for actual broadcast experience. Prerequisite: 
Radio Speaking 140 or consent of instructor. 
Second semester. Mr. Garneau. Three semester hours.

241 Radio Production
The class will study production techniques employed in radio and re-
cording. Each person will be given practice in handling controls, in 
arranging sound effects, musical effects, and other details peculiar to 
radio. Prerequisite: Radio Speaking 140 or consent of instructor. 
Second semester. Mr. Garneau. Three semester hours.
250 Introduction to Speech Correction
A course designed to acquaint the student with the scope, history and nature of speech correction. Topics considered are: the development of speech in the child, the psychology of the speech defective, the relationship of speech disorders to reading disabilities, and other psycho-educational problems.
First semester. Dr. Van Riper. Three semester hours.

251 Principles of Speech Correction
A course intended especially for students in speech correction, special education, and elementary education. The course is designed to acquaint the student with the general principles of speech correction as they relate to the types, causes, and development of the various speech disorders.
Second semester. Dr. Van Riper. Three semester hours.

307 Voice and Diction
This is a course in which the emphasis is placed exclusively upon voice production and diction. It gives the student a basis for individual analysis and emphasizes an intensive program for improvement of the student's speaking voice. No prerequisites.
Each semester. Staff. Three semester hours.

310 Interpretive Reading II
Advanced work in the oral interpretation of literature, with special emphasis on character delineation. Prerequisite: Interpretive Reading 110, Acting 215 or consent of instructor.
Offered as needed. Dr. York, Miss Bush. Two semester hours.

318 Phonetics
This course is designed to acquaint the student with the standard of pronunciation, with the methods of sound formation and phonetic transcription, and with the application of these methods to foreign language, dialect, interpretive reading, dramatics and speech correction.
Second semester. Mr. Jackson. 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. Prerequisites: Interpretive Reading 110, Acting 215, or consent of instructor.
Second semester. Dr. York. Three semester hours.

342 Radio Script Writing
An analysis will be made of radio scripts—commercial, sustaining, and educational. The class will study techniques of radio which present special problems to the radio script-writer. Emphasis will be placed on preparing scripts in various subject-matter fields. Resource persons will be brought in. Prerequisite: junior standing and consent of instructor.
First semester. Mr. Garneau. Two semester hours.
399 Teaching of Speech
This is a course designed to give the prospective teacher and the teacher in the field an understanding of the problems of teaching speech to high school students. It considers the aims, principles, curriculum, and techniques of modern speech; and seeks to bridge the gap between the student's academic training and its application to the teaching situation.
Each semester. Dr. Becker, Dr. C. Brown, Mrs. Herman. Three semester hours.

Open to Qualified Juniors, Seniors, and Graduates

405 Speech for the Classroom Teacher
This course is designed for seniors and teachers in service who have found that they need more work in speech. It aims by workshop approach to deal with speech needs and problems which the class members have encountered in their training or teaching. It involves individual research as well as laboratory practice in class. There will be opportunity for both individual and group projects.

406 Public Speaking II
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: Public Speaking 126, or consent of instructor.
Second semester. Dr. Becker. Two semester hours.

408 Direction of Forensic Activities
For students who expect to direct forensic activities in connection with other teaching duties. The course includes the principles of teaching debate and other forms of public speaking. Opportunities will be given for directing local speaking activities. Prerequisite: a major or minor in speech or consent of instructor.
Second semester. Dr. Becker. Two semester hours.

409—Persuasion
There are two aspects of the course, skills and content. Speech skills are developed by the presentation of studies in persuasion, by participation in discussion and by criticism of both. The content of the course is the psychological theories and experimentation in motives and theories in persuasion ethics. Recommended particularly to teachers, pre-ministerial, pre-law, and business students.
First semester. Dr. Becker, Dr. Murphy, Dr. C. Brown. Three semester hours.
415 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: Interpretive Reading 110, Acting 215, or consent of instructor.
Not offered 1954-55. Dr. York. Two semester hours.

416 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: Interpretive Reading 110, Acting 215, and Interpretive Reading 310, or consent of instructor.
Not offered 1954-55. Dr. York. Two semester hours.

421 Teachers' Workshop in Dramatics
A practical workshop in the basic skills of theatre production designed for students with little or no formal training in theatre. Opportunity is given for individual research and problem solving.
Summer 1954. Dr. York. Four semester hours.

440 Fundamentals of Broadcasting
Instruction concerning every department of the broadcasting studio. Prerequisite: Public Speaking 126, or Interpretive Reading 110, or consent of instructor.
Second semester. Mr. Garneau. Two semester hours.

441 Utilization of Radio and Recordings in the Classroom
An exhaustive study will be made of the sources of radio programs and transcriptions available to supplement other teaching aids. The group will study methods of preparation for utilization, techniques of class-listening, and follow-up procedures. Each student will be given an individual utilization project. Resource persons will be brought in. Prerequisite: junior standing.
Second semester. Mr. Garneau. Two semester hours.

442 Teachers' Workshop in Radio
A practical workshop in radio with emphasis upon the use of radio equipment. Planning program series, directing radio productions and editing scripts.
Each summer. Mr. Garneau. Four semester hours.

451 Basic Voice and Speech Science
This course is for students majoring in speech or speech-correction. Topics considered include: anatomy and physiology of hearing; speech and hearing; anatomy and physiology of articulation and phonation; the neurological organization of the speech function; the physics and physiology of quality, pitch, and intensity; and the psychology of speech.
Second semester. Dr. Van Riper. Three semester hours.
452 Stuttering and Allied Disorders

This course is designed to provide the student with more detailed knowledge of the nature, causes, development, and treatment of the more serious speech disorders. The literature of stuttering, cleft palate, deaf and aphasic individuals will be described in detail. Case studies and presentation will be provided. Prerequisite: Principles of Speech Correction 251.

Second semester. Dr. Van Riper. Three semester hours.

453 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: Principles of Speech Correction 251, or consent of instructor.

Each semester. Dr. Van Riper. Three semester hours.

456 Speech Therapy

This course is intended to give intensive training in techniques of speech therapy for disorders of phonation, delayed speech, dyslalia, stuttering and aphasia. Permission of instructor.

Second semester 1955. Dr. Van Riper. Two semester hours.

501 Group Problem Solving

This is a course designed for teachers and administrators and deals with the principles and methods of group problem solving in a democracy. The forms and techniques of committee hearing, symposium, panel, forum, board meeting, and others will be considered. Students deal with problems of their own choice and participate in roles of leader, participant and critic.

Summer. Dr. Brown, Dr. Murphy. Two semester hours.

554 Teaching of Speech Correction

A study of the methods of individual and group therapy for common disorders of speech.

Not offered 1954-55. Dr. Van Riper. Two semester hours.

555 Public School Speech Correction

This course deals with the organization and administration of speech therapy in the public schools. Problems of examination, certification, scheduling, inter-departmental relationships, parent and teacher education, techniques of group therapy, individual therapy, speech improvement methods for the elementary grades, and the philosophy of public school speech correction.

First semester. Dr. Van Riper. Two semester hours.
DIVISION OF MILITARY SCIENCE AND TACTICS

Lieutenant Colonel Comet Gibson, PMS&T

MAJOR EHRlich L. CHIPLEY
MAJOR ROBERT E. CROWE
CAPTAIN EUGENE BIERER
CAPTAIN DONALD W. CARSON
CAPTAIN LADEITRICH COGGIN
FIRST LIEUTENANT JESSE H. LOONEY
SFC WILLIAM BAKER
M/Sgt. KENNETH E. MCCLURE
M/Sgt. CLARENCE A. RODDEN
M/Sgt. JAMES E. DUNCANSON
M/Sgt. ROBERT R. YOUNG
M/Sgt. WILLIAM SULLIVAN
SFC JAMES CASEY

The Division includes both the Basic and Advanced courses, and upon completion of the two courses, together with summer camp training, students may apply for commissions as Second Lieutenants in the United States Army Reserve. In turn, outstanding students are eligible to apply for appointment as Second Lieutenants in the Regular United States Army, upon completion of the prescribed courses and graduation from Western Michigan College. Students in ROTC who maintain the established academic standards will be deferred from military service to insure completion of college without interruption.

BASIC COURSE

The first two years of military science comprise the basic course, designed to furnish a background of basic military subjects necessary to pursue the advanced course. The requirements for enrollment in the basic course are as follows: The student must be a citizen of the United States, over 14 and under 23 years of age, physically qualified for service, regularly enrolled at Western Michigan College, and of good moral character. Three years of Junior ROTC, or six months or more of active military service may be substituted for the first year of the basic course, when approved by the Professor of Military Science and Tactics. Basic course classes meet three hours each week, two hours in classroom work, and one hour of drill.

MS 101 Military Science—Two Semester Hours Credit.

Instruction in Military Organization; Military Problems and Policy of United States National Defense Act and ROTC; Maps and Aerial Photographs; First Aid and Hygiene; Leadership, Drill and Exercise of Command.

MS 102 Military Science—Two Semester Hours Credit.

Instruction in Individual Weapons and Marksmanship; Combat Formations; Tactics of the Rifle Squad; Leadership, Drill and Exercise of Command.
MS 201 Military Science—Two Semester Hours Credit.

Instruction in Organization for National Security and the Organization for Supply in the Army; Organization and Functions of the Quartermaster Corps; Property Accountability and Responsibility; Leadership, Drill and Exercise of Command.

MS 202 Military Science—Two Semester Hours Credit.

Instruction in Mission, Organization and Operation of Quartermaster Units; Unit and Organization Supply; Leadership, Drill and Exercise of Command.

ADVANCED COURSE

This course is primarily concerned with technical Quartermaster military subjects to furnish the student with a background for use in carrying out the duties of a Second Lieutenant, Quartermaster Corps, Army of the United States. For admission to the advanced course a student must have completed the basic course, be selected by the PMS&T and the President of the College, not be over 27 years of age at time of enrollment, and must execute a contract with the Government to finish the course, attend a six-week summer camp, and accept a reserve commission if tendered. When this contract is signed, completion of the advanced course becomes a requirement for graduation. Advanced course classes meet five hours each week, four hours in classroom work, and one hour of drill. Students accepted for the advance course receive payment of approximately $27.00 each month in lieu of subsistence issue.

MS 301 Military Science—Four Semester Hours Credit.

Instruction in Tactics of the Rifle Squad; Graves Registration and Mortuary Activities; Station Supply; Depot Supply; Commissary Operations; Leadership, Drill and Exercise of Command.

MS 302 Military Science—Four Semester Hours Credit.

Instruction in Storage, Warehousing and Materials Handling; Individual Weapons and Marksmanship; Food Service Activities; Garrison and Field Bakery Operations; Procurement, Storage and Distribution of Petroleum Products; Maintenance and Reclamation of Quartermaster Supplies; Salvage Operations and Procedures; Post and Field Laundry Operations; Leadership, Drill and Exercise of Command.

MS 303 ROTC Summer Camp.

Between MS 302 and MS 401 a summer training camp must be attended for a period of six weeks. Transportation to and from camp will be provided, and students will be fed, clothed, housed and paid while at camp. Instruction at camp consists of demonstrations of and participation in all types of military activities.
MS 401 Military Science—Four Semester Hours Credit.
Instruction in Military Teaching Methods; Geographical Foundations of National Power; Fiscal Procedures; Procurement Procedures; Psychological Warfare; Organization and Functions of the Technical Services; Organization and Functions of the Combat Arms; Technical Intelligence; Combat Intelligence; Command and Staff; Leadership, Drill and Exercise of Command.

MS 402 Military Science—Four Semester Hours Credit.
Instruction in Quartermaster Operations in the Continental United States; Military Administration; Quartermaster Operations in the Theater of Operations; Military Law and Boards; Leadership, Drill and Exercise of Command.
DIVISION OF PHYSICAL EDUCATION, HEALTH, AND RECREATION

Mitchell J. Gary, Chairman

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

PHYSICAL EDUCATION FOR MEN

MITCHELL J. GARY
GEORGE G. DALES
EDWARD A. GABEL
JOHN W. GILL
JOSEPH T. HOY

CHARLES H. MAHER
ERNEST J. PETOSKEY
THOMAS C. SLAUGHTER
RAYMOND F. SORENSEN
ROY J. WIEITZ

All men students must participate in general physical education beginning with the first semester of residence, until a minimum of four semester hours is completed, except that the requirement for men who attended Western Michigan College of Education prior to July 1, 1946, will remain at 3½ semester hours. An A course and a B course in the 100 group must be completed before the student enrolls in the 200 group. An A course and a B course in the 200 group must be completed before the student enrolls in the 300 group. A medical examination is required of all students upon initial entrance.

Members of athletic squads upon recommendation of the coach concerned, may receive credit for general physical education provided they officially enroll for physical education class and attend the class until the instructor arranges for their transfer to the athletic squad. If they are dropped from or withdraw from the athletic squad, they must report back immediately to the physical education instructor and attend class thereafter or credit will not be given.

Veterans of military service enrolling for the first time at Western Michigan College in September 1951 and thereafter will complete four semester hours of general physical education. Veterans who enrolled before September, 1951 are exempt from the general physical education requirement. In other words, any entering freshman or transfer student, beginning September, 1951, although he may be a veteran, must enroll for and participate in general physical education.

Majors or minors specializing in physical education are not required to complete the 4 semester hours of general physical education.

All transfer students must enroll for and participate in general physical
education during the first semester of residence at Western Michigan College and thereafter each semester until 4 semester hours of general physical education are completed. The 4 semester hours may include credits earned at another collegiate institution provided they are accepted for transfer by Western Michigan College. This requirement is in effect regardless of whether or not general physical education was required at the previous institution.

If time limitations will not permit the transfer student or other student to complete the minimum of 4 semester hours of physical education before graduation, he should enroll in a course meeting 3 hours weekly in order to earn the maximum credit possible during each semester before graduation.

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

Each male student shall enroll either in general physical education or R.O.T.C. beginning with his first semester of residence. He is excused from general physical education only for the semesters during which he is participating in R.O.T.C. If he elects less than 8 semesters of R.O.T.C., he must enroll in general physical education during all semesters that remain until graduation or until he has completed a minimum of four semester hours of physical education, whichever is achieved first.

R.O.T.C. credit earned at Western Michigan College or at another institution will not be accepted for general physical education credit at Western Michigan College.

Students in Occupational Therapy and in Medical Technology will complete 2 semester hours credit in Physical Education classes during their stay on campus and 2 semester hours credit will be given them for activities in the affiliated program off-campus.

Students enrolled in the terminal and in the two-year pre-professional curricula must participate in general physical education beginning with the first semester of residence; except that those enrolled in secretarial or retailing courses must complete one semester hour of Physical Education plus additional selected courses in health or physical education at the rate of one semester hour per semester until a minimum of four semester hours is completed.

The general physical education requirement will be waived for physical disability only if the waiver is approved by the Health Service and written notice is given by the Health Service to the Dean of Administration.

Students with irregular programs should consult the person in charge of general physical education to determine what recommendation may be made for satisfactory completion of the general physical education requirement.

Required courses for the twenty-four hour major in physical education are 105A, 105B, 205A, 205B, 206, 208, 209, 210, 211, 305, 306, 310, 320.
Strongly recommended electives are 207, 309, 312. Education 343 is required of those who plan to do directed teaching in physical education.

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

THE GENERAL PHYSICAL EDUCATION REQUIREMENT

102A General Physical Education

Activities of this course are especially designed to meet the physical needs of college freshmen. Emphasis is on fundamentals of the sports of the season, calisthenics, gymnastics, tumbling, and military drill.

First semester. Mr. Gill, Mr. Hoy, Mr. Maher, Mr. Petoskey, Mr. Sorensen, Mr. Wietz. Two-thirds semester hour.

102B General Physical Education

A continuation of the activities of 102A.

Second semester. Mr. Gill, Mr. Hoy, Mr. Maher, Mr. Petoskey, Mr. Sorensen, Mr. Wietz. Two-thirds semester hour.

103A General Physical Education

Similar in content to 102A above except that class meets three hours per week.

First semester. Mr. Gill, Mr. Hoy, Mr. Maher, Mr. Petoskey, Mr. Sorensen, Mr. Wietz. One semester hour.

103B General Physical Education

A continuation of the activities of 103A.

Second semester. Mr. Gill, Mr. Hoy, Mr. Maher, Mr. Petoskey, Mr. Sorensen, Mr. Wietz. One semester hour.

202A General Physical Education

Activities of this course follow the general pattern of the 100 group, emphasis on participation in the sports in season, with advanced work in gymnastics and tumbling.

First semester. Mr. Gill, Mr. Hoy, Mr. Maher, Mr. Petoskey, Mr. Sorensen, Mr. Wietz. Two-thirds semester hour.

202B General Physical Education

This is a continuation of 202A.

Second semester. Mr. Gill, Mr. Hoy, Mr. Maher, Mr. Petoskey, Mr. Sorensen, Mr. Wietz. Two-thirds semester hour.

203A General Physical Education

Content similar to 202A except class meets three hours per week.

First semester. Mr. Gill, Mr. Hoy, Mr. Maher, Mr. Petoskey, Mr. Sorensen, Mr. Wietz. One semester hour.
203B General Physical Education
This is a continuation of 203A.
Second semester. Mr. Gill, Mr. Hoy, Mr. Maher, Mr. Petoskey, Mr. Sorensen, Mr. Wietz. One semester hour.

302A General Physical Education
This class is organized to give additional participation in activities covered in the 100 and 200 groups with opportunities for students to spend special time in activities of major interest.
First semester. Mr. Gill, Mr. Hoy, Mr. Maher, Mr. Petoskey, Mr. Sorensen, Mr. Wietz. Two-thirds semester hour.

302B General Physical Education
This is a continuation of 302A.
Second semester. Mr. Gill, Mr. Hoy, Mr. Maher, Mr. Petoskey, Mr. Sorensen, Mr. Wietz. Two-thirds semester hour.

303A General Physical Education
Similar in content to 302A except that class meets three hours per week.
First semester. Mr. Gill, Mr. Hoy, Mr. Maher, Mr. Petoskey, Mr. Sorensen, Mr. Wietz. One semester hour.

303B General Physical Education
This is a continuation of 303A.
Second semester. Mr. Gill, Mr. Hoy, Mr. Maher, Mr. Petoskey, Mr. Sorensen, Mr. Wietz. One semester hour.

COURSES FOR SPECIALIZING STUDENTS

105A General Athletics and Elementary Gymnastics
Covers material used in physical education classes for elementary and high school level. In the fall, the fundamentals and playing of soccer are stressed. The winter activity consists of fundamentals on the buck, side horse, high bar, parallel bars, ladder, etc., with some attention to the fundamentals of boxing.
First semester. Mr. Hoy, Mr. Wietz. One semester hour.

105B Elementary Gymnastics and Outdoor Games
A continuation of 105A with the addition of wrestling, softball, and touch football.
Second semester. Mr. Hoy, Mr. Wietz. One semester hour.

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

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

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

208 Fundamentals and Technique of Football
Fundamentals of football coaching, with special emphasis on blocking, tackling, passing, kicking, and line and backfield maneuvers. Building an offense, principles of defense formations, scouting and rules.
Each semester. Mr. Petoskey. 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.
Each semester. Mr. Hoy. Two semester hours.

210 Fundamentals and Technique of Baseball
Theory and practice in base running, fielding, batting, and pitching; detailed study of each position; offensive and defensive team play; officiating; scoring; study of rules.
Each semester. Mr. Maher. Two semester hours.

211 Fundamentals and Technique of Track and Field
The accepted forms of starting, 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.
Each semester. Mr. Dales. 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. Notebook. Leadership emphasized.
First semester. Mr. Dales. Two semester hours.
306 First Aid and Athletic Training
Knowledge and skill in meeting emergencies. The use of massage, strappings, and training room techniques from the coach's point of view. Prerequisites: Anatomy 211A, Physiology 211B. Each semester. Mr. Gabel. Three semester hours.

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

310 Swimming
This course for physical education majors and minors is basic. Instruction is given to beginners with emphasis on the various strokes. Competent swimmers may participate in qualification tests for Senior Life Saving. Each semester. Mr. Gabel. One semester hour.

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

320 Playground and Community Recreation
Nature and function of play; age periods and adaptations of activities; social environment; needs and objectives; playground development; construction, management and supervision. Study of outstanding programs in operation. A survey of recreational material. Each semester. Mr. Slaughter. Three semester hours.

Open to Qualified Juniors, Seniors and Graduates

401 Curriculum Planning in Physical Education
A study and evaluation of present-day trends in secondary physical education for boys. A discussion of principles and procedures for curriculum construction and criteria for selection of activities and judging of outcomes. Individual projects will be developed. Second semester. Mr. Petoskey. Two semester hours.

Open to Graduates

501 Current Studies in the Administration of Physical Education
For administrative officers as well as for teachers and directors of physical education. Includes a study of representative programs of physical education and a discussion of standards for evaluating such programs. First semester. Mr. Gary. Two semester hours.
502 Community Recreation

Course considers problems in community recreation. The essential elements pertaining to leadership, areas, facilities, program, activities and methods of organization and administration are considered. A study is made of outstanding programs in operation. Recreation material is surveyed.

First semester. Mr. Slaughter. Two semester hours.

PHYSICAL EDUCATION FOR WOMEN

CRYSTAL WORNER
MARY BOTTJE
HELEN BROWN

ISABEL CRANE
ELEANOR N. DOUGLASS
DORIS A. HUSSEY
MARGARET LARGE

The Department of Physical Education for Women aims to provide an interesting and beneficial program of physical activity for each student. Physical fitness of the individual for participation is determined by medical and posture examinations. No student is excused from physical education, but program adjustments are arranged to take care of those with physical handicaps. Uniforms obtainable at the Campus Store are required for activity classes.

Requirements for the Physical Education major are: Physical Education 151, 251, 270, 271, 273, 274, 275, 276, 285, 351, 361, 444, 445 and 473; Biology 100 or 102, 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: 171, 275, 276, 285, 444, 445.

THE GENERAL PHYSICAL EDUCATION REQUIREMENT

100 Physical Education

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

Each semester. Miss Bottje, Miss Douglass, Miss Large. Two-thirds semester hour.

101 Square Dancing

Each semester. Miss Worner. Two-thirds semester hour.

105 Physical Education

Volleyball, folk dancing, basketball, softball, and other seasonal sports. Prerequisite: Physical Education 100.

First semester. Miss Bottje. Two-thirds semester hour.
108 **Restricted Exercise**
Sports and recreational activities for students with physical limitations.
Miss Bottje. Two-thirds semester hour.

109 **Individual Gymnastics**
A course of remedial exercise for students who do not pass the posture examination. Credit will be given in this course for one repetition only.
Each semester. Miss Hussey. Two-thirds semester hour.

110 **Swimming**
Swimming, diving, and life-saving. Prerequisite: Physical Education 100.
Each semester. Miss Bottje, Mrs. Brown, Miss Hussey, Miss Large. Two-thirds or one semester hour.

111 **Advanced Basketball**
Prerequisite: Physical Education 100.
First semester. Miss Douglass. Two-thirds semester hour.

113 **Tennis**
Prerequisite: Physical Education 100.
Second semester. Miss Bottje, Miss Douglass, Miss Hussey, Miss Worner. Two-thirds semester hour.

114 **Golf**
Practice of form for the various shots, with some work on the course.
Prerequisite: Physical Education 100.
Second semester. Miss Douglass. Two-thirds semester hour.

115 **Folk Dancing**
Prerequisite: Physical Education 100.
First semester. Miss Worner. Two-thirds semester hour.

116 **Advanced Swimming**
A course in swimming and life-saving; open to students who have passed the beginners' swimming test. Prerequisite: Physical Education 100.
First semester. Miss Hussey. Two-thirds semester hour.

117 **Winter Sports**
Skiing, skating, and hiking during the winter season. Prerequisite: Physical Education 100.

118 **Archery**
Prerequisite: Physical Education 100.
Each semester. Miss Douglass. Two-thirds semester hour.
119 **Tap Dancing**  
Prerequisite: Physical Education 100.  

120 **Badminton**  
Prerequisite: Physical Education 100.  
Each semester. Miss Bottje, Miss Douglass, Miss Hussey. One-third or two-thirds semester hour.

121 **Modern Dance**  
Individual and group study of expression through rhythmical movement.  
Prerequisite: Physical Education 100.  

122 **Social Dancing**  

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

330 **Elementary School Physical Education**  
A study of the physical, mental, and social nature of children in the early elementary group and of activities suited to their needs. Prerequisite: Physical Education 100.  
Each semester. Miss Bottje. Two-thirds semester hour.

332 **Secondary School Physical Education**  
A course giving in theory and practice physical education activities suitable for high-school students. Prerequisite: Physical Education 100.  
Second semester. Miss Douglass. Two-thirds semester hour.

**COURSES FOR SPECIALIZING STUDENTS***

151A **Physical Education Theory and Practice**  
Fundamental skills, body mechanics, folk dancing, social dancing, basketball, swimming, and hockey or soccer.  
First semester. Mrs. Brown, Miss Douglass, Miss Hussey, Miss Worner. Two semester hours.

151B **Physical Education Theory and Practice**  
Softball, social dancing, folk dancing, tennis, volley ball, and swimming.  
Second semester. Mrs. Brown, Miss Douglass, Miss Hussey, Miss Worner. Two semester hours.

*Students who are neither majoring nor minoring in Physical Education may elect courses from this group with consent of the departmental adviser. Only the activity courses in this group may be used to fulfill the general physical education requirement.
171 First Aid
The standard course in first-aid techniques leading to the Red Cross certificate.
First semester. Miss Douglass. Two semester hours.

240 Camping Education
This course consists of two parts, the first part to be taught on the campus twice a week for one semester, the second part to be four weeks of field work at a camp. Some of the topics to be considered are: the history and scope of camping, camping in education, camp standards, problems and personnel. Practice will be provided in skills and techniques for camp counselling. The field work will be done in a camp selected by the department where the student will be a counselor with continued guidance by a camp director.
Second semester and four weeks during the summer. Miss Crane, Miss Large. Four semester hours.

251A Physical Education Theory and Practice
A selection of activities for the elementary-school age level in relationship to the development of the fundamental skills and play interests.
First semester. Miss Bottje, Mrs. Brown, Miss Hussey, Miss Worner. Three semester hours.

251B Physical Education Theory and Practice
An activity program which offers an opportunity for organization and participation in simple games, simple team games, stunts, track and field, skill tests, rhythms and dances.
Second semester. Mrs. Brown, Miss Douglass, Miss Hussey, Miss Worner. Three semester hours.

270A Elementary School Physical Education
Concerned with the play interests, needs, and characteristics of children at the elementary-school level. An analysis of activities in terms of these needs.
Miss Bottje. Two semester hours.

270B Elementary School Physical Education
Practice in physical education activities suitable for the elementary grades with opportunities for members of the group to teach the activities. Miss Bottje. Two semester hours.

273 Applied Anatomy
Analysis of the mechanics of bodily movement. A study is made of the location and action of the large muscles in developmental activities and exercises. Prerequisite: Anatomy 211A, Physiology 211B.
First semester. Miss Hussey. Two semester hours.
274A Secondary School Physical Education
A study of the rules and methods of coaching team games of secondary level; also experience in the organization and management of tournaments and play days.

274B Secondary School Physical Education
A study of the rules and methods of coaching individual sports of secondary level, such as tennis, archery, and badminton.
Second semester. Miss Douglass. One semester hour.

275 History and Principles of Physical Education
A brief historical survey of physical education. In addition, a study is made of the principles of physical education and of the types of programs that develop through their application.
First semester. Miss Worner. Three semester hours.

276 Community Recreation, Scouting, and Camp Fire
The study of the organization and administration of community play.
First semester. Miss Worner. Two semester hours.

285 Health Education
In this course the fundamental scientific principles of healthful living are developed through a study of school health problems. An effort is made to make prospective teachers aware of modern methods and materials useful in helping school children solve their health problems.
Each semester. Miss Crane, Miss Worner.

351A Physical Education Theory and Practice
This course offers instruction in the theory and practice of group and team games of secondary level, individual sports, such as pingpong and ring tennis, and practice in marching, gymnastics, apparatus, tumbling, and dance.
First semester. Mrs. Brown, Miss Douglass, Miss Hussey. Two semester hours.

351B Physical Education Theory and Practice
A continuation of instruction in the theory and practice of activities suitable for secondary-school level.
Second semester. Mrs. Brown, Miss Douglass, Miss Hussey. Two semester hours.

361A Physical Education Theory and Practice
Advanced work in sports, swimming, and dancing, with opportunities for teaching and officiating.
First semester. Miss Douglass, Miss Hussey. Two semester hours.
361B Physical Education Theory and Practice
Continuation of the work begun in 361A with changes in the sports to suit the season.
Second semester. Miss Douglass, Miss Hussey. Two semester hours.

Open to Qualified Juniors, Seniors and Graduates

473 Individual Gymnastics
The study of preventive as well as prescribed exercises for remedial defects in case of curvature and physical abnormalities. Practice with patients will be given. Prerequisite: Anatomy 211A, Physiology 211B, Applied Anatomy 273.
Second semester. Miss Hussey. Three semester hours.

Open to Graduates

520 Curriculum Building in Physical Education
A course in the development of a practical progressive physical education program for the elementary schools and for secondary school girls. A review of characteristics of children, particularly those concerned with physical education, will be used as a basis for a thorough analysis of the development of the fundamental and basic skills at the various age levels.
First semester. Miss Bottje. Two semester hours.

530 The Dance in Education
The study of dance—its forms, history and relationship to the other arts. The place in education, the development of rhythmic expression and its relation to other subjects through the child's school life. The course consists of lectures, techniques, composition and performance.
First semester. Mrs. Brown. Two semester hours.

540 Corrective Therapy and Rehabilitation
A study of the physically handicapped child and of the contribution which the physical education program can make in his education. After a review of kinesiology and the principles of good body mechanics, a study will be made of muscular re-education for cases of birth injury, poliomyelitis, cerebral palsy and other handicapping deviations.
Second semester. Miss Hussey. Two semester hours.

550 Problems and Trends in Physical Education
This course deals with modern trends in the field and with instructional and supervisory problems involved in conducting an effective program of physical education. Critical appraisal of present practices.
Second semester. Miss Worner. Two semester hours.
DIVISION OF RURAL LIFE AND EDUCATION

Wm. McKinley Robinson, Chairman

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

AGRICULTURE

HOWARD D. CORBUS

The four major objectives of the Department of Agriculture are: (1) to prepare teachers of agriculture and shop work in rural consolidated schools and other schools in agricultural districts of the state; (2) to assist in the preparation of elementary teachers in rural schools; (3) to offer a pre-professional program for students who plan to transfer to schools of forestry, veterinary science, and specialized fields of agriculture; (4) to provide a general education in the field of agriculture as it relates to our national economy.

It is recommended that students in the first group elect basic science courses in biology, general chemistry, geology, and geography, and also basic courses in economics, sociology, history, and government for background information which is closely associated with all production and marketing practices in agriculture. Basic courses in industrial arts are also recommended in combinations of agriculture and shop courses, making possible major and minor sequences in these fields. Courses in education and directed teaching should be arranged with the counselor of the Division of Rural Life and Education. Majors in agricultural subjects with or without combinations in other departments can be arranged. Courses 107, 108, 109, 200, 201, and 202 are included in Group II.

105 Rural School Agriculture

A course designed to present to prospective rural school teachers as much information and materials as time permits concerning the environment surrounding representative rural schools. Consideration is given to the amounts and sources of cash used to support family and school costs in farming areas.

First semester. Mr. Corbus. Three semester hours.

106 Introduction to Agriculture

An introduction to the national institution of farming, where it operates, the rewards and compensations, the main problems, and opportunities
present which may support acceptable living standards for families living on farms and also for those investing capital in the business of farming.

First semester. Mr. Corbus. Three semester hours.

107 Animal Husbandry

An introduction to the industry of animal production, the development, consumption characteristics, marketing systems, and producer and consumer price relationships.

First semester. Mr. Corbus. Three semester hours.

108 Dairying and Feeding

A course to open up, to possible producers and consumers of milk products the possibilities of cash income from producing milk and butterfat, and the accompanying factors affecting success in the business.

Second semester. Mr. Corbus. Three semester hours.

109 Poultry

Poultry courses include the consideration of likely cash incomes from poultry enterprises, with the hazards, sources of stock, care, and marketing problems examined.

Second semester. Mr. Corbus. Three semester hours.

200 Soils

This course is intended to open new interests, establish scientific thinking, and promote more specific and continued observations with personal understandings of the importance of soils in the lives of everyone.

First semester. Mr. Corbus. Three semester hours.

201 Farm Crops

This course includes a survey of areas of crop production in the country, and in state and local communities, together with the study of cultural practices used to produce crops for market.

Second semester. Mr. Corbus. Three semester hours.

202 Horticulture

Organized to develop more fully the possibilities of financially supporting a farm family, using horticultural products as the sources of income. Handicaps, specific problems, marketing, and approved practices are studied.

Second semester. Mr. Corbus. Three semester hours.

300 Farm Management

This part of farm organization has been divided from the Farm Crops course in order to examine more fully the records of The College Farm enterprises that are now a part of farm income.

Second semester. Mr. Corbus. Three semester hours.
DIVISION OF RURAL LIFE AND EDUCATION

301 Land Use and Soil Conservation
This course is aimed at establishing an understanding of the movement promoting better use of the various types of land, and the recommended practices for conserving the productivities of these lands.
First semester. Mr. Corbus. Three semester hours.

310 Organizations in Agriculture
This is a specialized course in which the wide variety of farm organizations are studied so that the purpose, personnel, and influence of the organizations can be better observed.
Second semester. Mr. Corbus. One semester hour.

Open to Qualified Juniors, Seniors and Graduates

410 Agriculture in Michigan
This course includes a survey of Michigan agricultural production, the areas, volume and types of production and the marketing systems in operation. The place of Michigan agriculture in national and international production is included. There will also be a survey of the different types of education in Agriculture at the various grade levels in Michigan.
Mr. Corbus. Two semester hours.

RURAL LIFE AND EDUCATION

WM. MCKINLEY ROBINSON

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.
Students who major (24 semester hours) or minor (15 semester hours) in Rural Life and Education must take Curriculum 140 and Rural School Administration 340. Under the guidance of the departmental adviser the additional courses are chosen to meet the individual student's needs from among the following or their equivalents:
Rural Sociology 220, Rural Economics 230, Rural Life (Seminar) 320 or 321, Rural School Supervision (Seminar) 345 or 346, Special Problems of Community Schools (Seminar) 348; Introduction to Speech Correction 230, Introduction to Guidance Services 480, Introduction to Special Education 231, Introduction to Mental Hygiene 235, Audio-Visual Education 438; and one or more courses in Vocational Education such as Rural Practical Arts 104, Food for the Family 118, Clothing 203, Home Furnishings 221, Everyday Nutrition 222, Marriage and Family Relations 325, Housing and House Planning 421, Consumer Buying 439.

JAMES O. ANSEL
RURAL EDUCATION COURSES

140 Curriculum

A study of the objectives of education relating to rural children and rural needs, and curriculum practices in carrying out the objectives. Students have a wide range of experience in observation and in the examination and development of materials suitable for rural schools.
Each semester. Dr. Ansel. Three semester hours.

240 Introduction to Directed Teaching

A functional study of the general principles underlying good teaching and management in the various types of rural schools. Group and individual observation and participation opportunities on and off campus are provided.
Each semester. Dr. Ansel. Three semester hours.

241 Directed Teaching

The Hurd-One-Teacher and the Portage Rural Agricultural Schools are used for students in the department. Selected students are permitted to do practice teaching while in residence for six weeks in a school district in one of the several counties in the service area of the college.
Each semester. Supervisors. Four or five semester hours.

340 Rural School Administration

Problems met by teachers in rural schools are considered, such as district reorganization, community schools, public relations, support and control, county superintendent, state department, school plant, equipment and supplies, school law, professional ethics.
Second semester. Dr. Robinson. Three semester hours.

345 Rural School Supervision (Seminar)

Planned for principals, supervisors, and superintendents, this includes individual reports on problems related to the curriculum, teaching, and supervision of all types of rural schools and stresses the in-service education of teachers. Prerequisite: consent of instructor.
First semester. Dr. Ansel. Two semester hours.

346 Rural School Supervision (Seminar)

Continuation of 345. Study of group and individual problems pertaining to supervision and the related administrative activities in rural areas. Field work is afforded. Prerequisite: consent of instructor.
Second semester. Dr. Ansel. Two semester hours.

348 Special Problems of Community 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.
School semester. Dr. Robinson. Two semester hours.

RURAL SOCIAL SCIENCE COURSES

220 Rural Sociology
Study of life in the rural environment—population trends, community, social institutions, health facilities, libraries, etc. Current magazines and pamphlets supplement the textbooks.
Each semester. Dr. Robinson. Three semester hours.

230 Rural Economics
The fundamental principles are considered in terms of rural life relating to the local community and to the national and international scene. Economic interpretation is given topics touched upon in the elementary and secondary-school curricula; notably, conservation, agricultural extension services, cooperatives, insurance, consumer education, etc.
Each semester. Dr. Robinson. Three semester hours.

320 Rural Life (Seminar)
Critical study of recent advanced books in the field of rural social life with emphasis upon leadership, supplemented with references including research studies. Prerequisite: consent of instructor.
First semester. Dr. Robinson. Two semester hours.

321 Rural Life (Seminar)
Social research, such as local, county, or regional planning of various services and agencies, is considered; members of the class devising forms and schedules for a rural-community study. Individual problems are studied, field trips are included. Prerequisite: consent of instructor.
Second semester. Dr. Robinson. Two semester hours.
DIVISION OF SCIENCE AND MATHEMATICS

William J. Berry, Chairman

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

In certain cases, where a major or minor in science seems advisable, the Chairman of the Division should be consulted. Acting in conjunction with the heads of the involved departments (Biology, Chemistry, Geography and Geology, Mathematics, Physics, and Psychology), the Chairman will advise students relative to such majors or minors. In such cases the following rules will be observed:

A. For a science major
   1. Thirty or more semester hours are required in the division;
   2. The subjects must be selected from no more than two departments;
   3. Fifteen semester hours must be in subjects above the freshman level.

B. For a science minor
   1. Twenty or more semester hours are required in the division;
   2. The subjects must be selected 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. Selected topics in science, such as the solar system, energy, chemical change, the generation and use of electricity, x-rays and radioactivity, and others, are discussed.

Science Staff. Four semester hours.

100B Physical Science

A continuation of 100A. Further studies are carried on in chemistry and astronomy. In addition a study of weather and climate, rocks and minerals, erosion, and other geological subjects is made.

Science Staff. Four semester hours.

203 Teaching of Elementary Science

This course covers the more important subject matter of the physical and biological sciences with methods for its effective presentation in the classroom, particularly in rural schools.

Second semester. Dr. Mallinson. Three semester hours.
Teaching of Physical Science

Prerequisite: a major or minor in physics or chemistry.
Not given in 1954-1955. Two semester hours.

BIOLOGY

W. C. Van Deventer
Bette E. Barnes
Harriette V. Bartoo
A. Verne Fuller
Frank J. Hinds

Roy E. Joyce
George G. Mallinson
Myrtle M. Powers
Edward E. Reynolds
Edwin B. Steen

Merrill R. Wiseman

Courses 100A and 100B serve as the foundation for a biology major, for pre-professional training in medicine, dentistry, nursing, medical technology, forestry, horticulture, and landscape architecture, and as general prerequisites for advanced courses in the department.

A recommended major for pre-medical and pre-dental students includes 100A, B; 242A, B; 341 and 342. If possible, 312A and B should be elected. A recommended major for students preparing to enter forestry, horticulture, or landscape architecture consists of 100A, B; 221A, B; and 242 A, B. If possible, 223, 224, 243, and 410 should be elected. The recommended minor for physical education students consists of 100A, B; 211A, B; and 112. Course 304 must be elected if the person intends to teach biology in high school. The required minor for occupational therapy students consists of 102, 231A or B and 211A, B.

A major for secondary teachers should embrace as wide a range of courses as possible within the department, including both zoological and botanical aspects of biology. Students are expected to take 304 before enrolling for directed teaching in biology. A recommended minor for elementary teachers consists of 102, 231A, 231B, and three elective hours of work beyond the 100 level. A recommended minor or major for secondary teachers must include 304.

In all courses at the 500 level, consent of the instructor is a prerequisite for enrollment.

100A General Biology

This and the following course, 100B, cover the field of biology and serve as a foundation for advanced courses. This course includes a study of the cell and protoplasm, unicellular organisms, and the animal groups in the order of advancing complexity.

First semester. The staff. Six class hours weekly, including lecture and laboratory. Four hours credit.

100B General Biology

A continuation of 100A, covering the higher animal groups, the plant groups, genetics, evolution, ecology, and conservation.

Second semester. The staff. Six class hours weekly, including lecture and laboratory. Four hours credit.
101A General Biology
An abridgment of 100A, designed especially for teachers in service. (Offered by extension only) The staff. Three semester hours.

101B General Biology
An abridgment of 100B, designed as a sequel to 101A. (Offered by extension only.) The staff. Three semester hours.

102 Biological Science
A course designed to present basic biological principles and to give the student an understanding of the operation of the world of life. It fulfills the general education requirement for biological science when taken in combination with Human Geography, and it may also be used as a basis for a biology minor. It may not be used as a basis for a major except with consent of the department and in connection with 221A, B, and 242A, B.

Each semester. Dr. Van Deventer, Mr. Joyce, and Miss Powers. Six class hours weekly, including lecture and laboratory. Four semester hours.

102S Biological Science for Teachers
This course has the same goals and content as 102, but the presentation of subject matter is oriented especially for teachers in service.

Offered only in summers. It may be used as a basis for a biology minor. Four semester hours.

231A Outdoor Science
The development of ability to interpret natural phenomena with scientific accuracy, and to gain an understanding and appreciation of the relationships of life forms to each other and to their environment. Topics receiving special emphasis are flowering and non-flowering plants, insects, spiders, winter birds, mammals and astronomy. This course is especially desirable for elementary teachers. Field trips are a part of the scheduled work.

First semester. Miss Fuller. Six class hours weekly. Four semester hours.

231B Outdoor Science
Rocks, minerals, weather, spring plants, pond life, migratory and resident birds are included in the discussions, laboratory and field work, continuing the aims of 231A. This course is especially desirable for elementary teachers. Students may enter without having had 231A.

Second semester. Miss Fuller. Six working hours weekly. Four semester hours.

231S Nature Study for Teachers
An abridgment of 231A and 231B, designed especially for teachers in service.

Offered only in summers. Four semester hours.
304 Methods and Materials in Biology
This consists of class discussion, laboratory practice, and field work illustrating the selection, preparation, care, and use of materials for biological teaching with particular reference to high school conditions. Prerequisite: Twelve hours of biology, including both zoological and botanical aspects. This course is required of all prospective teachers who list biology as a major or minor.
Each semester. Dr. Mallinson. Four class hours weekly. Two semester hours.

305 Genetics
A comprehensive treatment of the field of genetics, including its application to plant and animal breedings and to man. Prerequisite: 100A, B, or equivalent.
First semester. (Not offered in 1954-1955) Four class hours weekly, including lecture and laboratory. Two semester hours. Mr. Reynolds.

306 Evolution
A consideration of the evidence for and principles involved in the evolution of plants and animals, including man. Prerequisites: 100A, B, or equivalent.
Second semester. Two semester hours. Dr. Van Deventer.

Open to Qualified Juniors, Seniors and Graduates

400 Recent Advances in Biology
A unit of a three-course group (with Teaching of Science and Recent Advances in Physical Science) designed particularly to aid high school teachers in keeping abreast of developments in the biological field. Open to other students. Prerequisite: Eight hours of biological science.
First semester and summers. (Not offered summer 1954) Two semester hours. Mr. Reynolds.

401 General Ecology
This is a study of plant-animal communities with emphasis on interrelationships among living organisms. Ecological concepts are presented and illustrated. Natural communities are studied, the influence of man is analyzed, and consideration is given to the types of secondary communities which have developed in connection with man's occupancy. Prerequisite: Eight hours of college biology.
First semester and summers. (Not offered summer 1954) Four working hours weekly, consisting of lectures and field studies. Two semester hours. Dr. Van Deventer.

408 History of Biology
This course involves a consideration of the nature and application of scientific attitude and scientific method as exemplified by specific cases from the history of biological research. Basic principles are stressed, along with
an understanding of the major currents of thought and investigation which have influenced the direction of biological research up to the present time. Prerequisite: Eight hours of college biology.

Second semester. Two semester hours. Dr. Van Deventer.

Open to Graduates

500 Recent Advances in Biology
An extension and expansion of 400. Students will be expected to undertake an extensive survey of current literature in biology at the popular and semi-technical levels, and to report this in the form of an acceptable paper. Minimum prerequisite: Eight hours of biological science and consent of the instructor.

First semester and summers. (Not offered summer 1954) Two semester hours. Mr. Reynolds.

501 Problems in Ecology
Using the local area as a laboratory, the student is expected to work out a special problem in the field, and prepare an acceptable paper on the basis of this investigation. Minimum prerequisite: Eight hours of college biology and consent of the instructor.

First semester and summers. (Not offered summer 1954) Two semester hours. Dr. Van Deventer.

508 Problems from the History of Biology
Students taking this course will choose a specific area of biological research, or the work of a particular individual, and will conduct an extensive investigation through available literature of this as a problem, to be written up as a course report. Minimum prerequisite: Eight hours of college biology and consent of the instructor.

Second semester. Two semester hours. Dr. Van Deventer.

530 Conservation of Natural and Human Resources
A study of the problems involved in the adjustment of human populations to the limitations imposed by the natural world, how man may make the best use of both replaceable and non-replaceable natural resources, and how he may best adjust himself to situations of abundance and scarcity. Problems of humans, soil, forest, and wild life, water and mineral conservation are stressed. Minimum prerequisite: A year’s work in biology or geography.

Offered only in summers. Two semester hours.

Anatomy, Physiology, and Hygiene

112A Healthful Living
A study of the principles underlying sound health practices. Factors in the causation, prevention, and control of disease are considered, and some attention is given to mental and social hygiene.

Each semester and summers. Mr. Joyce, Miss Powers, Mr. Reynolds, Dr. Steen. Two semester hours.
112B Healthful Living

A continuation and expansion of 112A, for students wishing to continue the study of health for an additional semester at the freshman level.

Second semester. Miss Powers. Two semester hours.

211A Anatomy

A study of the gross and microscopic structures of the vertebrates with special reference to man. In the laboratory the cat is dissected in detail. Prerequisite: 100A, B, or equivalent.

First semester. Dr. Steen, Mr. Wiseman, Mr. Reynolds. Six class hours weekly. Four semester hours.

211B Physiology

A study of the functions of the organs and tissues of the human body. In the laboratory, experimental techniques are utilized. Prerequisite: 100A, B, and 211A or their equivalent.

Second semester. Dr. Steen, Mr. Wiseman, Mr. Reynolds, Mrs. Barnes. Six class hours weekly. Four semester hours.

211S Anatomy and Physiology for Teachers

An abridgement of 211A and 211B, designed especially for teachers in service. Offered only in summers and by extension. Four semester hours.

212 Community Hygiene

An introduction to the field of public health. The nature and prevalence of communicable and non-communicable diseases are considered, followed by a study of community measures for their control. Attention is given to the health problems of certain age-groups, to industrial and school hygiene, and to the functioning of voluntary and official health agencies.

Each semester and summers. Not offered Summer 1954. Mr. Joyce. Three semester hours.

213 Anatomy and Physiology for Nurses

An abridged combination of 211A and 211B, especially adapted to meet the needs of the students in the Bronson Hospital School of Nursing.

First semester. Dr. Steen, Mrs. Barnes. Six class hours weekly. Four semester hours.

214 Bacteriology for Nurses

An abbreviated course in microorganisms, adapted to the needs of students in the Bronson Hospital School of Nursing.

Second semester. Mr. Wiseman, Mrs. Barnes. Four class hours weekly. Three semester hours.

312A Bacteriology

A study of microorganisms and their place in nature. Special attention is given to beneficial and injurious forms. Techniques used in their study
are demonstrated and employed in the laboratory. Prerequisite: 100A, B, or equivalent, and a course in chemistry.
First semester. Mr. Wiseman, Mrs. Barnes. Six class hours weekly. Four semester hours.

312B Bacteriology
A continuation of 312A with special attention given to pathogenic micro-organisms. Prerequisite: 100A, B, or equivalent, a course in chemistry and 312A.
Second semester. Mr. Wiseman, Mrs. Barnes. Six class hours weekly. Four semester hours.

Open to Qualified Juniors, Seniors and Graduates

413 Health Problems
This course is given on the seminar plan. Each student studies intensively several problems of his own choice, under the guidance of the instructor. The class meetings are devoted to discussion and group criticism of each student's reports. Prerequisite: consent of the instructor.
Second semester and summers. Not offered Summer 1954. Mr. Joyce. Two semester hours.

414 Materials for School Health Education
A practical course of lectures and demonstrations in which emphasis is placed on the effective health supervision of school children, the principles and practices of health teaching in the various grades, and the interrelation of this teaching to that of other subjects in the curriculum.
First semester and summers. Not offered 1954-1955 or Summer 1955. Mr. Hinds. Two semester hours.

For Graduates

513 Advanced Health Problems
An extension and expansion of 413. Students will carry on supervised investigation of a specific problem culminating in the preparation of an acceptable paper. Other selected problems are also considered and discussed. Prerequisite: consent of the instructor.
Second semester and summers. Not offered Summer 1954. Mr. Joyce. Two semester hours.

BOTANY

221B Botany
A course designated to acquaint the student with the fundamental gross and microscopic structure, classification and development of the seed plants. The college greenhouse is used in experiments involving living plants and their propagation. Prerequisite: 100A, B, or a year of high school botany.
First semester. Dr. Bartoo. Eight class hours weekly. Four semester hours.
221B Botany
A systematic study of the various plant groups, from the simplest algae to the more complex families of angiosperms, particularly in relation to their identification, structure, reproduction, and ecology. During the latter half of the semester, field studies occupy the major portion of the class time. Keys are used in identifying the more common plants of the Kalamazoo area. This continuation course of 221A can also be entered by students with satisfactory prerequisites.

Second semester. Dr. Bartoo. Eight class hours weekly. Four semester hours.

223 Trees and Shrubs
A field course in the identification of trees and shrubs occurring in southwestern Michigan. Attention is given to their geographic and physiographic distribution, and their uses in ornamental and economic planting, and for industrial purposes. Prerequisite: 100A or B or equivalent.

First semester. Dr. Bartoo. Four class hours weekly. Two semester hours. Not offered 1954-1955.

224 Local Flora
A field course in the identification of flowering plants. This course is designed to acquaint the student with the wild flowers occurring in southwestern Michigan. Attention is given to their geographic and physiographic distribution and other ecological relationships. Prerequisite: 100A or B or equivalent.

Second semester. Dr. Bartoo. Four class hours weekly. Two semester hours.

Open to Qualified Juniors, Seniors and Graduates

410 Economic Botany
A course dealing with plants useful to man including those used for food, flavoring, drugs, clothing, and building purposes. Emphasis is placed on a knowledge of plant life of economic value in connection with teaching at both elementary and secondary levels. Open to sophomore students by permission. Especially desirable for students in business education and industrial education. Prerequisite: Permission of the instructor.

First semester. Dr. Bartoo. Three semester hours.

420 Flowering Plants
An advanced course in field study and identification of flowering plants. Students will be expected to use keys for identification and assemble a herbarium collection for their own use. Prerequisite: Eight hours of biology.

Offered only in summers. Lectures and field work. Two semester hours.

ZOOLOGY

242A Invertebrate Zoology
A study of the structural characteristics, physiology, life histories, habits, distribution, and classification of the invertebrates. Identification of local
forms, and those having economic importance is emphasized. Prerequisite: 100A, B, or equivalent.

First semester. Mr. Hinds. Eight class hours weekly. Four semester hours.

242B Vertebrate Zoology (Comparative Anatomy)
A study of the Phylum Chordata; essential features of lower types; general features of chordate development; the endoskeleton and comparative anatomy of the systems of vertebrates. Field work includes a trip to the Field Museum of Natural History in Chicago. Prerequisite: 100A, B, or equivalent.

Second semester. Mr. Hinds. Eight class hours weekly. Four semester hours.

243 Bird Study
A development of knowledge and appreciation of birds through a 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 kinds in the laboratory and 50 in the field.

Second semester and summers. Not offered Summer 1954. Miss Fuller. Three semester hours.

341 Cytology and Histology
The microscopic study of the cells, tissues, and organs of the body with some attention to their preparation for study. Prerequisite: 100A, B, and eight additional hours of biology.

Second semester. Dr. Steen. Eight class hours weekly. Four semester hours.

342 Vertebrate Embryology
The study of the development of the individual from the origin of the germ cells to adulthood. The frog and chick are emphasized in the laboratory approach. Prerequisite: 100A, B, and eight additional hours of biology.


Open to Qualified Juniors, Seniors, and Graduates

421 Parasitology
A study of animal parasites, internal and external, their classification, life histories and ecological relationships. Emphasis is given to parasites of man and domestic animals. Prerequisite: 100A, B, or equivalent.

First semester. Dr. Steen. Four class hours weekly. Two semester hours.

422 Insects
A study of insects, their identification, and life histories. Emphasis is placed on those species having economic importance and relationships to human health. Prerequisite: 100A, B, or equivalent.
First semester and summers. Not offered 1954-1955 or Summer 1954. Dr. Steen. Four class hours weekly. Two semester hours.

440 Mammalogy

A study of mammals, their identification, habits, life histories, ecological relationships, economic importance and conservation, with emphasis on North American forms. Field and laboratory work are included in the course. Prerequisite: 100A, B, or equivalent.

Second semester. Not offered 1954-1955. Mr. Hinds. Four class hours weekly. Two semester hours.

441 Advanced Ornithology

Introductory bird study is reviewed. Special attention is given to details of song, habitat, habits, and identification of shore and marsh birds in their native haunts. Skins of birds both resident and migrant in Michigan are provided for identification in the laboratory. Early morning field trips will be a part of the scheduled class work. Prerequisite: Eight hours of college laboratory courses in biology and permission of the instructor.

Second semester and summers. Mr. Hinds. Three semester hours.

541 Problems in Ornithology

Within the framework of a working knowledge of local bird fauna, students are expected to work out a specific problem in the field. This will form the basis for an acceptable written report. Minimum prerequisite: Eight hours of college laboratory courses in biology and permission of the instructor.

Second semester and summers. Mr. Hinds. Two semester hours.

SPECIAL FIELD COURSES

At the Higgins Lake Training School of the Conservation Department, a week's work is offered in June, following Commencement. The student may obtain one semester hour credit in one of the following: Conservation, Botany, Ornithology, Mammalogy. For particulars, consult the Adult Education Department.

CHEMISTRY

Gerald Osborn
James W. Boynton
Robert J. Eldridge

Lawrence G. Knowlton
Lillian H. Meyer
Lauri E. Osterberg

A major in chemistry consists of one year of general chemistry (8 semester hours) and 16 semester hours from the following: 201, 202, 306A, B, 341, 350, 351, 408, 403A, 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, 351, 408.
### BASIC CHEMISTRY COURSES

**100A General Chemistry**

The fundamental principles of chemistry are studied in such a way as to prepare both those students who wish to teach and those who expect to go on to more advanced work in the subject. This course may also be taken as a cultural subject. Prerequisite: one year of algebra. Designed for students who have had no high school chemistry.

First semester. Mr. Eldridge. Four semester hours.

**100B General Chemistry**

A continuation of General Chemistry 100A. Prerequisite: General Chemistry 100A.

Second semester. Mr. Eldridge. Four semester hours.

**101A General Chemistry**

This is a more advanced course than 100A. The theory and fundamental principles of chemistry are emphasized. It is a foundation course. Prerequisite: one unit of high school chemistry and one unit of algebra.

Each semester. Chemistry Staff. Four semester hours.

**101B General Chemistry**

A continuation of course 101A. Prerequisite: General Chemistry 101A.

Each semester. Chemistry Staff. Four semester hours.

**105A General Chemistry**

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

First semester. Dr. Meyer. Four semester hours.

**105B General Chemistry**

A continuation of course 105A. Some applications of inorganic chemistry to home economics, elementary organic chemistry, introduction to the chemistry of foods and the body, and to textiles and dyeing. Open only to students in the Department of Home Economics. Prerequisite: General Chemistry 105A.

Second semester. Dr. Meyer. Four semester hours.

**106 Chemistry (for Nurses)**

The fundamentals of chemistry are studied with a view to applying them to the field of nursing. Credit for this course applies only to the combined curriculum in letters and nursing.

First semester. Dr. Meyer. Four semester hours.

**201 Qualitative Analysis**

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

Each semester. Dr. Osborn. Four semester hours.

202 Quantitative Analysis
This course includes the theory and practice of volumetric and gravimetric analysis. Prerequisite: Qualitative Analysis 201. A knowledge of quadratic equations and common logarithms is essential.

Second semester. Mr. Boynton, Dr. Knowlton. Four semester hours.

205 Everyday Chemistry
Through the media of lecture—demonstrations, sound films, and field trips the student will be given an introduction to the role of chemistry in everyday living. This course is designed for those students who have never studied chemistry. It should be especially helpful to elementary teachers and to all other teachers who are non-specialists in science.

Summer 1955. Dr. Osborn. Two semester hours.

210 Engineering Materials
An elementary study of the manufacture and properties of the ferrous and non-ferrous alloys, cements, clay products, protective coatings, fuels, and water softening. This is a non-laboratory course for pre-engineers. This course should be accompanied by a metal-processing course. Prerequisite: General Chemistry 100A, B or 101A, B.

First semester. Mr. Eldridge, Dr. Knowlton. Three semester hours.

305 Advanced Qualitative Analysis
This course consists of laboratory work, readings, and quizzes. Emphasis is placed on the analysis of alloys and mixed solids.

Given on request. Dr. Osborn. One or two semester hours depending on amount of work.

306A Organic Chemistry
Preparation and reactions of organic compounds, of both the aliphatic and the aromatic series, are studied. These courses are valuable, not only to those students who wish to teach chemistry, but also to those who may later study medicine, dentistry, or chemical engineering. Prerequisite: General Chemistry 100A, B or 101A, B. Open to qualified sophomores.

First semester. Mr. Eldridge, Dr. Osborn. Four semester hours.

306B Organic Chemistry
A continuation of course 306A. Prerequisite: Organic Chemistry 306A.
Second semester. Mr. Eldridge, Dr. Osborn. Four semester hours.

307 Advanced Quantitative Analysis
Special determinations will be selected by the student upon approval of the instructor. Analysis of limestone and brass will generally be included
depending upon the previous background of the student. Prerequisite: Quantitative Analysis 202. Given on request.

Mr. Boynton, Dr. Knowlton. One or two semester hours depending on the amount of work.

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 105B.

First semester. Dr. Meyer. Two semester hours.

350 Elementary Biochemistry

Elementary study of the chemistry of the body; digestion, metabolism, excretion, the endocrines, and vitamins. Prerequisite: Organic Chemistry 306A. Open only to Juniors and Seniors.

Second semester. Dr. Meyer. Two semester hours.

351 Biochemistry Laboratory

Analysis of blood, urine, and gastric juice, and other experiments according to the needs of the student and the number of hours credit elected. To accompany Elementary Biochemistry 350. Prerequisite: Quantitative Analysis 202, and Organic Chemistry 306A.

Second semester. Dr. Meyer. One or two semester hours.

398 Inorganic Preparations

Consult instructor before enrolling. Laboratory work only.

Given on request. Mr. Eldridge, Dr. Osborn. One or two semester hours.

399 Organic Analysis

Determination of carbon, hydrogen, and nitrogen by combustion methods. Laboratory work only. Consult instructor before enrolling.

Given on request. Mr. Eldridge. Two semester hours.

Open to Qualified Juniors, Seniors, and Graduates

403A Physical Chemistry

The course includes studies in kinetic theories of gases, liquids, solids, solutions, thermodynamics, physical basis for molecular structure, thermo-chemistry, homogeneous equilibria, heterogeneous equilibria, etc. Prerequisite: Quantitative Analysis 202, Physics 203A, B; College Algebra and Analytic Geometry 104A, B or equivalent; and Calculus 205A, B.

First semester. Mr. Boynton, Dr. Knowlton. Three or five semester hours. (Five hours includes laboratory)

403B Physical Chemistry

A continuation of course 403A. The course includes radioactivity, quantum theory, atomic structure, conductance of solutions, polepotentials, oxida-
tion potentials, polarization, chemical thermodynamics, colloids, etc. Pre-requisite: Physical Chemistry 403A.
Second semester. Mr. Boynton, Dr. Knowlton. Three or five semester hours. (Five hours includes laboratory)

408 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. Pre-requisite: two years of college chemistry.
Second semester. Dr. Osborn. Two semester hours.

496A 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.
First semester. Mr. Eldridge. Two semester hours.

496B Organic Preparations
Methods of preparing the aromatic organic compounds. Classroom, one hour a week; laboratory, ten hours a week. Consult instructor before enrolling.
Second semester. Mr. Eldridge, Dr. Osborn. Two semester hours.

497A Special Problems in Chemistry
Advanced students who have completed certain basic work in chemistry may select a special problem in the fields of analytical, organic, or physical chemistry. Prerequisite: Quantitative Analysis 202, Organic Chemistry 306B, and Physical Chemistry 403A. Given on request.
Mr. Eldridge, Dr. Knowlton, Dr. Meyer, Dr. Osborn. Two semester hours.

497B Special Problems in Chemistry
A continuation of special problem work started under 497A. Given on request.
Mr. Eldridge, Dr. Knowlton, Dr. Meyer, Dr. Osborn. Two semester hours.

GEOGRAPHY AND GEOLOGY

WILLIAM J. BERRY  MARGUERITE LOGAN
CYRIL L. STOUT

Geography, either 105A or 305, must precede all other undergraduate geography courses except Conservation of Natural Resources 312, Introduction to Economic Geography 218, and Meteorology 225. There is no required sequence in the courses in regional geography.
Successful completion of Geographic Techniques 303 is prerequisite to receiving departmental recommendation for directed teaching or for a teaching position in geography.
A major in geography consists of 24 semester hours: Geography 105A, B, Dynamic Geology 230A, Meteorology 225, Cartography 350, Field Geography 340, Geographic Techniques 303 or equivalent, and electives.

A major in earth science consists of Geology 230A, B and 16 semester hours additional in geography and geology.

A minor in geography consists of 17 semester hours, including Field Geography 340 or Geographic Techniques 303. County normal geography will not be counted toward a major or minor in geography.

**FOUNDATIONAL COURSES**

**105A Human Geography**

Designed to build an understanding of major human activities in relation to environmental factors throughout the world. Consideration is given to effects of climate, soil, minerals, topography, and the biotic environment on occupational pursuits of people, transportation and communication, density of population and growth of cities.

Each semester. The Staff. Four semester hours.

**105B Regional Geography of the World**

A continuation of 105A. The continents are studied by geographic regions. Attention is given to patterns of agricultural land use, mining, manufacturing, fishing, recreation, and other major uses of land and other resources.

Each semester. The Staff. Four semester hours.

**305 Introductory World Geography for Juniors and Seniors**

Course should be elected instead of 105A, B by students who do not begin the study of geography before the junior year. Not open to students who have received credit for Geography 105A or 105B.

Not offered in 1954-1955. Dr. Berry. Three semester hours.

**SURVEY REGIONAL COURSES**

**206 United States and Canada**

Study of areal differentiation in Anglo-America and of present-day problems, with emphasis upon occupational crises in selected regions. Prerequisite: Geography 105A or Geography 305.

First semester. Dr. Berry. Three semester hours.

**207 Europe**

Course discloses the ways man has adjusted his economic, political, and social life to the natural environmental conditions within the regions of the continent. Prerequisite: Introductory Geography 105A or Geography 305.

First semester. Miss Logan. Three semester hours.

**208 South America**

Regional study of the several countries of South America with attention to the interrelationships of the physical and cultural environments. Historical background necessary for the interpretation of the present political,
social and economic conditions is included. Prerequisite: Geography 105A or Geography 305.
First semester. Dr. Stout. Three semester hours.

209 Mexico and the Caribbean Lands
Includes the regional study of Mexico, Central America and the West Indian Islands; present economic, social, and political development of these regions; their potentialities and trends. Prerequisite: Geography 105A or Geography 305.
Second semester. Dr. Stout. Two semester hours.

307 Asia
Interpretation of the major geographic regions of Asia. Special emphasis is given to the organization of materials into geographic units. Prerequisite: Geography 105A or Geography 305.
Second semester. Miss Logan. Three semester hours.

308 Africa
The evolution of the present political pattern of the continent; governmental policies of the colonial powers; the geography of the major areas of economic exploitation; impending changes related to opposition to colonial status. Prerequisite: Geography 105A or Geography 305.
Not offered in 1954-1955. Dr. Berry. Three semester hours.

309 Islands of the Pacific
Study of populations and natural resources of Pacific Islands with emphasis upon economic and political problems which have arisen. Prerequisite: Geography 105A or Geography 305.
Second semester. Dr. Stout. Three semester hours.

INTENSIVE REGIONAL COURSES

304 The British Isles
Geographical analysis of their present and potential development. Prerequisite: Geography 105A or Geography 305, and Europe 207.
Not offered in 1954-1955. Miss Logan. Two semester hours.

311 The South
Study of the regions of the southeastern part of the United States with particular attention to the natural resources, the manner in which they have been utilized, and the economic problems which exist today. Prerequisite: Geography 105A or Geography 305.
Not offered in 1954-1955. Dr. Stout. Two semester hours.

320 Japan
Detailed study of the geography of Japan, with attention focused on present developments and future potentialities. Prerequisite: Geography 105A or Geography 305.
Not offered in 1954-1955. Miss Logan. Two semester hours.
323 Union of Soviet Socialist Republics
Analysis of the geography of the whole of the Soviet realm. Prerequisite: Geography 105A or Geography 305.
Second semester. Miss Logan. Three semester hours.

FUNCTIONAL COURSES

218 Economic Geography
Course deals with important economic products from the standpoint of their places of origin, cultural and natural factors in their production, their flow in commerce, and principal regions of their consumption.
Each semester. Dr. Stout. Three semester hours.

225 Meteorology
Study of the elements of weather: temperature, precipitation, and pressure; the reading of weather maps; and the characteristics of fronts and air masses. Thermodynamics and the mechanics of atmosphere are used to explain weather phenomena. The course is non-technical.
First semester. Dr. Stout. Two semester hours.

303 Geographic Techniques
Guidance is given in the selection, interpretation, and use of all major types of geographical materials such as texts, library materials, pictures, and maps. Special emphasis is placed upon the organization of findings into geographic teaching units. Prerequisite: Geography 105A, B or Geography 305.
Each semester. Miss Logan. Three semester hours.

312 Conservation of Natural Resources
Critical evaluation of certain of the natural resources of the United States, such as minerals, soils, forests, water, and wild life; and study of the utilization of these resources so as to yield the greatest ultimate good. Methods in teaching conservation.
Second semester. Dr. Berry. Three semester hours.

325 Climatology
Study of the distribution and character of the major climatic types of the earth. Fundamentals of air physics as applied to this distribution are discussed. Prerequisite: Geography 105A, or Geography 305 or Meteorology 225, or consent of instructor.
Not offered in 1954-1955. Dr. Stout. Two semester hours.

350 Cartography and Graphics
Study of maps, the construction of them for reproduction, and the projections and symbolism most commonly used; also the graphical presentation of statistical material. Prerequisite: Geography 105A or Geography 305.
Second semester. Dr. Stout. Two semester hours.
FIELD GEOGRAPHY

340 Field Geography

Intensive study of type areas near Kalamazoo with the purpose of observing how agricultural and industrial development, transportation, commercial organization, and the urban pattern have made adjustments in these areas. The course is based primarily upon field work. Prerequisite: Geography 105A or Geography 305.

Second semester. Dr. Berry. Three semester hours.

341 Advanced Field Geography

Planned for students who desire to do independent field work in geography. The amount of credit will depend on the size of the project and the intensity with which the work is done. A complete report written in scientific style is required. Not a residence course. Enrollment must be made with the Extension Division and fees paid at that office. Residence credit is given. Prerequisite: Field Geography 340 or an approved equivalent and consent of the instructor.

Each semester. The Staff. One, two, or three semester hours.

Open to Qualified Juniors, Seniors, and Graduates

406 Geography of Michigan

Detailed but non-technical study of Michigan in which are taken up the major economic, social, and recreational activities with a view to explaining their existence in the state where each activity is prominent. Prerequisite: Geography 105A, B or Geography 305, or equivalent, or consent of instructor.

Not given in 1954-1955. Dr. Berry. Two semester hours.

410 Studies in Geographic Education

Course gives prospective geography teachers guidance in the selection, organization and presentation of the best materials available in this field. Not open to students who have had Geographic Techniques 303.

Not given in 1954-1955. Miss Logan. Two semester hours.

411 Historical Geography of North America

Migrations and routes of travel of the several European colonizers. Pattern and progress of settlement as related to the geographical conditions encountered in the development of each of the parts of the continent for human use. Emphasis chiefly on United States. Prerequisite: 105A or consent of instructor.

Second semester. Dr. Berry. Two hours credit.

416 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.

First semester. Miss Logan. Two semester hours.
419 Survey of Latin American Geography

Comprehensive survey of Latin America. Includes the physical landscape, natural resources, and the cultural adjustments in each of the countries. May not be taken by those who have credit in South America or Mexico and the Caribbean.

Not given in 1954-1955. Two semester hours.

Open to Graduates

578 Pro-seminar in Economic Geography

Each member of the class carries on an individual investigation of some problem in economic geography. Theory and technique of research in economic geography, and the treatment of graphic forms as applied to geography. Prerequisite: Geography 105A, B or Geography 305 and Commercial Geography 218, or consent of instructor.

Not offered in 1954-55. Dr. Stout. 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. Dr. Berry. Four semester hours.

230B Historical Geology

Course includes a study of the origin of the earth, development of plant and animal life as shown by fossils, and major changes that have occurred in elevation, size, and form of continents. There will be at least three Saturday field trips. Prerequisite: Dynamic Geology 230A.

Second semester. Dr. Berry. Four semester hours.

332 Physiography of United States

Characteristics of the land forms in the United States and the geologic processes which have produced them. Laboratory work will consist largely of examination and interpretation of selected topographic maps. Prerequisite: Dynamic Geology 230A.

Not offered in 1954-55. 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.

Second semester. Dr. Berry. Two semester hours.
350 Field Geology—Summer Trip

A survey of geologic factors responsible for the landscape features between Kalamazoo and western South Dakota. Rock formations of the Black Hills Region. Field mapping techniques. Enrollment is with the Extension Division, but residence credit is given. Required of students with minor in geology. Prerequisite: Geology 230B or the equivalent.

Post-summer session. Dr. Berry. Four semester hours.

MATHEMATICS

Charles H. Butler
Fred A. Beeler
William H. Cain
Pearl L. Ford
Herbert H. Hannon
Jack R. Meagher
Joseph K. Peterson
Conway C. Sams

The Department of Mathematics offers a variety of courses and sequences designed to serve the interests and meet the needs of students in the various curricula. These might be broadly classified as conventional courses and special courses.

The conventional courses are designed to contribute to the general education of college students and to meet the needs of students who plan to specialize in mathematics, science, economics, engineering, or other professional fields. These courses include trigonometry and college algebra, analytic geometry, calculus, and subsequent courses for which calculus is prerequisite: These courses, in the order listed above, form a natural sequence, and in general can be taken only in the order of that sequence.

The special courses are designed to meet the special needs of students in various vocational curricula and of those who are preparing to be teachers of mathematics.

The course entitled "Basic Mathematics" is neither a conventional course nor a pre-vocational course. It is designed to contribute to the general educational background of students who do not plan to take any specialized courses in mathematics or the sciences. It has no prerequisites and it may be taken by any student, even though he may have only a very limited background of high school mathematics.

For students in accounting and for others interested in the mathematics of business, the Department of Mathematics offers a group of subjects consisting of the following courses: Mathematics of Finance (227A), Mathematics of Finance (227B), Elementary Statistical Practice (209), and Introduction to Statistical Theory (473).

The attention of students who plan to become teachers of mathematics is directed to the following courses: Arithmetic for Teachers (101), and The Teaching of Secondary Mathematics (401). It is strongly recommended that course 101 be taken by all who expect to teach in the grades, and that courses 401 and/or 423 be taken by those who expect to teach mathematics in the junior or senior high school.
The conventional freshman courses are trigonometry, college algebra, and analytic geometry. Students who have taken trigonometry in high school are not required to take it again in college. Students who have successfully completed these three courses are qualified to take calculus.

The courses in high school mathematics which a student presents for admission determine the pattern of his work in college mathematics. A student can determine the appropriate sequence of courses for his freshman and sophomore years by referring to the following table.

A minor in mathematics comprises not less than eight semester hours of work completed subsequent to any one of the courses 103B, 104B, or 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 work in calculus, and elected with the approval of the departmental adviser.

### For students who plan to take Calculus

<table>
<thead>
<tr>
<th>Subjects and number of units presented for entrance</th>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>First Semester</td>
<td>Second Semester</td>
</tr>
<tr>
<td>Algebra, 1½ or 2 units</td>
<td>104A</td>
<td>104B</td>
</tr>
<tr>
<td>Geometry, 1 or 1½ units</td>
<td></td>
<td></td>
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<tr>
<td>Trigonometry, ½ unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algebra, 1½ or 2 units</td>
<td>103A</td>
<td>103B</td>
</tr>
<tr>
<td>Geometry, 1 or 1½ units</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algebra, 1 unit only</td>
<td>100A</td>
<td>100C</td>
</tr>
<tr>
<td>Geometry, 1 or 1½ units</td>
<td></td>
<td></td>
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</tbody>
</table>

### For students who plan to take Mathematics of Finance and Statistics in their second year.

<table>
<thead>
<tr>
<th>Subjects and number of units presented for entrance</th>
<th>First Year</th>
<th>Second Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Algebra, 1 unit only</td>
<td>105A*</td>
<td>105B*</td>
</tr>
<tr>
<td>Geometry, 1 or 1½ units</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Courses 105A and 105B do not prepare students to take calculus. Students who are qualified to take courses 103A, B or 104A, B in the freshman year should take these courses in preference to courses 105A, B.

### 100 Basic Mathematics

This course is a part of the general education program of the college. It is designed primarily for those students who enter college with a limited mathematical background and who do not plan to specialize in mathematics or scientific work. Its purpose is to give an understanding of the nature of mathematics and of the role which it plays in the solution of many life problems. Topics studied include a review of fundamental processes, logical reasoning, our number system, ratio, proportion, and variation, business problems, and elementary statistics. Emphasis at all times is upon
meanings and understanding. Credit for this course may be counted toward satisfying the general requirements of Group II.

Not offered in 1954-1955. Mr. Hannon. Four semester hours.

100A Intermediate Algebra

For students who present for admission only one year of high school algebra and one year of plane geometry, this course should precede trigonometry and college algebra. It includes a review of the important topics of the first year's course, and covers the work usually given in the third semester of high school algebra. Prerequisite: One year of high school algebra and one year of plane geometry.

Each semester. Staff members. Three semester hours.

100B Solid Geometry

Fundamental definitions, assumptions, theorems, and constructions of solid geometry, with emphasis on the properties and mensuration of the common geometric solids. Original exercises are stressed. Any student who plans to major in mathematics, to teach mathematics, or to transfer to a college of engineering should elect this course unless he has already taken it in high school. Prerequisite: One year of high school algebra and one year of plane geometry.

Second semester. Mr. Meagher. Two semester hours.

100C Plane Trigonometry

A study of trigonometric functions, identities, and equations, inverse functions, logarithms, radian measure, and the solution of triangles. Prerequisite: One year of plane geometry and 1½ years of high school algebra, or Math. 100A.

Each semester. Staff members. Three semester hours.

100D Spherical Trigonometry

The trigonometry of spherical triangles, including the development of formulas and numerical solutions, with applications to astronomy and navigation. Prerequisite: A course in plane trigonometry.

Not offered in 1954-55. Mr. Cain. One semester hour.

101 Arithmetic for Teachers

This course is designed for students who expect to teach arithmetic in the grades. It deals with the history, philosophy, objectives, and methods of teaching arithmetic, and includes a thorough review of the subject matter of arithmetic.

Each semester. Miss Ford, Mr. Cain, Mr. Hannon. Three semester hours.

103A Trigonometry and College Algebra

About three-fifths of this semester's work is spent in the study of trigonometric functions, identities, and equations, inverse functions, logarithms, radian measure, and the solution of triangles. The rest of the semester is given to college algebra, and includes work with fractions, exponents,
linear and quadratic equations, variation, and progressions. This course should be followed by course 103B. Prerequisite: A year of plane geometry and 1½ years of high school algebra, or Math. 100A.

First semester. Staff members. Five semester hours.

103B College Algebra and Analytic Geometry

In this continuation of college algebra the binomial theorem, complex numbers, logarithms, permutations and combinations, determinants, and selected topics from the theory of equations are studied. The last two-thirds of the semester is given to analytic geometry. This work includes study of the straight line, circle, conics, and certain higher plane curves, transformation of axes, polar coordinates, parametric and polar equations, and a few topics from solid analytic geometry. Prerequisite: Math. 103A.

Second semester. Staff members. Five semester hours.

104A College Algebra

A full semester's work in college algebra. The topics studied include fractions, exponents, functions, graphs, and variation, linear and quadratic equations, systems of equations, the binomial theorem, inequalities, complex numbers, logarithms, permutations and combinations, probability, determinants, and selected topics from the theory of equations. Prerequisite: Trigonometry and 1½ years of high school algebra, or Math. 100A.

First semester. Staff members. Four semester hours.

104B Analytic Geometry

The analytic geometry of the straight line, circle, conics, and certain of the higher plane curves, transformation of axes, polar coordinates, and equations expressed in parametric and polar form. A few topics from solid analytic geometry are introduced near the end of the course. Prerequisite: Trigonometry and college algebra.

Second semester. Staff members. Four semester hours.

105A Introduction to College Mathematics

For students in the Department of Business Studies who have a limited background in high school mathematics but who wish to take the courses in Mathematics of Finance and Statistics. It is planned with a view to providing the necessary foundations for those courses. It consists largely of elementary algebra through quadratic equations. Prerequisite: One year of high school algebra and one year of plane geometry.

First semester. Miss Ford. Four semester hours.

105B Introduction to College Mathematics

This is a continuation of course 105A, and consists of the study of the binomial theorem, logarithms, progressions, the straight line and parabola, curve fitting, and probability. Prerequisite: Math. 105A.

Second semester. Miss Ford. Four semester hours.
112 Applied Mathematics

This course is designed for students in vocational and industrial curricula. It consists mainly of the application of elementary mathematics to problems arising in connection with machines, design, and shop work.

Each semester. Dr. Beeler, Dr. Butler. Three semester hours.

115 College Algebra

This brief course in college algebra includes those parts of college algebra which are covered in courses 103A and 103B. It may be taken by students who want a separate three-hour course in college algebra. Prerequisite: One year of plane geometry and $1\frac{1}{2}$ years of high school algebra or Math. 100A.

Second semester. Mr. Sams. Three semester hours.

116 Analytic Geometry

This course is the equivalent of Math. 104B. Prerequisite: Trigonometry and college algebra.

First semester. Mr. Sams. Four semester hours.

120A Business Mathematics

Diagnostic and remedial work in the fundamental operations of arithmetic, together with a study of elementary business forms and problems. This course is intended primarily for students in the Department of Business Studies.

Each semester. Staff members. Two semester hours.

120B Business Mathematics

This is a continuation of the work of course 120A. It includes the study, and the application to business problems, of simple algebraic operations, evaluation of formulas, ratio and proportion, the use of logarithms, and simple problems in probability. Prerequisite: Math. 120A or equivalent.

Each semester. Staff members. Two semester hours.

200 Mathematics of Buying and Investment

An elementary course designed for students who wish to get some understanding of the mathematics of installment buying, discounts, interest, taxes, budgets, and other elements entering into personal business transactions.

Second semester. Mr. Cain. Two semester hours.

201 Field Work in Mathematics

The aim of this course is to make the students familiar with the purpose, construction, and use of simple mathematical instruments. There will be some class discussions, but much of the time will be spent in actual field work. The course should be valuable to teachers and to persons interested in camping or scouting activities. Prerequisite: A course in plane trigonometry.

Not offered in 1954-55. Dr. Butler. Two semester hours.
205A Calculus
This is the first half of a year's work in calculus. It is largely centered around the study of functions, limits, continuity, derivatives, differentials, and integrals. It includes the study of derivatives of algebraic and transcendental functions and the corresponding integrals, parametric and polar forms, curvature and motion, evaluation of indeterminate forms, and curve tracing. Prerequisite: Math. 103B, 104B, or 116.
Each semester. Staff members. Four semester hours.

205B Calculus
A continuation of the work begun in course 205A. Among the major topics considered are special integration procedures and applications, infinite series, expansion of functions, hyperbolic functions, partial derivatives, multiple integrals, and an introduction to differential equations. Prerequisite: Math. 205A.
Each semester. Staff members. Four semester hours.

209 Math. Elementary Statistical Practice
A study of averages, dispersions, sampling, correlation and tests of significance for small and large samples. Prerequisite: Analytic geometry.
First semester. Mr. Sams. Three semester hours.

210 Surveying
An elementary course in surveying, consisting mainly of field work, though a few office problems are included. The aims are to make the students familiar with standard field and office procedures used in surveying, and to develop skill, facility, and precision in the use of the instruments. Each student is required to keep a book of field notes of his work in good standard form. Prerequisite: Math. 100C or equivalent.
Second semester. Dr. Butler. Three semester hours.

227A Mathematics of Finance
This is the first semester of a year's work in the mathematics of finance. It includes the study of simple and compound interest, simple annuities certain, and the application of such annuities to problems in the amortization of debts, sinking funds, the valuation of bonds, depreciation, and perpetuities. Prerequisite: Math. 103B, 104B, 105B, or 116.
First semester. Mr. Hannon. Three semester hours.

227B Mathematics of Finance
A continuation of the work begun in course 227A. Topics studied include the general case of annuities certain, and contingent annuities, with applications to problems of reinvestment, and especially of life insurance. Prerequisite: Math. 227A.
Second semester. Mr. Hannon. Two semester hours.
305 Vector Analysis
The formal processes of vector analysis, with applications to geometry and mechanics. Prerequisite: Math. 205B.
Not given in 1954-55. Mr. Peterson. Three semester hours.

321 Differential Equations
An elementary course in ordinary differential equations. Prerequisite: Math. 205B.
First semester. Dr. Beeler. Three semester hours.

322 Theory of Equations
The major topics studied are complex numbers, properties of polynomials, cubic and quartic equations, algebraic criteria for ruler-and-compass constructions, determinants, and the solution of systems of linear equations. Prerequisite: Math. 205B.
First semester. Dr. Beeler. Three semester hours.

323 Solid Analytic Geometry
A study of lines, planes, space curves, and surfaces; transformations, using matrices. Prerequisite: Math. 205B.
Second semester. Dr. Beeler. Two semester hours.

325 Theoretical Mechanics
A vectorial treatment of the kinematics and dynamics of particles and of rigid bodies, with emphasis on problem solving. Prerequisite: Math 305.
Not given in 1954-55. Mr. Peterson. Two semester hours.

331 Advanced Calculus
Review of fundamentals of calculus, with more critical examination of concepts. Power series, partial differentiation, implicit functions, definite integral; line, surface and space integrals. Green's and Stokes' theorems. Prerequisite: Math. 205B.
Second semester. Mr. Sams. Three semester hours.

373A Statistical Methods for Industry
Statistical methods of quality control; the normal, binomial, and Poisson distributions; the Shewhart control chart; sampling methods for scientific acceptance inspection. Mathematics 373A and 373B together form an introductory course especially designed for the needs of people in industry in both experimental work and the flow of production. Prerequisite: One year of calculus.
First semester. Dr. Beeler. Three semester hours.

373B Statistical Methods for Industry
Significance tests; tests valid for small samples; introduction to linear correlation; elementary design of experiments. Prerequisite: Math. 373A.
Second semester. Dr. Beeler. Three semester hours.
401 Teaching of Secondary Mathematics
In this course some consideration is given to curriculum problems and trends in secondary school mathematics, but the main emphasis will be upon specific problems of teaching mathematics effectively to secondary school students. Prerequisite: Math. 116 or equivalent.
First semester. Dr. Butler. Three semester hours.

411 History of Mathematics
This course treats of the history of geometry and trigonometry from earliest times to the present. Prerequisite: Math. 103B, 104B, or 116.
First semester. Mr. Peterson. Two semester hours.

412 History of Mathematics
This course treats of the history of arithmetic and algebra from earliest times to the present. Prerequisite: Math. 103B, 104B, or 116.
Second semester. Mr. Peterson. Two semester hours.

423 Introduction to Higher Geometry
The nature of proof, as exhibited in advanced theorems involving the triangle and circle, followed by a survey of various geometrical systems, notably non-Euclidean and projective. This course is especially recommended for those who are planning to teach geometry in the high schools. Prerequisite: Math. 103B, 104B, or 116.
Second semester. Mr. Sams. Three semester hours.

473 Math. Introduction to Statistical Analysis
The study of statistics as the science of experimentation: averages, dispersions, sampling, correlation and statistical tests valid for small and large samples. Prerequisites: Analytic geometry.
Second semester. Dr. Beeler. Three semester hours.

PAPER TECHNOLOGY

ALFRED H. NADELMAN
Instructor to be appointed

ROBERT T. ELIAS

The Department of Paper Technology offers two curricula. Option I stresses preparation for production and technical areas whereas Option II prepares students for sales and management areas in the Paper Industry.

130A Orientation to Pulp Technology
The course stresses the basic processes used in the manufacture of pulp and prepares the student for summer mill practice.
Each semester. Dr. Nadelman. One semester hour.
130B Orientation to Paper Technology
A continuation of course 130A. The fundamentals of paper making are studied. Prerequisite: Orientation to Pulp Technology 130A.
Second semester. Dr. Nadelman. One semester hour.

131 Summer Mill Practice
In order to gain practical experience, students of pulp and paper technology are required to work in a mill for ten weeks following the second semester. Employment must be secured and/or approved by the Advisory Committee of the Paper Industry. Prerequisite: Orientation to Pulp and Paper Technology 130A, B.
Dr. Nadelman, Mr. Elias. Two semester hours.

230A Pulp Manufacture
A detailed description of production equipment and chemistry of the processes used in the manufacture of pulp. Visits to various pulp mills are coordinated with the lecture course. Prerequisite: Orientation to Pulp and Paper Technology 130A, B; General Chemistry 101A, B or 100A, B.
First semester. Dr. Nadelman. Two semester hours.

230B Paper Manufacture
A study of the technological aspects of paper making with discussion of various types of stock-preparation equipment and paper machines. Several mill visits give a deeper understanding of the processes discussed. Prerequisite: Orientation to Pulp and Paper Technology 130A, B; General Chemistry 101A, B or 100A, B; Pulp Manufacture 230A.
Second semester. Dr. Nadelman. Two semester hours.

231 Summer Mill Practice
A continuation of paper-mill work to give the student diversified practical experience. It is expected that the student will work in pulp and paper mills at least two out of three summers. Prerequisite: Pulp and Paper Manufacture 230A, B.
Dr. Nadelman, Mr. Elias. Two semester hours.

331 Summer Mill Practice
Course 331 is optional for students who receive credit for courses 131 and 231.
Dr. Nadelman, Mr. Elias. Two semester hours.

332A Pulp Testing
A lecture and laboratory course treating the evaluation of chemical and physical characteristics of pulp. Prerequisite: Pulp and Paper Manufacture 230A, B; Quantitative Analysis 202.
First semester. Mr. Elias. Two semester hours.
276 DESCRIPTION OF COURSES

332B Paper Testing
This course consists of laboratory work and a limited number of lectures pertaining to the evaluation of chemical and physical characteristics of paper. Prerequisite: Pulp and Paper Manufacture 230A, B; Quantitative Analysis 202, Pulp Testing 332A.
Second semester. Mr. Elias. Two semester hours.

333 Fiber Microscopy
A general study of the microscopic structure of fibers used in making paper. Qualitative and quantitative fiber analyses are part of the scheduled work. Prerequisite: Pulp and Paper Manufacture 230A, B, Electricity and Light 203B.
First semester. Instructor to be appointed. One semester hour.

334A Elements of Industrial Chemistry
A study of the most important industrial chemical processes from the point of view, not only of the chemical reactions, but of the conditions and equipment necessary to carry on these reactions. Prerequisite: General Chemistry 101A, B, or 100 A, B.
First semester. Instructor to be appointed. Two semester hours.

334B Elements of Industrial Chemistry
A continuation of course 334A. Prerequisite: Elements of Industrial Chemistry 334A, Organic Chemistry 306A.
Second semester. Instructor to be appointed. Two semester hours.

335 Wood Chemistry
A lecture course which includes the chemistry of cellulose, hemicellulose, lignin and extractives. Prerequisite: Pulp and Paper Manufacture 230A, B, Organic Chemistry 306A.
Second semester. Mr. Elias. Two semester hours.

336 Coloring and Filling of Paper
This course includes the evaluation of fillers, pigments, and dyestuffs. Filled and colored sheets are produced in the laboratory in order to familiarize the student with color matching and development of color formulae. Prerequisite: Pulp and Paper Manufacture 230A, B.
Second semester. Mr. Elias. One semester hour.

337 Mill Inspection Trip
One week's inspection trip to representative pulp and paper mills.
Mr. Elias, Dr. Nadelman. One semester hour.

432 Bleaching, Pulp Purification, and De-inking
A lecture and laboratory course treating the theory and technique of producing bleached pulp, dissolving pulp and de-inked secondary stock. Prerequisite: Wood Chemistry 336A.
First semester. Mr. Elias. Two semester hours.
433 Auxiliary Equipment for Pulp and Paper Mills

A discussion of pumps, boiler-house operation, generation of electricity, electric motors, heating, and ventilation. The subjects are presented with the assistance of experienced engineers serving the pulp and paper industry. Prerequisite: Pulp and Paper Manufacture 230A, B; Mechanics, Sound, and Heat 203A; Electricity and Light 203B.

First semester. Dr. Nadelman. One semester hour.

434 Chemistry and Technology of Plastics

A general survey of the chemistry and technology of plastics with emphasis upon the synthetic resinous materials used by paper makers and converters. Prerequisite: Organic Chemistry 306A, B; Wood Chemistry 336A.

Second semester. Mr. Elias. Two semester hours.

435 Converting of Paper

A thorough study of a variety of converting operations presented with the assistance of qualified members of the converting industry. Prerequisite: Pulp and Paper Manufacture 230A, B.

Second semester. Dr. Nadelman. One semester hour.

436A Thesis

Laboratory development work on a problem pertaining to pulp and paper technology preceded by a survey of available literature.

Given on request. Mr. Elias, Dr. Nadelman. Two semester hours.

436B Thesis

A continuation of course 436A.

Given on request. Mr. Elias, Dr. Nadelman. Two semester hours.

PHYSICS

PAUL ROOD
GROVER C. BAKER
GEORGE BRADLEY
EDWIN S. FOX
WALTER G. MARBURGER

The Department of Physics offers two kinds of courses: (1) those for the non-specialist who will choose classes of a general nature and (2) those for students who plan to major or minor in physics.

A major in physics consists of 24 semester hours; a minor 15 semester hours. Acceptable sequences of courses are arranged in consultation with the departmental adviser.

Students wishing to do directed teaching 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.

102A General Physics

A general college physics course in the principles and practical applications of mechanics, sound, and heat. Required of all medical and dental students. Recommended for students desiring a four-hour course in physics.

First semester. Dr. Bradley. Four semester hours.
102B General Physics
A general college physics course in the principles and practical application of magnetism, electricity, and light. Prerequisite: 102A.
Second semester. Dr. Bradley. Four semester hours.

103A Mechanics, Sound, and Heat
A general college course dealing with mechanics, sound, and heat and their applications. Required for students majoring in physics and for engineers; recommended for students planning to teach physics.
Each semester. Mr. Fox, Dr. Rood. Five semester hours.

103B Electricity and Light
This course follows 103A and consists of studies in electricity, magnetism, and light. Prerequisite: Mechanics, Sound, and Heat 103A.
Each semester. Mr. Fox, Dr. Rood. Five semester hours.

110 Elementary Acoustics
In this course are studied the nature of sound, how sounds are produced, reflection and absorption, reverberation, the physics of hearing, and the physical basis of musical scales. It is a required course for students majoring in music. Open to any student who is not majoring or minoring in physics.
First semester. Dr. Bradley. Two semester hours.

200 Slide Rule
A course in the use of the slide rule.
Each semester. Mr. Baker. One semester hour.

210 Astronomy
A non-mathematical course in astronomy for all students who desire an acquaintanceship with our solar system, with stars and constellations, and with the great galaxies of stars in the depths of space about us. Frequent use is made of an 18-ft. Spitz planetarium and a 4½" refracting telescope.
Each semester. Dr. Rood. Three semester hours.

220 Photography
This is an elementary course in the theory and use of photographic materials. To enroll in this course students should get permission from the instructor.
Each semester. Mr. Baker. Three semester hours.

221 Statics
This satisfies the requirements for a course in statics in mechanical engineering at the University of Michigan. 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 103B, Calculus 205A, B.
Each semester. Mr. Fox. Three semester hours.
342 Heat and Elementary Thermodynamics

An intermediate course dealing with expansion, specific heats, change of state, kinetic theory and the elementary principles of thermodynamics. One laboratory period and two class periods per week. Prerequisite: Mechanics, Sound, and Heat 103A, Electricity and Light 103B, Calculus 205A, B.

Second semester. Dr. Bradley. Three semester hours.
Not given 1954-55.

350 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 103B, Calculus 205A, B.

Each semester. Dr. Rood. Three semester hours.

361 Introduction to Electronics

This course includes an introduction to electric circuit analysis with particular reference to electron-tube circuits. The more important uses of electron tubes are considered in some detail. Prerequisite: Electricity and Light 103B and Calculus 205A, B.

Each semester. Mr. Marburger. Three semester hours.

365 Advanced Electronics

Applications of electronics in different types of radio frequency communication systems, in control devices and in general instrumentation are considered in this course. Some laboratory measurement work at both audio and radio frequencies is included. Prerequisite: Introduction to Electronics 361, Calculus 205A, B.

Second semester. Mr. Marburger. Three semester hours.

390 Laboratory Techniques

A course in various common laboratory operations such as glass blowing and the repair of physical equipment. Prerequisite: Electricity and Light 103B.

Each semester. One semester hour.
Not given in 1954-55.

399 Advanced Laboratory Physics

A course in laboratory experimentation more advanced than that in 103A, B. May be elected only on arrangement with the instructor. Prerequisite: Electricity and Light 103B and a minor in physics.

Each semester. Dr. Bradley, Mr. Marburger, Dr. Rood. Two semester hours.

Open to qualified Juniors, Seniors, and Graduate students.

440 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 103B, Calculus 205A, B.
First semester. Dr. Bradley. Three semester hours.

441 Nuclear Physics
Designed to follow Atomic Physics 440. 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 440.
Second semester. Dr. Bradley. Three semester hours.

442 Foundations of Modern Physical Theory
A course designed to inspect the important theories of physics in their historical setting. Emphasis is placed on Newtonian mechanics, wave theory of Maxwell, quantum theory, special theory of relativity, the modern theories of the atomic nucleus. The relationship between the experiment and the theory is scrutinized in each case and the connection with the general methods of science is shown. Modern engineering developments resulting from the new theories will be discussed. Prerequisite: General College Physics.
Not given 1954-55. Dr. Bradley. Two semester hours.

443 Theoretical Physics
A course designed to present the fundamental structure of physics in precise mathematical terms. It is particularly arranged for students who are majoring in physics or in mathematics. The topics will include mechanics from a vector point of view, flow of fluids, electric and magnetic fields. Prerequisites: Electricity and Light 103B, Calculus 205B.
Not given 1954-55. Dr. Bradley. Three semester hours.

462 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: Electricity and Light 103B and Calculus 205A, B.
Mr. Marburger. Four semester hours.

Open to Graduates

501E Modern Advances in Physical Science
Some modern developments in the fields of chemistry and physics will be treated. Such topics as: Additions to the periodic table, radioactive isotopes, new organic compounds, ultrasonics, semi-conductors and transistors, and nuclear energy will be considered. Lectures, demonstrations, readings. Prerequisite: Sixteen semester hours in physics and/or chemistry.
Not given 1954-55. Dr. Osborn, Mr. Marburger. Two semester hours.
General Psychology 200 is prerequisite to all other courses in this department, except courses 100 and 102. A major in psychology may be obtained by completing 24 semester hours of work in the department, including course 301. A minor consists of 15 semester hours.

Students majoring in psychology are advised to elect from the Department of Biology and the Department of Sociology.

100 Introduction to Learning and Adjustment

Psychological principles of effective learning will be presented; methods of note-taking, reading, memorizing, and organization will be discussed. Emphasis will be placed upon problems of personal, educational, and social adjustment. This course may not be counted toward a major or a minor in psychology or in fulfillment of the requirements in Group II.

Each semester. Mrs. Sumney, Mr. Carter. One semester hour.

102 General Psychology (for Nurses)

An introductory course intended to fit the needs of students of nursing. Not open to regular students. It covers the recommendations of the "Curriculum Guide for Schools of Nursing".

First semester. Miss McGinnis. Two semester hours.

200 General Psychology

A brief survey of the elementary principles of psychology. This course affords a general introduction to the field.

Each semester. Staff. Three semester hours.

204 Applied Psychology

An overview course introducing the student to the various areas of psychology at work. Some areas covered are: education, industry, business, military, clinical, criminal, and legal.

First semester. Dr. Fatzinger. Two semester hours.

207 Psychology of Personality

Attention is given to individual differences, traits, content, and synthesis of personality; modification of behavior and varieties of adaptive behavior. Emphasis is placed upon constructive personal adjustment and the manner in which it is achieved in various interpersonal relations.

Each semester. Dr. Kuffel, Mr. Carter. Four semester hours.

210 Psychological Aspects of Business

This course deals with the basic wants and the motives that make men buy and sell, work for a living, like or dislike their jobs. It points out the psychological principles involved in buying, selling, market research, and advertising.

First semester. Dr. Fatzinger. Three semester hours.
213 Psychology of Adolescence
This course deals with the various kinds of development in the adolescent. It discusses his problems and difficulties and the proposals for reducing his difficulties and improving his adjustment.
Second semester. Dr. Kuffel. Three semester hours.

300 Introduction to Industrial Psychology
This course introduces the student to the many applications of psychology in industry, such as: evaluation of the worker's worth, training on the job, promotion, rating, wages and job evaluation, working conditions as they affect safety, efficiency, morale, and labor turnover.
Second semester. Dr. Fatzinger. Two semester hours.

301 Elementary Experimental Psychology
An introduction to current psychological problems and laboratory methods through experimental work in motivation, emotion, memory, learning, and perception. This is a course for majors.
Second semester. Dr. Fatzinger. Three semester hours.

302 Laboratory in Psychological Testing
The course will consider selecting, administration, and interpretation of educational, personality, and aptitude tests. A competency in interviewing techniques will be developed.
First semester, lecture and laboratory. Mr. Carter, Miss McGinnis. Three semester hours.

303 Comparative Psychology
This is primarily a course for psychology majors. A general treatment of the behavior, sensory and perceptual processes, and learning of the lower animals as bearing on the problem of the evolution and development of human behavior. Consult instructor before enrolling.
Second semester. Dr. Fatzinger. Two semester hours.

305 Abnormal Psychology
A discussion of the deviant individual, with particular attention to the recognition of disordered behaviors, to the factors contributing to their development and to the principles of therapy. Consult instructor before enrolling.
Each semester. Dr. Kuffel. Three semester hours.

307 Mental Testing
The purpose of this course is to provide training in the administration, scoring, and interpretation of various mental tests. This course supplements 302 in giving the student practice in use of diagnostic tests.
Second semester. Mr. Carter, Miss McGinnis. Two semester hours.
308 Elementary Statistical Methods in Psychology
Computation and interpretation of statistical techniques useful in the production and understanding of psychological and educational research.
First semester. Dr. Mallinson. Three semester hours.

309A, B, C Clinical Psychology
This course considers theory and practice of the case study. It involves individual case studies, home visits, interviewing, conferences, laboratory, and clinical procedures. Courses 309 B or C involve additional cases and practice in clinical procedure. Prerequisite: Psychology 302, 305, and 307, or consent of instructor.
Second semester. Mr. Carter, Miss McGinnis. Two to four semester hours.

310A, B, C Special Projects in Psychology
General prerequisites must include twelve hours in psychology, and the permission of the instructor. Arrangements will be made for adequately prepared students to undertake individual problems under the direction of a member of the staff. This is a course for majors.
Each semester. Dr. Fatzinger, Dr. Kuffel. One or two semester hours.

315 Emotion
The various theories of emotion. The physiology of emotion. Emotional expression and control. The crucial part it plays in human adjustment, with reference to disordered behavior. A major purpose of this course is to introduce the major in psychology to the seminar type course.
First semester. Dr. Fatzinger. Two semester hours.

Open to Qualified Juniors, Seniors, and Graduates

402 Laboratory in Psychological Testing
The course will consider selecting, administration and interpretation of educational, personality and aptitude tests. A competency in interviewing technique will be developed.
Summer, 1954. Mr. Carter, Miss McGinnis. Three semester hours.

404 Occupational Analysis and Classification
Sources of occupational information; procedures and techniques of job analysis and job classification; applications in employment procedures, placement, and vocational counseling.
Summer, 1954. Dr. Kuffel. Two semester hours.

405 The Deviant Individual
Study of the gifted, mentally defective neurotic, delinquent and criminal, and psychotic; with particular attention to factors in development and to distinctive manifestations of these deviations from the normal.
First semester. Dr. Kuffel. Two semester hours.
406 Vocational Psychology
The problems of vocational choice and of occupational group-differences. Lectures, reading, and an occasional laboratory period substituted for a class hour.
Second semester. Summer 1955. Dr. Kuffel. Two semester hours.

407 Mental Testing
The purpose of this course is to provide training in the administration, scoring and interpretation of various mental tests. This course supplements 402 in giving the student practice in use of diagnostic tests.
Summer, 1955. Mr. Carter, Miss McGinnis.

408 Survey of Personnel Psychology
An introduction to the psychological problems of personnel administration and to the methods of personnel psychology. Lectures, discussions and visits to personnel offices.
Second semester. Summer 1955. Dr. Fatzinger. Two semester hours.

410 Learning and Memory
A survey of the general principles of learning and memory and an introduction to learning theory.
Summer, 1954. Second semester. Dr. Fatzinger. Two semester hours.
DIVISION OF SOCIAL SCIENCES

James O. Knauss, Chairman

The Division includes the Departments of Economics, History, Political Science, and Sociology. It functions through the Divisional Planning Committee, working in conjunction with the department heads and the staff members of the Division.

Majors and minors in individual departments of the Division must have the approval of the heads of the respective departments. Special requirements are listed under the separate department headings.

Students preparing for social work should consult the head of the Sociology Department concerning their departmental or group major in the social sciences and their minor in social work. See the Social Work Curriculum for special requirements.

Group majors and minors in the Division, except those of students pursuing the Social Work Curriculum, must have the approval of Mr. Crawford, Room 108, Health and Personnel Building.

A. A group major must include:
1. Thirty or more semester hours in the Division.
2. A minimum of fifteen semester hours in one department of the Division.
3. Acceptable courses in at least three departments of the Division. (Man and Society 101A, B, do not alone satisfy this requirement.)

B. A group minor must include:
1. Twenty or more semester hours in the Division.
2. A minimum of ten semester hours in one department of the Division.
3. Acceptable courses in at least three departments of the Division. (See rule A-3 above.)

C. A group minor for students in non-teaching curricula:
1. Sixteen or more semester hours in the Division.
2. Open only to students in the following non-teaching curricula: Pre-professional, Non-teaching Professional and Combined Curricula; Vocational and Practical Arts Education Curricula; and the General Degree Curriculum without a teaching certificate.
3. May be developed around any one of the following content patterns:
   Foundations of Western Civilization, 100A, B .................................. 8 sem. hrs.
   Man and Society, 101A, B ......................................................... 8 sem. hrs.
   or
   Foundations of Western Civilization, 100A, B .................................. 8 sem. hrs.
   Political Science (minimum) ...................................................... 2 sem. hrs.
   Electives ................................................................. 6 sem. hrs.
   or
   Man and Society .......................................................... 8 sem. hrs.
   Electives ................................................................. 8 sem. hrs.
D. Students in the Secondary Curriculum may not count courses in Philosophy toward a group major or minor.

E. Students taking a group major or minor in the social sciences must complete at least one minor in a field outside the Division.

DIVISIONAL COURSES

The general education offerings of the Division include two sequences, one an eight semester hour unit in history, and the other an eight semester hour sequence in the combined social studies.

The history sequence is made up of the two courses, Foundations of Western Civilization 100A, B. These courses, which are described under History, carry only history credit. They are especially recommended for those students who know in advance that they will take a group or departmental major or minor in the Division.

The combined social studies sequence consists of the two courses, Man and Society 101A, B, described below. Credit for these courses is allotted in either group or departmental majors or minors on the basis of two semester hours each to Economics and Political Science and three semester hours in Sociology. If both courses are taken they satisfy the state requirement in government.

Foundations of Western Civilization 100A, B, and Man and Society 101A, B, may all be counted toward group majors or minors in the Division.

The course in the teaching of the social studies is an elective course open to graduates and qualified Juniors and Seniors. Credit earned in the course may be applied on (1) Economics, History, Political Science, or Sociology majors (not minors), in the Secondary Curriculum, and (2) on social science group majors or minors in the Secondary Curriculum, providing it is not included in the minimum of 15 semester hours in one department for a major or the minimum of 10 semester hours in one department for a minor.

101A and 101B Man and Society

The emphasis is on understanding basic ideas in the social sciences and on acquiring a mature ability to analyze and appreciate the individual in society. The student is introduced to such matters as: the nature of man and the purpose and meaning of human existence; the ways in which personality and society are mutually interdependent; the ways men work, the reasons why they work and the effect of such economic factors on the composition and political complexion of society; the reasons for and types of communities into which men form themselves (political, social, religious, and international).

Four semester hours credit each semester. Dr. Bowers, Dr. Clark, Mrs. Patton, Dr. Woods.
Open to Qualified Juniors, Seniors, and Graduate Students

400 Teaching of the Social Studies

Teaching of the social studies in the Junior and Senior High School. Definition of objectives. Selection, organization and development of content materials. Study of the procedures and problems of effective teaching in the social studies.

Each semester. Dr. Macmillan. Two semester hours.

401 Workshop on Contemporary Britain and Anglo-American Relations

A study of the historical forces moulding contemporary Britain, her government and society; economic, political, and social changes in the twentieth century; the development of the Welfare State; and the structure of the British Commonwealth of Nations. England’s international relations will be studied with particular reference to the United States.

Not offered in 1954-55. Dr. Seibert. Five semester hours.

ECONOMICS

FLOYD W. MOORE
HOWARD F. BIGELOW
ROBERT S. BOWERS

Courses in economics are designed (1) to contribute to general education by attempting to make students more familiar with the ways and means by which men make their living in modern times; (2) to fulfill the requirements for the training of teachers in certain professional groups, such as commerce and business administration; and (3) to furnish courses and explore areas of economic thought which are prerequisite to graduate study and are recommended as pre-professional in business administration, engineering, journalism, law, medicine, and social work.

All majors and minors in economics must include Principles of Economics 220A, B. These two courses are prerequisite to all other courses offered in the Department of Economics, except 223 and 526.

220A Principles of Economics

A study of the fundamental principles of economics and their application to some of our more important economic problems. This course and the following one, 220B, are basic to intelligent understanding of our American economic system as compared with communism or other “isms”.

Each semester. Mr. Bigelow, Dr. Bowers, Dr. Carlson, Mr. Eck, Dr. Moore, Mrs. Patton. Three semester hours.

Note.—Principles of Economics 220A and 220B form a single course, which is prerequisite to advanced work in the field. A student planning to take only a single semester’s work in economics should consult with the instructor before electing Principles of Economics 220A.

220B Principles of Economics

A continuation of Principles of Economics 220A. Prerequisite: 220A.

Each semester. Mr. Bigelow, Dr. Bowers, Dr. Carlson, Mr. Eck, Dr. Moore, Mrs. Patton. Three semester hours.
223 Economics of Consumption
A study of the problems the individual and the family face in trying to satisfy their wants with the money income and other resources at their disposal. No prerequisites.
Each semester. Mr. Bigelow. Three semester hours.

321A Money and Credit
In this course an examination is made of the evolution and functions of money, monetary standards, and credit. Some attention is given to the history of currency in the United States, experiments with paper money, and price-level control, together with considerable factual material relative to credit and credit instruments. Prerequisite: Principles of Economics 220A, B.
First semester. Dr. Carlson. Two semester hours.

321B Money and Credit
A continuation of 321A with special emphasis on banking and other financial institutions. Prerequisite: Money and Credit 321A.
Second semester. Dr. Carlson. Two semester hours.

323 Marketing
A study of the principles, methods, and problems of marketing. Included in the study is a general criticism of the existing market structure and some proposals for its improvement. Prerequisite: Principles of Economics 220A, B.
First semester. Dr. Moore. Three semester hours.

324 Transportation
An analysis of the various means of transportation, including the items of service, cost, revenues, and government regulation. Prerequisite: Principles of Economics 220A, B.
Second semester. Dr. Carlson. Three semester hours.

327 Economic Statistics
A course designed to promote the importance and use of statistical devices and formulae as applied to economic data; to enable the student to collect or assemble basic statistical data and to organize them; and to develop his capacity to use summary statistics as interpretative tools and aids in economic studies and practical management operations. Prerequisite: Mathematics 209 or 211 or consent of the instructor; Principles of Economics 220A, B.
Not given in 1954-55. Mrs. Patton. Two semester hours.

330 Business Cycles
An historical and theoretical analysis of business cycles. Prerequisite: Principles of Economics 220A and 220B.
Second semester. Mr. Eck. Two semester hours.
Open to Qualified Juniors, Seniors, and Graduates

420 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.
First semester. Mr. Bigelow. Three semester hours.

421A Labor Problems
An analysis of the nature and underlying causes of the problems facing the worker in modern economic society. Prerequisite: Principles of Economics 220A, B.
First semester. Dr. Bowers. Two semester hours on campus. Three semester hours in extension.

421B Labor Problems
A study of the methods by which workers, employers, and the public have been and now are attempting to solve labor problems. Present programs are evaluated in the light of underlying economic principles in order to develop sound thinking about these problems. Prerequisite: Labor Problems 325A.
Second semester. Dr. Bowers. Two semester hours on campus. Three semester hours in extension.

422 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.
Second semester. Mr. Bigelow. Three semester hours.

423 Collective Bargaining
An analysis of the major problems in present-day collective bargaining including the negotiation of collective agreements, the practical aspects and the economic implications. Prerequisite: Labor Problems 421A, B, or the consent of the instructor.
First semester. Dr. Bowers, Mr. Eck. Three semester hours.

424 International Economics
A general course in international relations with special emphasis on the fundamentals of international trade theory and the impact of national economic policies on international relations. Prerequisite: Principles of Economics 220A and B.
Second semester. Dr. Carlson. Two semester hours.

425 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. Mr. Bigelow. Two semester hours.

426 Business and Government
A study of the regulatory policies of government and their impact on private enterprise. The course seeks to explain the need for regulation, and to provide an analysis and evaluation of the various laws from the viewpoint of encouragement, subsidization, and control. Special attention will be directed to certain aspects of concentration of economic power, public ownership, and nationalization programs. Prerequisite: Principles of Economics 220A, B. Work in Political Science may be substituted in special cases by permission of the instructor.
First semester. Dr. Carlson. Three semester hours.

427 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.
First semester. Dr. Moore. Two semester hours.

428 Comparative Economic Systems
The economic institutions and conditions of capitalism, socialism, communism, fascism, and the cooperative movement are critically examined as to ideology and actual operation. Prerequisite: Principles of Economics 220A, B.
Second semester. Dr. Bowers. Two semester hours.

429 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. Dr. Moore. Three semester hours.

Open to Graduates

525 Public School Finance
This course considers problems of school expenditures, sources of revenue, principles of budget making, techniques of borrowing, bonding to finance building programs, tax allocations, and similar financial problems facing school administrators. These factors of school cost and expenditures are coordinated with the overall subject of public revenues and expenditures. Not offered 1954-1955. Mr. Bigelow. Two semester hours.
Applied Economics for Teachers

This course is designed primarily to help in-service teachers. Three or four segments of our present economy, such as: installment buying, concentration of economic power, buying and selling of stocks and bonds, distribution of the national income, the economic role of governments, the supply and demand theory of prices, banking, capitalism and full employment, costs of living, labor relations, the national debt, or other segments selected by the class, are critically examined.

It is hoped that the results of these examinations will be (a) applicable to grade and high school classroom demands and procedures, and (b) helpful additions to the general economic understanding of the students. Each student is expected to prepare a paper on some economic problem selected by the student in conference with the instructor. No prerequisites are required, although some undergraduate or graduate credits in the Social Sciences are desirable.

Summer Session 1954. Dr. Moore. Two semester hours.

HISTORY

JAMES O. KNAUSS
WILLIS F. DUNBAR
ROBERT FRIEDMANN
MARGARET E. MACMILLAN

A. EDYTIE MANGE
HOWARD A. MOWEN
ROBERT R. RUSSEL
RUSSELL H. SEIBERT
CHARLES R. STARRING

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 select instead advanced courses in the field: 312; 313; 317; 324; 403; 404A, B; 405A, B; 406A, B; 418.

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, affords students a better opportunity to become acquainted with methods of advanced historical study: 403; 404A, B; 405A, B; 406A, B; 408; 409; 415; 416; 418; 425A, B; 426.

A minor in history should include at least 3 semester hours in courses numbered above the one-hundreds.

Since a reading knowledge of French or German, or both, is helpful in advanced courses in history and essential in graduate work in the field, students majoring in history are urged to elect at least two years of French or German.
100A Foundations of Western Civilization
This course is designed to give the student an understanding and an appreciation of contemporary institutions and culture through a study of their origins and development. It is essentially a history of culture which shows how the present is a product of the past, and how peoples widely separated in space and time have contributed to the present.
Each semester. Dr. Dunbar, Dr. Friedmann, Dr. Macmillan, Dr. Mange, Mr. Mowen, Dr. Seibert, Mr. Starring. Four semester hours.

100B Foundations of Western Civilization
Continuation, from the seventeenth century on, of course 100A. It surveys significant developments in the Orient as well as those in the Western world. Special emphasis is placed upon the twentieth century. Prerequisite: Foundations of Western Civilization 100A.
Each semester. Dr. Dunbar, Dr. Friedmann, Dr. Macmillan, Dr. Mange, Mr. Mowen, Dr. Seibert, Mr. Starring. Four semester hours.

108A Modern Europe, 1500-1815
A study of the Reformation; the struggle between Spain and England; the rise of the Dutch Republic; the growth of absolutism in France; the establishment of parliamentary supremacy in England; the rise of Russia and Prussia; colonial conflict, social and political ideas of the eighteenth century; the French Revolution; and the era of Napoleon.
Offered in the summer session. Three semester hours.

108B Modern Europe, 1815 to the Present Time
The reactionary period after 1815; the industrial revolution; the liberal and national movements of the nineteenth century; the Near Eastern question; the expansion of Europe in Asia and Africa; international relations; World War I; the peace treaties; causes and results of World War II.
Offered in the summer session. Three semester hours.

201A United States History to 1865
A general survey of American history from the beginning of the Thirteen Colonies to the end of the Civil War.
Each semester. Dr. Dunbar, Dr. Knauss, Dr. Macmillan, Dr. Russel, Mr. Starring. Three semester hours.

201B United States History, 1865 to the Present
A general survey of United States history for the period.
Each semester. Dr. Dunbar, Dr. Knauss, Dr. Macmillan, Dr. Russel, Mr. Starring. Three semester hours.

307A Colonial Latin American History
A study of the social, political, economic, and cultural aspects of Latin American history to end of the wars for independence.
First semester. Dr. Knauss. Two semester hours on campus. Three semester hours in extension.
307B History of the Latin American Republics
A study of the development of Latin America since the achievement of independence. Special stress will be placed on foreign relations.
Second semester. Dr. Knauss. Two semester hours on campus. Three semester hours in extension.

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 1954-55. Dr. Russel. Three semester hours.

312 Economic History of the United States
A general survey of the subject. A general knowledge of United States history such as may be gained from 201A, B is presupposed and a knowledge of the principles of economics is very helpful.
Each semester. Dr. Russel. Three semester hours.

313 History of Michigan
A course designed to show the development of the contemporary political, social, and economic status of Michigan. The relation of the history of the state to that of the nation is stressed.
Each semester. Dr. Knauss, Mr. Starring. Three semester hours.

314 History of the Far East
A comprehensive survey of the Far East from the earliest times down to the present. The internal development and cultures of China, Japan, India and special emphasis is placed upon the foreign relations of these countries in the 19th and 20th centuries.
Second semester. Dr. Dunbar. Three semester hours.

317 Constitutional History of the United States
A study of the development of the political institutions of this country from colonial times to the present with emphasis on the growth of the federal constitution. A general knowledge of the United States history, such as may be gained from 201A, B, is presupposed.
Not offered in 1954-1955. 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.
First semester. Dr. Mange. Three semester hours.

320 Ancient Greece
Background: Near East and Aegean civilization—The Homeric Age; rise and fall of Athens; Alexander the Great; Hellenism; Political achievements; the cultural legacy of the Greeks.
First semester. Dr. Friedmann. Three semester hours.
321 Ancient Rome
Its growth, expansion, civil wars, imperialism, and final decline. Constitutional history, Roman law. The rise of the Christian church until the sixth century.
Second semester. Dr. Friedmann. Three semester hours.

322A Renaissance and Reformation (1350-1650)
Italian Renaissance, the awakening of the modern mind. Humanism. Lutheranism; Calvinism; Anglicanism; Anabaptism. The Catholic Reformation. Resulting European civilization.
Not offered in 1954-1955. Dr. Friedmann. Three semester hours.

322B The Modern Near East
A study of the east Mediterranean lands formerly part of the Ottoman Empire; the problems resulting from racial conflict, economic imperialism, and the rise of nationalism.
Second semester. Dr. Mange. Three semester hours.

323 Modern Nationalism in Europe and America
Not offered in 1954-1955. Dr. Macmillan. Two semester hours.

324 The Westward Movement in American History
The conquest of the West and the westward movement of the American people are studied, and considerable emphasis is placed on the influence of the frontier on American life and institutions.
First semester. Dr. Dunbar. Three semester hours.

Open to Qualified Juniors, Seniors, and Graduates

403 American Foundations
The English Colonies in America, 1607-1763. Mainland and island settlements; development of society and institutions; policy and administration.
Second semester. Dr. Knauss. Two semester hours.

404A The Era of the American Revolution 1763-1787
The causes, character, and consequences of the American Revolution. An intensive study of selected topics. A principal aim is to acquaint students with all kinds of historical materials and to introduce them to methods of advanced historical study.
First semester. Dr. Macmillan. Two semester hours.

404B United States History 1787-1815
The making of the Constitution and establishment of the early republic. This course is conducted in the same manner as 404A.
Second semester. Dr. Macmillan. Two semester hours.
405A United States History 1815-1848
An intensive study of selected topics. Principal objects are to acquaint students with the various classes of historical materials and to introduce them to methods of advanced historical study.
First semester. Dr. Russel. Two semester hours.

405B United States History 1848-1877
This course deals principally with the great sectional struggle over slavery. It is conducted in the same manner as 405A.
Second semester. Dr. Russel. Two semester hours.

406A United States History, 1901-1933
An intensive study of a short period. The big topics are the progressive movement, World War I, and the causes of the Great Depression. Pre-requisite: six semester hours of history.
Not offered in 1954-1955. Dr. Russel. Two semester hours.

406B United States History 1933 to the Present
A continuation of 406A. The big topics are the Great Depression, the New Deal, World War II, and our foreign relations since the war. Pre-requisite: six semester hours of history.
Not offered in 1954-1955. Dr. Russel. Two semester hours.

408 Europe: 1900-1925
A study of the evolutionary promise of the New Enlightenment and the forces that led to its end in World War I; the frustrated opportunities of the peace ending at Locarno. Emphasis on evaluating significant trends of Liberalism; the relationship of domestic and foreign policies.
First semester. Mr. Mowen. Three semester hours.

409 Europe: 1925 to Present
An investigation into the nature of the crucial problems and the varied solutions offered. Special study of the World Depression; the revolutionary alternatives posed by Fascism and Communism; tensions and ideological conflicts culminating in World War II; the positions of victor and vanquished after modern war.
Second semester. Mr. Mowen. Three semester hours.

415 The Old Regime
A study of the development of absolute monarchy; of the institutions, life, and thought of the eighteenth century, with special emphasis upon France; the causes of the French Revolution, and belated efforts at reform. Prerequisite: An introductory course in European history.
First semester. Dr. Seibert. Two semester hours.

Note.—Courses 415 and 416 are sequential courses. Each course may, however, be taken separately.
416 The French Revolution and Napoleonic Era, 1789-1815

The overthrow of the French Monarchy and establishment of the First French Republic, the rise and fall of the Napoleonic Empire, and the spread of revolutionary principles throughout Europe. Prerequisite: An introductory course in European history.

Second semester. Dr. Seibert. Two semester hours.

Note.—See note under course 415.

418 The Old South

A study of economics, 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 1954-1955. Dr. Russel. Two semester hours.

425A Intellectual History of Western Man, I (Beginning to 1550)

Leading ideas and movements in Western Civilization; their foundations in classical and Judaeo-Christian traditions. Medieval thought, both secular and ecclesiastic. Arab influences. The spirit of Gothic art. Renaissance and Humanism. The final breakup of the medieval system through the Protestant Reformation.

First semester. Dr. Friedmann. Two semester hours.

425B Intellectual History of Western Man, II (1550-1950)

Four hundred years of the “modern mind”: the dominance of the scientific perspective and the conflict with Christian ideas and ideals. Calvinism and the economic revolution. Rationalism, Enlightenment and the secularization of life. Romanticism, Liberalism, and the challenge of socialism. The world at a crossroad.

Second semester. Dr. Friedmann. Two semester hours.

426 Twentieth Century Britain

A study of British political, social, and economic developments since 1900, and of the changing character of the Empire and Commonwealth.

First semester. Dr. Seibert. Two semester hours.

Open to Graduates

511 Studies in the Near East

Studies pertaining to the major aspects of the history of the Near East; involving lectures, supplementary reading, and the critical use of historical materials in the preparation of papers.

Not offered in 1954-1955. Dr. Mange. Two semester hours.

513 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.

First semester. Dr. Knauss. Two semester hours.
515 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 philosophies.

Not offered in 1954-1955. Dr. Seibert. Two semester hours. (Not open to students who have had course 415.)

519 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.

Second semester. Dr. Mange. Two semester hours.

524 Studies in the History and Culture of the Old Northwest

Reading, discussion, and research on various aspects of the development of government, education, social institutions, and economic life in the Old Northwest.

Not offered in 1954-1955. Dr. Dunbar. Two semester hours.

COURSES IN PHILOSOPHY

A student may earn a minor in Philosophy by taking 15 semester hours credit in Philosophy. The courses History of Political Philosophy (Pol. Sc. 390) and Political Philosophy (Pol. Sc. 391) may count towards such a minor.

290 Design for Living

Man viewed as an individual: life with and without a design. Conflict situations of life and the issue of freedom. Meaning of life; responsibilities toward ourselves and toward our neighbors. Concern, service, love.

Not offered in 1954-1955. Two semester hours.

291 Social Values

Man viewed as member of organized society; forms of social relationships and social responsibilities. Democracy and its moral implications. Individualism, cooperation, and the problem of planning. The need for international order. Essence of liberty.

Second semester. Dr. Friedmann. Three semester hours.

390 Introduction to Philosophy

A first acquaintance with the problems of philosophy; relationship between philosophy, science, and religion. Theoretical and practical philosophy. Problems of philosophy: universe, man, inner life, moral conduct, esthetics. Different schools of thought.

First semester. Dr. Friedmann. Two semester hours.
391A History of Philosophy: Greek and Christian Philosophy
The great thinkers of the Greeks and Romans, Plato, Aristotle, Stoicism, etc. The church fathers and the schoolmen of the Middle Ages up to the Renaissance.
Not offered in 1954-1955. Dr. Friedmann. Two semester hours.

391B History of Philosophy: Modern and Recent Thinkers
The new world view since the Renaissance. Bruno, Galileo, Descartes, Spinoza, Leibnitz, English thinkers: Locke to Hume; Kant to Hegel; the more recent thinkers of both Europe and America.
Not offered in 1954-1955. Dr. Friedmann. Two semester hours.

392 Philosophy of Science
Logical foundations, methodology of sciences. The eternal principles of the universe as discussed by physics, chemistry, and biology. Law and causality. Mechanism and vitalism.
Not offered in 1954-1955. Dr. Friedmann. Two semester hours.

393 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. Dr. Friedmann. Two semester hours.

394 Great Religions of the World
First semester. Dr. Friedmann. Three semester hours.

POLITICAL SCIENCE

Courses in the Department of Government are designed to prepare students to become (1) a functioning citizen; (2) a teacher of government or civics; (3) a governmental employee or officer; and (4) to understand the part government plays in every day business or other activities; (5) to develop sound methods of investigation and reflection as well as the ability to evaluate political information critically; (6) to make clear the role which individuals and organized groups can play in the Political Process; and (7) to demonstrate relationship of the study of government and public affairs to the other social sciences.
The state legislature in 1931 passed a law requiring that all colleges receiving public money shall grant no degree or diploma to any student who shall not have successfully completed a political science course covering the form and functions of our federal and state governments, and of counties, cities, and villages. This requirement may be met by any one of the following department courses: Nos. 230A, 230B, and 234.

A major shall consist of 24 semester hours in the Department and a minor of 15 semester hours in the Department. Majors and minors in the Department are urged to take Political Science 230A and/or 230B, 351, and 360.

Political Science 230A and 230B overlap with 234. Therefore, credit in either 230A or 230B will preclude credit in 234.

230A American National Government
An introductory course dealing with the National Government structure, processes and functions. The structure and functions of political parties are touched upon incidentally. Emphasis is placed on the relationships and obligations of citizens to their government. Motion pictures and other visual aids are used in addition to class lecture and discussion.
Each semester. Dr. Clark, Mr. Plano, Dr. Stine, Dr. Weber. Three semester hours.

230B State and Local Government
Detailed attention is given to the structure, functions, and processes of state, county, township, municipal and school government, with emphasis upon Michigan patterns and practices. The work is supplemented and enriched by guest speakers, field trips, and visual aids as time, facilities, and group interests dictate.
Each semester. Mr. Plano, Dr. Stine, Dr. Weber. Three semester hours.

234 Survey of American Government
A survey of national, state and local governments, and is intended for those who do not find time for the more extensive courses 230A and 230B.
First semester. Dr. Weber. Two semester hours.

340 Political Parties
A study of the nature of political parties and the part they play in government. Party principles, organization and the role of parties in the electoral process is emphasized. Prerequisite: Junior standing.
First semester. Dr. Stine. Two semester hours.

341 Public Opinion and Pressure Groups
An analysis of the nature of public opinion, the methods of influencing it, and the techniques of opinion and attitude measurements, the organization, characteristics, methods and results of propaganda are considered. (This course is designed as a continuation of Political Science 340 but may be taken separately.) Prerequisite: Junior standing.
Second semester. Dr. Stine. Two semester hours.
351 **Comparative Governments of Europe**

The organization and procedure of the political institutions of England and the British dominions are considered, and those of France, Switzerland, and the U.S.S.R. and other European nations. Political trends and forces challenging or reshaping democratic institutions are examined. Prerequisite: Political Science 230A or Junior standing.

Second semester. Dr. Weber. Three semester hours.

360 **International Politics**

The course includes a study of the forces which have operated to bring conflict among the states in the international community. It also includes an analysis of power and the ways in which power is gained, maintained and used in international relations. Prerequisite: Political Science 230A or a course in modern history or equivalent.

First semester. Mr. Plano. Three semester hours.

361 **International Organization**

A study of systems and methods derived by states for dealing with their common problems. Special attention will be given to the problems arising in the United Nations. (This course is designed as a continuation of Political Science No. 360 but may be taken separately.) Prerequisite: Political Science No. 230A, or a course in modern history or equivalent.

Second semester. Mr. Plano. Three semester hours.

370 **Public Administration**

Analysis of the principles of administrative organization and supervision, and of fiscal and personnel agencies, with special reference to current administrative problems in American government. Prerequisite: Political Science 230A or Junior standing.

First semester. Dr. Stine. Two semester hours.

381 **Constitutional Law**

This course considers the nature, principles, and the view of the government of the United States as embodied in written Constitutions and judicial decisions. Prerequisite: Political Science 230A.

Second semester. Dr. Clark. Three semester hours.

383 **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. Change brought about by World War II. Prerequisite: A course in modern European history or international affairs.

Not offered in 1954-55. Dr. Clark. Three semester hours.

390 **History of Political Philosophy**

An introduction to a selected portion of the political thought that has influenced the thinking of all ages. The works of the great political philosophers will be studied.

Not offered in 1954-55. Dr. Clark. Three semester hours.
391 Political Philosophy

This course is a continuation of the History of Political Philosophy, No. 390. It does not consider political philosophy historically but rather examines certain areas of concern to the political philosopher. It considers among others such problems as the nature of man, the purposes of government, the meaning of liberty, and the extent of political authority. Prerequisite: Junior standing.

First semester. Dr. Clark. Three semester hours.

Open to Qualified Juniors, Seniors, and Graduates

420 Principles of Government

This course studies that area of Political Science which lies between practical descriptions of political systems and advanced philosophic speculation. It considers, for example, such problems as the influence of geography, technology, education and tradition on political systems.

Not offered in 1954-55. Dr. Clark. Two semester hours.

437 Problems of American Government

An advanced study of the problems which are related to the various branches of our national government. Executive-legislative relationships and administrative organization are among topics to be considered.

Not offered in 1954-55. Dr. Weber. Two semester hours.

439 Municipal Government and Administration

Structural, political and legal questions concerning the development and organization of cities are discussed. Emphasis is placed on city planning Police, Social welfare, Public Improvements, finance and other activities. Prerequisite: Political Science 230B or the equivalent.

Second semester. Dr. Stine. Two semester hours.

451 British Government and Politics

The organization and operation of the government of Great Britain and a survey of contemporary British political issues and problems. Prerequisite: Political Science 230A or equivalent.

Not offered in 1954-55. Dr. Weber. Two semester hours.

452 Governments and Problems of the Far East

This course includes a study of the governmental organization and an analysis of some current problems of organization and administration of Japan, India, the Philippines, and other countries of the Far East. Special attention will be given to such problems as the growth of communism, land reform, industrialization efforts, and the development of democratic philosophy.

Not offered in 1954-55. Dr. Stine. Two semester hours.
453 Governments of the Soviet Union and Eastern Europe
The government and politics of the U.S.S.R. and a survey of the new regimes established in Poland, Czechoslovakia, Hungary, Romania and Yugoslavia. Prerequisite: Modern European History or equivalent.
Not offered in 1954-55. Dr. Weber. Two semester hours.

454 Governments and Problems of Central and South America
This course includes a study of the governmental organization, an analysis of some of the more current economic, and social problems of selected Latin American countries.
First semester. Dr. Weber. Two semester hours.

465 Conduct of American Foreign Relations
A study of the agencies in the national government responsible for formation and execution of American foreign policy. Particular attention will be paid to these roles in current policy. Prerequisite: Political Science 230A, American history, or equivalent.
First semester. Dr. Woods. Two semester hours.

466 Foreign Policy of the United States
An analysis of foreign problems faced by the United States. Special emphasis on relations between the United States and the Major power areas of the world. (This course is designed as a continuation of Political Science 465 but may be taken separately.) Prerequisite: Political Science 230A, American history, or equivalent.
Second semester. Dr. Woods. Two semester hours.

471 Problems of Public Administration
The course will include an analysis of some typical problems of administration at all three levels of government. An attempt will be made to develop some principles which will aid the administrator in his consideration of such matters as organization and reorganization of agencies of government personnel and financial administration, techniques of control within the unit and public relations. Individual problems will be assigned at the level of government in which each is particularly interested.
Not offered in 1954-55. Dr. Stine. Two semester hours.

Open to Graduates

530 National Government
This course considers the major aspects of the national government of the United States with emphasis upon constitutional questions and intergovernmental relations; executive, legislative, and judicial branches; problems of citizenship and civil liberties, political parties, and elections, and basic problems of public administration and finance.
Not offered in 1954-55. Dr. Clark and Dr. Weber. Two semester hours.
531 State Government
This course considers the major aspects of state government. Emphasis will be placed upon the role of the states in government, the state legislature, the executive, the courts, the role of the citizen, pressure groups and political parties. Class members will be asked to make individual studies of such important problems as State Aid to Schools, revision of the executive branch and other governmental problems in Michigan.
Not offered in 1954-55. Dr. Stine. Two semester hours.

537 Seminar in Problems of American Government
This course gives consideration to some of the more important problems facing the United States and the state of Michigan. Some topics studied are: financing government, regulation of business and labor, reorganization of governmental agencies, social welfare, and education.
Second semester. Dr. Weber. Two semester hours.

539 Problems of Municipal Government
Deals with problems resulting from the growth of cities, auxiliary departments such as personnel, finance, planning and law, and line departments including police, fire, public works and utilities, public health, parks and recreation. Prerequisite: Political Science 230B or equivalent.
Not offered in 1954-55. Dr. Stine. Two semester hours.

560 Problems in International Politics
Analysis through case studies of major current international problems, their backgrounds, solutions offered, and current status.
Not offered 1954-55. Mr. Plano. Two semester hours.

593 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 course material will be used.
First semester. Dr. Clark. Two semester hours.

SOCIIOLOGY

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 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 or 243 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 18 semester hours selected from courses 255, 348, 351, 353, 355, 356, 357, 358A and 358B. Students intending to pursue this curriculum should seek counsel and guidance early from the instructor in social work.

**SOCIOLOGY COURSES**

**241 Principles of Sociology**

A study of man's social nature and of the social world in which he lives. The biological, social, and cultural factors underlying the development of human personality and the various forms and processes of group association are analyzed.

Each semester. Dr. Horton, Dr. Hunt, Dr. Kercher. Three semester hours.

**242 Modern Social Problems**

A general survey of some of the major social problems now confronting American society, such as inter-group conflict, physical and mental ill health, economic insecurity, juvenile delinquency and crime, population changes, and mass communication. Prerequisite: Principles of Sociology 241.

Each semester. Dr. Horton, Dr. Hunt, Dr. Kercher, Dr. Manis. Three semester hours.

**243 Social Psychology**

A study of the social and cultural aspects of individual personality, together with an analysis of the problems of personal adjustment that arise from the interaction of personalities and from the relation of the individual to the social environment in general. Prerequisite: Principles of Sociology 241.

First semester. Dr. Manis. Three semester hours.

**244 Sociology (for Nurses)**

An introductory course in sociology especially adapted to the needs of students of nursing. Not open to regular students.

First semester. Dr. Horton. Two semester hours.

**245 Modern Marriage**

A general education course designed to help young people prepare for successful marriage. Courtship, choosing a mate wisely, planning for marriage, adjusting to one's partner, preparing for successful parenthood are considered. Should not be taken by students expecting to take Marriage and the Family 345.

Each semester. Dr. Horton. Two semester hours.
247 The City
A study of city 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.
Not offered in 1954-55. Dr. Horton. Two 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.
Second semester. Dr. Hunt. Three semester hours.

342 Criminology
A study of crime as a social problem. Course includes (1) an analysis of causative factors in crime, (2) a study of American police and court systems, (3) a survey of the problems of penology, and (4) a consideration of crime prevention. Visits to institutions are made. Prerequisite: Principles of Sociology 241.
Second semester. Dr. Kercher. Three semester hours.

344 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. Prerequisite: Principles of Sociology 241, or Introduction to Contemporary Society 101A, or Social Dynamics of Human Behavior 540.
Not offered in 1954-55. Dr. Kercher. Two semester hours.

345 Marriage and the Family
A study of both the personal and the institutional aspects of marriage and family living. Courtship and mate selection, marital adjustment, parent-child relations, family disorganization, and the adaptation of the family to modern society are considered. Credit not given to persons with credit for Modern Marriage 245. Prerequisite: Principles of Sociology 241.
Each semester. Dr. Horton. Three semester hours.

346 Industrial Sociology
A study of human relations in business and industry. The functioning of informal groups and the varying roles of leadership are analyzed. Consideration is given also to the problems of depersonalization, of worker morale and output, and of labor-management conflicts.
First semester. Dr. Hunt. Two semester hours.

347 Race Relations
A study of race and inter-group relations, 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.

Not offered in 1954-55. Dr. Hunt. Two semester hours on campus. Three semester hours in extension.

348 Introduction to Social Research

An introductory course in the principles and techniques of social investigation. The leading research approaches are surveyed. Procedures for planning, organizing, and conducting limited research projects are analyzed. Statistical concepts and methods are studied. Each student will take part in a group study project. Prerequisite: 12 semester hours of social science other than history.

Second semester. Dr. Hunt. Three 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 consent of instructor.

Not offered in 1954-55. Dr. Manis. Three semester hours.

Open to Qualified Juniors, Seniors, and Graduates

442 Social Pathology and Personal Deviation

A study of the social aspects of personal deviation. Subject-matter would include consideration of the alcoholic, the drug addict, the marginal man, and the sexually maladjusted. Course considers deviate behavior in light of social background, causative factors, and possible therapy. Prerequisite: Principles of Sociology 241, or Introduction to Contemporary Society 101A, or Social Dynamics of Human Behavior 540.

Not offered in 1954-55. Dr. Hunt. Two semester hours.

443 Population Problems

A study of population trends and their human significance. The social and cultural factors influencing the reproductive behavior of man are examined. Biosocial facts are presented and analyzed, but primary stress is on the social implications of present and probable future population trends. World pressure spots as well as the United States are considered. Prerequisite: 12 semester hours of Social Science.

First semester. Dr. Kercher. Three semester hours.

444 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 Introduction to Contemporary Society 101A, or Social Dynamics of Human Behavior 540.

Not offered in 1954-55. Dr. Hunt. Two semester hours.
446 Juvenile Delinquency and the Community
A study of juvenile delinquency as a social problem. Extent, causative factors, methods of treatment, and programs of prevention and control are covered. When possible, extensive use of community resource people is made. Prerequisite: Principles of Sociology 241, or Social Dynamics of Human Behavior 540, or equivalent.
Second semester. Dr. Kercher. Two or three semester hours as scheduled.

447 Community Agency Resources
A study of community agencies and resources for those concerned with family and personal problems. Emphasis is placed upon the availability of these resources and their effective use by business and industry, speech therapists, guidance counselors, teachers, etc.
Second semester. Mrs. Reid. Two semester hours.

448 Comparative Culture Studies
A comparative study of the structure and the functioning of selected aspects of culture in Britain and America. The courts, the educational system, the welfare state, class stratification, correctional institutions, political organization, and the basic structure of government are considered. Prerequisite: Principles of Sociology 241, or Social Dynamics of Human Behavior 540.
First semester. Dr. Kercher. Two semester hours.

449 Contemporary Social Movements
A study of the growth and place in contemporary society of selected social movements, including communism, fascism, Ku Klux Klan, the Townsend movement, and the like. Prerequisite: Principles of Sociology 241, or Social Dynamics of Human Behavior 540.
Second semester. Dr. Horton. Three semester hours.

540 Social Dynamics of Human Behavior
The concepts of sociology, cultural anthropology, and social psychology essential to understanding human development and social behavior are systematically explored and integrated. The student is taught how to assess the concrete social situations in which he finds himself, and in which he observes other people from day to day. Especially designed for those who have not had a foundational course in sociology.
Each semester. Dr. Kercher. Two semester hours.

541 Primary Group Dynamics
A study of the forces that influence the outcomes of primary group activity. The effects of diverse personalities, of varying leadership roles, of person to person interaction, and of the responses of the group as a whole are considered. Principles of effective group dynamics are practiced, as well as observed and studied, in the educational setting. Prerequisite: Principles of Sociology 241, or Social Dynamics of Human Behavior 540.
Second semester. Dr. Manis. Two semester hours.
544 Techniques of Intercultural Adjustment

A study of intercultural processes of adjustment involving different racial, nationality and religious groups. The factors giving rise to present day conflict situations are examined and special emphasis is given to techniques of adjustment through individual and community action. Prerequisite: Principles of Sociology 241, or Social Dynamics of Human Behavior 540, or equivalent.

First semester. Dr. Hunt. Two semester hours.

545 The Family

The family in a changing society. The family as the molder of child personality; cooperation of school and home in guiding children; sex guidance and family life education in the school. Prerequisite: Principles of Sociology 241, or Dynamics of Human Behavior 540, or equivalent.

Not offered in 1954-55. Dr. Horton. Two semester hours.

548 Independent Studies in Sociology

For graduate students desiring to do independent research or study in fields of sociology not covered by the curriculum. A student's project must be approved by the Sociology faculty, and work on it is supervised throughout by an individual staff member. Prerequisite: A minimum of 8 semester hours of college work in sociology.

As needed. Dr. Horton, Dr. Hunt, Dr. Kercher, Dr. Manis, Mrs. Reid. Two or three semester hours.

SOCIAL WORK COURSES

255 The Field of Social Work

A study of social work as a professional field. The philosophy, functions, employment opportunities, patterns of specialization, and methods of social work are surveyed. Interpretative visits to varied types of social work agencies are made.

First semester. Mrs. Reid. Two semester hours.

351 Family and Child Adjustment

A study of personality development and adjustment in family situations during childhood and adolescence. Cases are analyzed to reveal the common emotional problems encountered by social workers.

First semester. Mrs. Reid. Three semester hours.

353 Public Welfare

The history of social legislation and public welfare and their underlying philosophy are considered from the Elizabethan Poor Law to the Social Security Act. An analysis is made of various aspects of welfare legislation of importance to the social worker.

Second semester. Mrs. Reid. Three semester hours.
355 Principles of Social Case 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. Prerequisite: consent of the instructor.
First semester. Mrs. Reid. Two semester hours.

356 Principles of Social Group Work
The study of the socio-cultural factors affecting group life, and of the methods and techniques used by the group worker in meeting individual and group needs. Social agency staff members will bring to the class specific programming employed in local group work agencies. Consent of instructor.
Second semester. Mrs. Reid and agency resource persons. Two semester hours.

357 Community Welfare Organization
A study of the community organization method as it applies to the planning, coordination, and integration of social, health, welfare, and recreation services. The class will observe a community organization agency by visits to its meetings and offices.
First semester. Mrs. Reid and agency resource persons. Two 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 90 hours of on-the-spot study of the agency's organization, functions, and methods is required. Prerequisite: Principles of Social Case Work 355 or Principles of Social Group Work 356, and consent of the instructor.
First semester. Mrs. Reid. Two semester hours.

358B Supervised Field Work
A continuation of Orientation to Field Work 358A, with emphasis on supervised participation in the work of the agency. Each student is required to complete 135 hours of field work on specific assignments. The student's work is evaluated jointly by the agency supervisor and the instructor. Prerequisite: Orientation to Field Work 358A, and consent of the instructor.
Second semester. Mrs. Reid. Three semester hours.
DIVISION OF TEACHER EDUCATION

James H. Griggs, Director

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

EDUCATION

JAMES H. GRIGGS
CATHERINE BAUNER
MARY BOTTJE
ROY C. BRYAN
JOHN A. BUELKE
HOMER L. J. CARTER
CLARA R. CHIARA
CARL R. COOPER
ISABEL CRANE
MANLEY M. ELLIS
JOHN L. FEIRER
ORIE I. FREDERICK
MITCHELL J. GARY
JOSEPH W. GIACHINO
LOUIS A. GOVATOS
BERNARD JACKSON
GEORGE E. KOHRMAN

EUNICE E. KRAFT
DOMINIC LEONARDELLI
LESTER R. LINDQUIST
L. MORRIS MCCLURE
DOROTHY J. MCginNIS
GEORGE G. MALLINSON
ARTHUR J. MANSKE
LOY NORRIX
LOIS ROBINSON
ESTHER D. SCHROEDER
AVIS L. SEBALLY
M. ELIZABETH SMUTZ
CARL B. SNOW
BEss L. STINSON
SARA R. SWICKARD
ALFRED R. THEA
CHARLES VAN RIPER

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 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.
Each semester. Dr. Buelke, Dr. Ellis, Dr. Govatos, Dr. Mallinson, Dr. Sebaly, Miss Stinson, Dr. Swickard. Three semester hours.

Junior Year

351 Introduction to Directed Teaching
This course is designed to prepare students for successful student-teaching. Prerequisite: Human Growth and Development 251 or equivalent and as many honor points as hours of credit.
Each semester. Dr. Buelke, Dr. Chiara, Dr. Ellis, Miss Schroeder, Dr. Sebaly. 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.
Dr. Buelke, Dr. Chiara, Dr. Griggs, Mr. Leonardelli, Dr. McClure, Dr. Mallinson, Dr. Manske, Miss Schroeder, Dr Swickard, supervisors, and resource persons. Fifteen semester hours.

370A Directed Teaching
Students devote a half day for one semester to Directed Teaching, at which time they have experiences in both the curricular and extra-curricular program of the training school in which they teach. All students expecting to do Directed Teaching should enroll in the Teacher Education Office well in advance of the semester in which the Directed Teaching is to be done.
Each semester. Eight semester hours.
370B Laboratory in Education

Students work individually and in groups on the kinds of problems faced in directed teaching situations in classroom, school, and community. Other problems to be faced later as full-time teachers are considered. Suggestions and guidance are afforded by staff members and by resource persons. The laboratory is divided into elementary and secondary sections.

Each semester. Four semester hours.

370C General Educational Problems

Course content includes such matters as social, political, and economic influences on education; historical and philosophical backgrounds of present-day education; changes and trends in education; and current problems in education.

Each semester. Three semester hours.

OPTIONAL COURSES IN DIRECTED TEACHING

371 Directed Teaching

Only for seniors who have completed most of their professional course work prior to the senior year. Similar to description for 370A. Students should enroll at the Teacher Education Office for Directed Teaching 371, 372, or 373 well in advance of the semester in which the Directed Teaching is to be done. Prerequisite: as many honor points as semester hours of credit acquired.

Each semester. Supervisors. Four semester hours.

372 Directed Teaching

Only for seniors who have previously fulfilled a part of their requirement in directed teaching. Similar to description for 370A.

This course is also offered in extension through the cooperation of the Department of Teacher Education.

Each semester. Miss Robinson and Supervisors. Four semester hours.

373 Directed Teaching

This elective course is planned primarily for those students who wish to extend their teaching over a wide range of grades or subjects, and for students who, in the opinion of the head of the department and the Director of Teacher Education, need more experience in teaching. Prerequisite: Directed Teaching 372 or 370A.

Each semester. Supervisors. Four semester hours.

374 Directed Teaching

A course in the teaching of arts and crafts related to work in occupational therapy in the public schools and in institutions for defective children. Prerequisite: same as for Directed Teaching 371. Open only to students of occupational therapy.

Each semester. Supervisors. Five semester hours.
570 Directed Teaching
Open to graduate students who have completed the major portion of professional courses required for certification.
Each semester. Dr. McClure and Supervisors. Two to eight semester hours.

REQUIRED GRADUATE COURSES

All candidates for the Master of Arts degree must take a minimum of six semester hours of credit in a core program, including at least three of the four courses listed below: 501, 502, 503, and 504. Graduate advisers will counsel students in choosing these courses in accordance with their undergraduate professional preparation.

501 Educational Research
Acquaints students with the nature and methods of research, with special emphasis upon the practical application of research findings to the solution of educational problems.
Each semester. Dr. Buelke, Dr. Mallinson, Dr. Frederick. Two semester hours.

502 The School Curriculum
A study of educational programs for children and youth, emphasizing principles and problems of curriculum development common to all levels of instruction.
Each semester. Dr. Frederick, Dr. Griggs. Two semester hours.

503 Foundations of American Education
A study of American education as affected by the great traditions and movements of Western culture. Consideration is given to historical, socio-economic and philosophical factors in the interpretation of modern educational issues and the solution of present-day educational problems.
Each semester. Dr. Chiara, Dr. Sebaly. Two semester hours.

504 Educational Psychology
A study of the forces which motivate behavior and affect the learning process, with particular reference to problems of growth and adjustment, to the development of meanings and insights, and to individual differences. Provisions are made to meet the needs of students with varying backgrounds in psychology.
Each semester. Dr. Ellis, Dr. Govatos. Two semester hours.

600 Thesis in Education (Optional)
Candidates for the Master of Arts degree may elect to write a thesis in a specialized field of education, under the supervision of one or more faculty advisers.
Each semester. Staff members. Six semester hours.
601 Special Individual Studies
Opportunity is provided for advanced graduate students to pursue individual studies or carry out individual projects in education under the guidance of one or more faculty members. A substantial paper or report of the project is required of all students.
Each semester. Staff members. Two or three semester hours.

ELEMENTARY EDUCATION

208 Stories for Childhood
A study of stories and poems suitable to childhood. Classroom practice in story telling.
First semester. Dr. Swickard. Two semester hours.

212 Psychology of Reading
A summary of the results of the scientific studies made in the field of reading, with suggestions as to the bearing of these studies upon the materials and methods of teaching. Prerequisite: as many honor points as hours of credit.
Each semester. Dr. Buelke, Miss Schroeder, Dr. Swickard. Three semester hours.

302 Problems in Elementary Education
This course is designed to deal with problems of immediate concern to beginning teachers—discipline, group activity, teacher-pupil planning, and other problems dealing with teaching in the elementary school.
Not offered in 1954-1955. Members of the staff. 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.
Not offered in 1954-1955. Dr. Swickard. Three semester hours.

309 Nursery-Kindergarten Education
This course will acquaint the students with the history and present-day status of the Nursery School and Kindergarten education. Consideration will be given to the organization, equipment, curriculum, and approved teaching procedures.
First semester. Miss Bauner. 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.
Open to Qualified Juniors, Seniors, and Graduates

402 Curriculum Workshop
Opportunity is provided for teachers, supervisors and administrators in selected school systems to develop programs of curriculum improvement. A wide variety of resources is used for instructional purposes, including several specialists, library and laboratory facilities, field trips, audio-visual materials, and the like.

Each semester. Dr. Chiara, Dr. Swickard, and others. Two to four semester hours.

410 Parent Education
Places major emphasis on home problems which have educational implications for the child. Parent-teacher relationships, council programs, and cooperative efforts for improvement of education in home and in school are studied.
First semester. Dr. Griggs, Dr. Swickard. Two semester hours.

411A The Elementary Curriculum
A consideration of content and procedures to adapt experiences of pupils in elementary schools to modern conditions and to child needs and interests. Individual or committee reports concerning the improvement of various aspects of the elementary school curriculum will be prepared.
Second semester. Dr. Frederick, Miss Schroeder. Two or three semester hours.

411B The Elementary Curriculum
A continuation of 411A. Emphasis will be placed on developing and organizing research materials for actual use in school systems represented by those taking the course.
Not offered in 1954-1955. Dr. Frederick, Miss Schroeder. Two or three semester hours.

465 Adult Education
This course will include such topics as organizing and financing formal public school adult education programs, promoting informal adult education activities, leadership training, program planning, and adult education group techniques. Students will be permitted to select special areas of interests for research and study.
Mr. Gernant and Mr. Yntema. Two semester hours.

Open to Graduates

512 Guiding Child Development in the Elementary School
This course is designed to help nursery school, kindergarten and elementary school teachers gain an understanding of the manner in which skills, information, attitudes and behavior patterns are acquired and modified. The contributions made by each curricular area, such as language, arts, science, arithmetic, social studies and health are stressed, with emphasis
on suitability of experiences for different stages of growth, instructional practices, and appropriate procedures of evaluation.
Second semester. Dr. Swickard. Two semester hours.

513 Elementary School Supervision
Emphasis is placed on practical problems of educational leadership and supervision in the elementary school. The roles of supervisors, principals, superintendents and teachers are studied.
Not offered in 1954-1955. Two semester hours.

514 Elementary School Administration
Deals with general and specific problems confronting the elementary school principal, such as: organization of the school program, parent and community relationships, personnel problems, discipline, evaluation, and the like. Open to students of maturity and experience who wish to fit themselves for administrative and supervisory positions.
Second semester. Dr. Buelke. Two semester hours.

610 Seminar in Elementary Education
Open to advanced students who are preparing theses or who wish to undertake problem studies in this field.
Each semester. Dr. Buelke and staff. 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 1954-1955. Dr. Frederick. Two semester hours.

Open to Qualified Juniors, Seniors, and Graduates

402 Curriculum Workshop
Opportunity is provided for teachers, supervisors and administrators in selected school systems to develop programs of curriculum improvement. A wide variety of resources is used for instructional purposes, including several specialists, library and laboratory facilities, field trips, audio-visual materials, and the like.
Each semester. Dr. Chiara, Dr. Swickard, and others. Two to four semester hours.

Open to Graduates

520 Improvement of Teaching in Secondary Schools
For teachers of experience, high-school principals, and superintendents who desire to consider the larger problems of classroom instruction. Open also to graduate students without teaching experience.
First semester. Dr. Bryan. Two semester hours.
521 The Secondary School Curriculum
This course is concerned with modern practices and recent emphases and trends in various subject fields and areas of the secondary school curriculum. Each graduate student will prepare a report on one or two subject fields or aspects of the curriculum for use in actual teaching situations. Prerequisite: 502 The School Curriculum, or equivalent.
Second semester. Dr. Frederick. Two semester hours.

522 Core Programs in Secondary Schools
An analysis, interpretation and comparison of newer practices regarding integration of knowledge from several fields around the needs of secondary youth. Designed especially for students now engaged in or preparing for unified programs in junior and senior high schools.
Second semester. Dr. Chiara. Two semester hours.

523 The Role of the Secondary School in American Society
Consideration of the past and present responsibilities of the high school as part of the American social scene. Preparation for vocation, citizenship, marriage and family life, and other problems of high school youth are discussed in relationship to major social trends and forces.
Not offered in 1954-1955. Dr. Chiara. Two semester hours.

524 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.
Second semester. Dr. Bryan. Two semester hours.

525 High School Supervision
Deals with principles and methods of supervision in secondary schools and with planning, organizing, and evaluating the supervisory program. Emphasis is placed on supervision as skill in educational leadership, human relations, group process, and personnel administration.
First semester. Dr. Frederick. Two semester hours.

620 Seminar in Secondary Education
Open to advanced students who are preparing theses or who wish to undertake problem studies in this field.
Each semester. Dr. Frederick and staff. 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.
Not offered in 1954-1955. 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.

First semester. Dr. Van Riper, Mr. Jackson. 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, frustration, and aggression; role of the emotions in education; adolescence and its problems; sex development; juvenile delinquency; the mental hygiene of courting, mating, and marital relations; the mental hygiene of religion.

Second semester. Dr. Ellis. Three semester hours.

331 **Clinical Problems in Reading**

This course provides practical experience in Reading Laboratories sponsored by the Psycho-Educational Clinic. Diagnosis and treatment of reading problems at either the elementary level or secondary level are emphasized. The course deals with physical, mental, and emotional factors affecting reading performance.

Open to advanced students with permission of instructor.

Each semester. Mr. Carter and staff. 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 bibliography of reference to methods and materials is collected.

Each semester. Mr. Cooper. Two semester hours.

430 **Educational Therapy in Reading**

A study is made of the psychological, sociological and physiological factors affecting children's reading ability, together with laboratory application of such knowledge in the prevention, diagnosis and treatment of reading problems. Open only to experienced teachers by permission of the instructor.

Second semester. Mr. Carter, Miss McGinnis. Two or three semester hours.

431 **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.

First semester. Dr. Ellis. Two semester hours.
432 Education and Control of the Mentally Handicapped

The course deals with the roles of the courts, institutions, schools and other agencies in control, education and custody of the mentally handicapped. Organization and administration of special classes for mentally handicapped of all levels. Prerequisite: Human Growth and Development 251, or equivalent.

Second semester. Dr. Ellis. Three semester hours.

433 Introduction to Lip Reading

A course designed to acquaint the student with the various methods of lip reading and the problems encountered in the teaching of this skill. The student is given opportunity to acquire elementary lip reading skill as well as practice in the techniques of teaching.

Second semester. Mr. Thea. Three semester hours.

434 Mental Deficiency

A course in the psychology and pathology of mental deficiency including causation, diagnosis, classification, prognosis and therapy at all levels. Prerequisite: Human Growth and Development 251.

Not offered in 1954-1955. Dr. Ellis. Three semester hours.

436 Mental Hygiene of Childhood and Adolescence

Deals with the problems of emotional adjustment and maladjustment in childhood and adolescence.

First semester. Dr. Ellis. Two semester hours.

437 Methods of Teaching Mentally Handicapped Children

Principles of learning and instructional practices applicable to mentally handicapped children. Special attention is given to problems of the mentally retarded child with elementary curricular materials.

Not offered in 1954-1955. Dr. Ellis. Two semester hours.

438 Audio-Visual Education

Acquaints teachers and administrators with the principles and practical uses of multi-sensory aids to education, including field trips, machines, and creative materials.

Each semester. Mr. Snow. Two semester hours.

439 Driver Training and Safety Education

Deals with several aspects of safety education in the home, school and community, with special emphasis on preparing secondary school teachers of driver training and safety education. Materials and methods, psychophysical testing, sound driving practices, pedestrian protection, "Behind-the-Wheel" training in dual-control cars, and accident prevention procedures are an integral part of the course.

Not offered in 1954-1955. Instructor to be announced. Two semester hours.
Open to Graduates

530 Improvement of Reading in Secondary Schools
This course is designed to aid teachers in developing the reading abilities and skills of their students at the secondary level. The emphasis is upon aims, materials and procedures. There will be frequent demonstrations of techniques to be employed in dealing with students having difficulties in reading. Opportunity is provided for laboratory practice.
First semester. Mr. Carter, Miss McGinnis. Two semester hours.

531 Clinical Study of Exceptional Children
This course is intended to illustrate methods of diagnosing and treating the problems of exceptional children.
Not offered in 1954-1955. Two semester hours.

338 Introduction to Audio-Visual Education
Survey of various types of Audio-Visual Aids; functions of Audio-Visual Aids in the learning process; practice in selecting and evaluating materials; equipment instruction in laboratory periods with proficiency in operation required; and techniques of good utilization of Audio-Visual materials.
Not offered in 1954-1955. Mr. Snow. Three semester hours.

532 Problems in Education of the Mentally Handicapped
Problems in education and training of mentally handicapped children, including educability; philosophy of education of the mentally handicapped; organization of programs; educational and custodial functions of institutions; vocational guidance and training.
Not offered in 1954-1955. Dr. Ellis. Two semester hours.

533 Hearing Rehabilitation
This course considers lip reading, hearing aids, auditory training and speech re-education as rehabilitative measures. Laboratory work consists of observation and supervised teaching of hard of hearing children and adults.
First semester. Mr. Thea. Two semester hours.

534 Advanced Audiometry
This course deals with the physics of sound, with the ear as a sound receiver, and with clinical methods of measuring hearing. The interpretation of test results for the purposes of re-education and the necessary follow-up measures in an educational hearing program are studied. Students will be given actual practice in group and individual audiometric testing.
Not offered in 1954-1955. Mr. Thea. Two semester hours.

630 Seminar in Special Education
Open to advanced students who are preparing theses or who wish to undertake problem studies in this field.
Not offered in 1954-1955. Dr. Ellis and staff. Two semester hours.
340 **Art Observation**
Observation of art activities in the training school and discussion and illustration of these problems.
First semester. Miss Smutz. One semester hour.

341 **Art Supervision**
A study of the school curriculum and its need in art activities. A course of study will be outlined and administration problems discussed. Prerequisite: Art Structure 106, Elementary Design 105, Art Composition 208, History of Art 213A, Commercial Art 214.
Second semester. Miss Smutz. Two semester hours.

342 **Teaching of Latin**
The problems of the first two years of high-school Latin are considered. Observations of teaching, reports, and discussions will form a part of the work. This course is prerequisite to directed teaching in Latin.
Not offered in 1954-1955. Miss Kraft. Two semester hours.

346 **Teaching of Business Subjects**
This course is designed for the prospective teacher of high school subjects. Consideration is given to business education programs, equipment, approved teaching procedures and teaching aids.
Second semester. Mr. Lindquist. Two semester hours.

347 **Plan and Organization of a School Shop**
This is a course to help teachers plan and organize the school shop. Topics concerned include physical needs of the subject, selection of activities, shop layout, purchasing equipment, establishing a supply routine, planning personnel organization, and shop management.
Each semester. Dr. Feirer. Two semester hours.

348 **Teaching of Industrial Arts**
This course deals with the problems in teaching industrial-arts subjects, the techniques employed in the analysis of instructional units, construction of tests and rating scales, and problems dealing with administration and work. The principal methods of instruction used in industrial-arts subjects will be emphasized.
Each semester. Dr. Feirer. Three semester hours.

Open to Qualified Juniors, Seniors, and Graduates

443 **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 buildings, grounds, swimming pools, athletic fields, stadia.
Each semester. Mr. Gary. Three semester hours.
444 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.
First semester. Miss Bottje. Two semester hours.

445 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.
Second semester. Miss Crane. Two semester hours.

449 Education in An Air Age
This course is intended for elementary and secondary school teachers desiring an understanding of various phases of aviation and their relation to social, political, economic and educational problems in the modern world. Opportunities will be provided to analyze various educational activities that are appropriate to different grade levels, and provision will be made for visiting airports and acquiring some flight experience.
Not offered in 1954-1955. Dr. Giachino. Two semester hours.

THEORIES AND PRINCIPLES OF EDUCATION
Open to Qualified Juniors, Seniors, and Graduates

404 Workshop in Human Relations
Opportunity is provided for teachers, administrators, and other school personnel to work together in the study and solution of problems in human relations, particularly in the fields of intercultural relations, group processes, communication, and home-school-community relations. Resource persons in Psychology, Sociology, Speech, Business, and Education will participate in the workshop.
Not offered in 1954-1955. Staff members and resource persons. Two to four semester hours.

451 Philosophy of Education
For graduate students and teachers of experience. Analyzes and interprets the changes in education taking place in this and other countries.
Not offered in 1954-1955. Dr. Sebaly. Two semester hours.

ADMINISTRATION
Open to Graduates

560 Principles of Educational Administration
Deals with the philosophy and principles underlying school administration, including areas of governmental control, school plant, finance, per-
sonnel, and the internal organization of school systems. Presupposes a rudimentary knowledge of administration and some practical field experience.

First semester. Dr. Norrix. Two semester hours.

561 Social Interpretation

Deals with community education with respect to the educational program. Considers the principles of education interpretative service and their application in every phase of the system, considering specifically the constructive method of continuous community education.

Second semester. Dr. Norrix. Two semester hours.

566 Workshop in Educational Administration

Open to experienced administrators and others interested in working through administrative problems in school systems. Areas to be studied include: school buildings, finance, public relations, internal administrative problems, personnel policies, and educational leadership.

Not offered in 1954-1955. Staff members. Four semester hours.

660 Seminar in Educational Administration

Open to advanced students who are preparing theses or who wish to undertake problem studies in this field.

Not offered in 1954-1955. Dr. Norrix and staff. Two semester hours.

GUIDANCE

Open to Qualified Juniors, Seniors, and Graduates

480 Introduction to Guidance Services

A basic introductory course for all secondary and elementary teachers, including a survey of the history, principles, problems, methods, organization and methods of guidance. Special attention is centered on the individual, his needs and adjustments, and on counselling procedures.

First semester. Dr. Manske. Two semester hours on campus. Three semester hours in extension.

481 Techniques of Guidance

This course is designed to give competencies in the use of school records, instruments of measurement, case studies, interview, group guidance, placement, follow-up and community resources.

Second semester. Dr. Manske. Two semester hours on campus. Three semester hours in extension.

482 Occupational Information for Counselors and Teachers

Stresses knowledge of sources, use, evaluation and techniques of imparting occupational information. Recent trends in the major occupations are also discussed.

Second semester. Dr. Kohrman. Two semester hours.
485 Guidance Workshop

The workshop is designed for teachers, counselors, supervisors, and administrators in selected school systems to study particular guidance problems and procedures in relation to their local guidance program. A wide variety of workshop methods and resources is used. Two semester hours each session. Maximum credit. Four semester hours.


Open to Graduates

581 Interpretation and Use of Tests in Guidance

Designed to familiarize students with various psychological tests and scales that may be used in school guidance programs. Tests are taken and scored by students, and the results are interpreted and evaluated. Class discussion is based upon information gained through use of tests, readings, demonstrations, and class reports.

First semester. Dr. Manske. Two semester hours.

583 Organization and Administration of Guidance Programs

Administrative and supervisory problems of guidance directors. Need for local and state administration, function of administration and supervision, improvement of group guidance programs in homeroom and classroom, extra-curricula activities, human relationships, status and scope of the program in school and community, administration of supplies and equipment.

Second semester. Dr. Manske. Two semester hours.

680 Seminar in Guidance

A critical review of the research literature relating to guidance and allied fields. Emphasis will be placed upon the practical application of these findings in the respective schools of the participants.

Not offered in 1954-1955. Dr. Manske and staff. Two semester hours.

LIBRARIANSHIP

ALICE LOUISE LEFEVRE

The Department of Librarianship is fully accredited by the American Library Association for the preparation of librarians for school and public libraries. The curriculum is designed for: (1) candidates for the Bachelor's degree with teaching certificate who wish to qualify as teacher-librarians; (2) candidates for the Bachelor's degree who wish to meet requirements for positions in small public and in county and regional libraries; (3) candidates for the Master's degree who wish to prepare for full-time positions as librarians in elementary and in secondary schools; (4) students who desire a wider acquaintance with books and other library materials and methods. The school libraries in the Campus Elementary and High School and in the affiliated Paw Paw school serve as centers for field work. A
Departmental laboratory containing books and other materials in library science and related fields is provided in the quarters located on the second floor of the college library.

The sequence for teacher-librarians consists of courses 302A and B (preceded by English 203) 360, 361, 470 or two semester hours elected from 405 or 406 plus the field work which comprises part of Education 370 which is required of all candidates for the teaching certificate. The major for those in the public library sequence consists of courses 202 (preceded by English 203) 304, 360, 363, 402, 411, 470 plus six hours of electives in librarianship. Candidates in this sequence will also need to elect 380 which provides a period of supervised practice in a county, regional or small public library. Consult the director of the department of Librarianship for further information on the selection of courses.

The courses in the department of librarianship count in the following subject groups: Group I, Language and Literature, 202, 302, 304, 403, 406, 411; Group III, Social Science, 509, 562; Group IV, Education, 561, 405, 361, 363, Group VI, Practical Arts, 360, 470, 570 and 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.

Each semester. Miss Hunt. Three semester hours.

302A Books and Related Materials for School Libraries

Selection and evaluation of books, periodicals, maps, pictures, etc., for the school library. Criteria for evaluation developed through intensive and extensive study of a wide range of books in the subject fields. Attention given the use of books and other materials as sources of information in relation to the curriculum. Provides opportunity for practice in use of the formal reference book and the total resources of the library.

First semester. Miss Hunt. Three semester hours.

302B Books and Related Materials for School Libraries

A continuation of 302A which is a prerequisite.

Second semester. Miss Hunt. Three semester hours.

304 Reading Interests of Adults*

Discussion of the methods used in libraries in promoting reading such as reader's advisory service, book talks, forums, radio, films, and booklists. Students have opportunity to examine and read a number of books in various fields of interest and to evaluate them on the basis of their value in meeting specific problems.

Second semester. Miss LeFevre. Two semester hours.

*Starred courses open only to majors and minors in the Department of Librarianship.
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. (Not to be offered after 1954.)

First semester. Miss Hunt. Three semester hours.

360 Organization of Library Materials*

Methods of organizing various types of materials such as books, periodicals, pamphlets, and audio-visual aids for effective use in relation to the demands of schools and of the community. Emphasis is placed upon practical methods of keeping essential business records, book buying, processing and distributing books with a minimum of routine in schools and in small public libraries.

First semester. Miss Hunt. Two semester hours.

361 Administration of School Libraries*

Consideration is given the functions of the library in the school, its objectives, contributions to the educational program and administrative procedures. Stresses the responsibility of the library in carrying out the aims of the school program. Covers problems of support, housing and equipment, personnel, public relations, and standards of service.

Second semester. Miss Hunt. Two semester hours.

362 The Library in the Modern Community*

The course aims to give the student professional background and opportunity to broaden his own reading program. Surveys the development of libraries in the United States from the Colonial period to the present day with consideration of various types of libraries in relation to their contribution to society. Attention is given the adult education program, county and regional library service, and the services rendered through national, state, and local library agencies.

Second semester. Miss LeFevre. Two semester hours.

363 Rural and Urban Library Administration*

Organization, operation, laws, and finances of county and regional libraries with consideration for the Middle Western area. Emphasizes the library's place in the cultural and educational activities of the community and its relationship to the State Library and to local social agencies.

Second semester. Miss LeFevre. Three semester hours.

380 Field Assignment and Laboratory*

An assignment in one of the selected cooperating public libraries will be made usually for a period of three weeks preceding the opening of college, or between semesters. The student is given opportunity to observe methods of administration and to participate in all types of activities.

*Starred courses open only to majors and minors in the Department of Librarianship.
A laboratory period for discussion is held throughout the following semester. Each semester. Hours to be arranged. Miss LeFevre. Two or three semester hours.

402 Reading Interests of Young Adults

Study of the fields of literature suited to the interests of young people. Students are given opportunity through wide reading to develop principles and standards for the selection of the book collection. Includes an introduction to methods of stimulating broader reading interests and of conducting group book discussions with young people. Open to students in the Education Department and to others who expect to work with youth. Prerequisite: 302A, B; or 302 or equivalent.

Each semester. Miss LeFevre. Two semester hours.

403 Selection of Reading Materials*


First semester. Miss Hunt. Two semester hours.

405 Curriculum Enrichment Materials

Study of selection of teaching materials, books, pamphlets, periodicals, maps and audio-visual materials in relation to the elementary and secondary school curriculum. Emphasis laid on evaluation of content and on methods of distribution in relation to the school organization. Considers sources of selection for various types of materials. Discussion and practice in methods of instruction in use of such materials. Open to students in Education Department and teachers in service.

First semester, Miss LeFevre. Second semester, Miss Hunt. Two semester hours.

406 Storytelling

Underlying principles of the art of storytelling: techniques; content and sources of materials. Practice in telling stories before groups of children is provided. Planning the story-hour program for various ages as a means of developing appreciation of literature and stimulating an interest in reading.

First semester. Miss LeFevre. Two semester hours.

411 Reference Service*

Study and evaluation of basic reference and bibliographic sources in the various subject fields. Critical examination of the publications of governmental agencies, societies and institutions especially as reference sources in relation to the curriculum. Attention given to organization and methods of reference services. (Not open to those students who have had 311 Reference nor 302A, B.)

Second semester. Miss Hunt. Two semester hours.

*Starred courses open only to majors and minors in the Department of Librarianship.
470 Introduction to Classification and Cataloging*

Introduction to the principles of cataloging and classifying the book collection. Includes study and practice in making the dictionary catalog and in classifying according to the Dewey Decimal Classification scheme. Students are taught to use the unit card system and are given practice in assigning subject headings, in adapting Library of Congress and Wilson printed catalog cards, and in cataloging non-book materials.

First semester. Miss Le Fevre. Four semester hours.

Open to Graduates Only

509 History of Books and Printing

Study of the development of the book from the earliest period to modern times. Considers the appraisal of the physical book as well as its relationship to social and cultural developments. Includes history of the alphabet, early writing materials, manuscripts, invention and spread of printing and evolution of book production.

Second semester. Miss Hunt. Two semester hours.

511 Subject Bibliography*

A study and evaluation of the bibliographical sources in the social sciences, the pure and applied sciences and the humanities. A bibliography will be compiled on a topic chosen by the student. Prerequisite: an introductory course in Reference, 302A, B; 311 or 411.

Second semester. Miss Hunt. Two semester hours.

561 Seminar in Administrative Problems of School Libraries*

Designed for the school librarian who has had basic course in administration of school libraries. Analysis of the problem involved in establishing a system of school libraries or information centers in county, city or state units and of problems of supervision.

Second semester. Miss Le Fevre. Two semester hours.

562 Foundations of Librarianship

Historical development of the American Library as a social institution; study of present status and function of the school library in relation to other libraries and to the community; survey of library literature and investigation of current trends in education especially as they affect school library service.

Second semester. Miss Le Fevre. Two semester hours.

570 Advanced Classification and Cataloging*

A continuation of 470 Introduction to Classification and Cataloging. Attention is given to comparison of classification systems; to cataloging of special types of materials and to methods of organizing centralized cataloging units.

Second semester. Miss Le Fevre. Two semester hours.

*Starred courses open to majors and minors in the Department of Librarianship.
DIVISION OF VOCATIONAL AND PRACTICAL ARTS EDUCATION

George Kohrman, Director

The Division includes the Departments of Business Studies, Home Economics, Industrial Arts, and Vocational-Industrial and Technical Education. The heads of the departments and the departmental counselors will advise students relative to requirements for majors or minors in these departments and concerning any special requirements set up by the departments. In certain cases, where adjustments need to be made, or where a group major or minor is possible and advisable, the director of the Division should be consulted.

Western Michigan College has been designated by the State Department of Public Instruction as an approved institution for the training of vocational teachers in the fields of distributive education, home economics, and vocational-industrial education. Graduate as well as undergraduate courses are available in these fields.

The following divisional courses are approved for vocational credit and are available for graduate students and upperclassmen:

470 Principles of Practical Arts and Vocational Education
The place and function of the practical arts and vocational education in the modern school; fundamental principles upon which this work is based. For teachers of agriculture, business, home economics, industrial subjects, and administrators.
First semester. Dr. Kohrman. Two semester hours.

482 Occupational Information for Counselors and Teachers
Stresses knowledge of sources, use, evaluation and techniques of imparting occupational information. Recent trends in the major occupations are also discussed.
Second semester. Dr. Kohrman. Two semester hours.

512 Seminar in Vocational Education
This course is planned especially for teachers, coordinators, and administrators working toward a master's degree in vocational education.
Not offered in 1954-1955. Dr. Kohrman and staff. Two semester hours.

575 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. Dr. Giachino. Two semester hours.
DESCRIPTION OF COURSES

578 Administration and supervision of Practical Arts and Vocational Education

The functions of administration and supervision; problems involved in the organization and operation of practical arts and vocational education programs. For administrators, supervisors of vocational education, and those wishing to prepare for such positions.

Not offered in 1954-1955. Dr. Kohrman and staff. Two semester hours.

582 Special Problems in Vocational Education

This course provides for the study and organization of a specific teaching problem in vocational education. The student will select a suitable problem, develop material for it, and organize it for instructional purposes.

Each semester. Dr. Giachino, Dr. Kohrman. Two semester hours.

BUSINESS STUDIES

ARNOLD E. SCHNEIDER
AGNES E. ANDERSON
WM. L. BURDICK
GEORGE K. COOPER
WENDALL FIDLER
JOHN B. HEALEY
EDNA KIRBY
GEORGE KIRBY
LESTER LINDQUIST
RALPH W. MATTHEWS

THOMAS W. NULL
MARGUERITE PATTON
RUSSELL POWELL
GLEN C. RICE
ROSE ANN SCHNEIDER
EMIL SOKOLOWSKI
ROBERT B. TRADER
ADRIAN TRIMPE
ROBERT B. WETNIGHT

The Department of Business Studies offers three main programs. They are:

1. The Business Teacher Training Curriculum

Students who intend to take a major or minor in Business Teacher Education should confer with their adviser as early as possible in their sophomore year. All students desiring to do directed teaching in Business Education are required to take Teaching of Business Subjects 346. Business Mathematics 120 is required as a part of Group II requirements.

The curriculum for high-school vocational coordinators is to be found under the curriculums for teachers.

Those planning to teach business subjects in high schools must take twenty-four hours in one of the following fields:

1. Secretarial and related business subjects.
2. Accounting and related business subjects.

Students who desire to minor in Business Teacher Education may select fifteen hours from any one of the four fields listed above.
2. Business Administration

For majors and minors and curriculum requirements in Business Administration, look up Business Administration curriculum in this catalog.

3. Two-Year Technical Business Curricula

Students may enter on any one of the following Terminal Business programs:

1. Cooperative program in secretarial training.
2. Cooperative program in retailing.
3. Technical business program with specialization in Clerical Accounting, General Business, Secretarial Training, Salesmanship, General Clerical, and Small Business Management.

Students who enroll in the Technical Business programs listed above should look up the Technical Business curricula as shown in the catalog under the Business Administration programs.

ACCOUNTING

210A Accounting

This course deals with the elementary principles of accounting and considers the more common technical devices for recording business transactions according to those principles. Prerequisite: Sophomore standing or consent of instructor. Accounting majors should start 210A as freshman if possible.

Each semester. Mr. Burdick, Mr. Kirby, Dr. Schneider, Mr. Sokolowski, Mr. Wetnight. Three semester hours.

210B Accounting

A continuation of course 210A, applying the principles developed in the preceding course to partnerships and corporations. Manufacturing accounts and statements, reserves and funds, the voucher system, and the analysis and interpretation of simple financial statements are studied. Prerequisite: Accounting 210A.

Each semester. Mr. Burdick, Mr. Kirby, Dr. Schneider, Mr. Sokolowski, Mr. Wetnight. Three semester hours.

211A Secretarial Accounting

In this course the basic principles of accounting are presented from the viewpoint of the secretary. The accounts of private individuals, professional men, institutions, and small business firms of various types are studied.

First semester. Dr. Schneider, Mr. Cooper. Three semester hours.

211B Secretarial Accounting

A continuation of course 211A in which practical applications will be applied in a large number of work situations. Prerequisite: Secretarial Accounting 211A.

Second semester. Dr. Schneider, Mr. Cooper. Three semester hours.
215 Pay Roll and Social Security Accounting
A study of the accounting records and procedures used in meeting the requirements of the social security laws, procedure of pay roll accounting for federal withholding tax laws, and state unemployment insurance.
Second semester. Mr. Wetnight, Mr. Kirby. Two semester hours.

310A Intermediate Accounting
A study of evaluation of current assets; investments; depreciation, appraisal, and depletion of fixed assets; current, contingent, and fixed liabilities; capital stock; surplus and reserves. Prerequisite: Accounting 210A, B.
First semester. Mr. Burdick, Mr. Wetnight. Three semester hours.

310B Intermediate Accounting
A continuation of Accounting 310A, including the following topics: partnerships, consignments, installment sales, mergers, holding companies, receiverships, estates, and trusts. Prerequisite: Advanced Accounting 310A.
Second semester. Mr. Burdick, Mr. Wetnight. Three semester hours.

313 Auditing
The theory and practice of making audits of business enterprises. Prerequisite: Senior standing, accounting major.
First semester. Mr. Wetnight. Three semester hours.

314 Accounting Theory and Problems
Theoretical consideration of accounting problems. Nature and analysis of the type of problems that are to be found in C.P.A. examinations. Prerequisite: Senior standing, accounting major.
Second semester. Mr. Wetnight. Three semester hours.

316A Industrial Cost Accounting
A course expressly designed for the training of industrial supervisors in Accounting Principles, Cost Accounting, and the managerial use of accounting data. Not for students who have completed 210A.
Second semester. Mr. Kirby, Mr. Wetnight. Two semester hours.

316B Industrial Cost Accounting
A continuation of 316A. Prerequisite: 316A.
Second semester. Mr. Kirby, Mr. Wetnight. Two semester hours.

Open to Qualified Upperclassmen and Graduates

410A Advanced Accounting
This course is designed specifically for the study of the balance sheet accounts.
Mr. Wetnight. Three semester hours.

410B Advanced Accounting
This is a study of accounts for special sales, consolidations, and miscellaneous accounting matters.
Mr. Wetnight. Three semester hours.
DIVISION OF VOCATIONAL EDUCATION

411 Cost Accounting
The relation of cost accounting to management for control; general principles involved in constructing a cost system; distribution of cost-materials, labor, and burden; cost records; operating reports; joint and by-product costs and budgetary control. Prerequisite: Accounting 310A or consent of instructor.

Second semester. Mr. Wetnight, Mr. Kirby. Three semester hours.

412 Income Tax Accounting
A study of the federal income tax laws, as they apply to individuals, partnerships in corporations, including excess profits tax. Prerequisite: Accounting 310A, or consent of instructor.

First semester. Mr. Wetnight, Mr. Kirby. Three semester hours.

GENERAL BUSINESS

135A Industrial and Business World
This is an introductory course which, through a very broad approach, attempts to acquaint the student with existing principles and problems of business and industry.

Such topics as types of American businesses, current business problems, current business trends, long-term financing, short-term financing, insurance, physical location and lay-out, production problems are included.

First semester. Mr. Sokolowski, Mrs. Patton, Mr. Cooper. Two semester hours.

135B Industrial and Business World
This is a continuation of course 135A, covering such areas as personnel selection and training, wages, labor problems, marketing functions and problems, management problems and procedures, government and business. Prerequisite: Industrial and Business World 135A.

Second semester. Mr. Sokolowski, Mrs. Patton, Mr. Cooper. Two semester hours.

230 Survey of Office Machines
A survey of operating principles and fundamentals and applied usages of the business machines commonly found in industry and business.

Each semester. Mr. Null, Mrs. Patton. Two semester hours.

232 Business Correspondence
Provision is made in this course for an analysis of and practice in writing various types of business letters and reports. A study is made of the principles of effective expression in all letters of business correspondence.

Each semester. Mr. Lindquist, Mrs. Patton, Mr. Trader, Mr. Cooper. Three semester hours.
235 Business Statistics
An introduction to basic applied business statistics. A study of various statistical and financial ratios as guides to efficient business management and the interpretation of financial data. Prerequisite: Accounting 210A.
Each semester. Mr. Burdick, Mrs. Patton, Mr. Sokolowski. Three semester hours.

237 Small Business Management
A study of the fundamental principles involved in the operation of a small business enterprise. The structure, functions, and basic operating principles will be discussed and developed.
Each semester. Mr. Sokolowski, Mr. Trader. Three semester hours.

239 Office Organization
The flow of office work and the basic purposes served. Areas of office services from the managerial viewpoint. A brief overview of the problems of organizing, constructing, installing, and maintaining office systems.
Second semester. Dr. Schneider, Mr. Null, Mrs. Patton. Three semester hours.

320A Business Law
A study of the basic principles of law applicable to business. Law of contracts, negotiable instruments, debtor or creditor relationships, bailment, are studied from the viewpoint of the business man.
Each semester. Dr. Healey. Three semester hours.

320B Business Law
Continuation of Business Law 320A with emphasis on personal property, real property, statute of fraud, insurance, partnerships, and corporations.
Each semester. Dr. Healey. Three semester hours.

322 Insurance Principles
A basic course covering all phases of insurance. The consumer approach is used, designed to acquaint the non-specialist with the economic and social services of the institution of insurance. It also provides the necessary background for the person planning to take advanced work in the field of insurance.
Each semester. Three semester hours.

324 Property Insurance
The course deals with Fire Insurance and Allied Lines, Automobile, Ocean Marine, and Inland Marine Insurance. The important phases of the fields which are covered are contract provisions, loss, adjustment, rate-making, regulation, carriers, and legal concepts.
Three semester hours.
326 Casualty Insurance and Suretyship
The course deals with the legal concepts, rate-making, regulations, loss adjustment, and contract provisions in the Workmen's Compensation, Liability, Theft, and Accident and Health fields. The course also touches briefly the fields of Surety and Fidelity Bonding.
Three semester hours.

339 Management Problems
An opportunity to approach business from the case-study viewpoint. Problems to be studied will be correlated with the students' major interest in their field of business. Wherever possible, actual business cases in the surrounding business area will be used.
Each semester. Dr. Healey, Dr. Schneider, Mr. Wetnight. Three semester hours.

350 Real Estate Fundamentals
A survey course of the principles of real estate as they affect personal and business operations. Real estate as an occupational field, value, land use, and related topics.
Second semester. Dr. Schneider. Three semester hours.

360 Current Business Trends
A study of sources and information which aid in the description, analysis, and prediction of current business trends.
First semester. Dr. Schneider. Three semester hours.

Open to Qualified Upperclassmen and Graduates

423 Life Insurance
The course covers the economic, social, and more important technical aspects of life insurance. Important phases of Group and Business Life Insurance and Social Insurance are also considered.
Second semester. Three semester hours.

433 Business Report Writing
A study of the techniques in and applications of management reports and management-report writing. Actual management reports in the various fields will be studied. The development and practice of technical report writing will be stressed.
Each semester. Dr. Schneider. Two semester hours.

436 Personnel Administration
The personnel office in modern business and industry. The duties and work of the personnel staff, personnel office, records and reports, interviewing, counseling, adjustment of complaints, job analysis, job classification, in-service training, and upgrading of employees. Prerequisite or concurrent: Psychology of Personality 207.
Each semester. Dr. Healey. Three semester hours.
439 Office Management
Areas of office services from the managerial viewpoint. A brief overview of the problems of organizing, constructing, installing, and maintaining office systems.

RETAILING

100 Coordinated Business Experience
Limited to second-semester students enrolled in Retailing Curriculum. The requirement for credit will be (1) a minimum of 200 clock hours of approved store work, (2) a report from the employer, and (3) a term report by the student.
Each semester. Mr. Rice. Two semester hours.

111 Retail Merchandise Mathematics
An introduction to the mathematics of merchandising. Mark-up, mark-down, discounts, terms, turn-over, ratios, methods of inventory, and specific problems are studied.
Second semester. Mr. Powell, Mr. Cooper. Three semester hours.

140 Fundamentals of Retailing
In this introductory retailing course a survey of our distributive system is presented. Types of retail establishments and opportunities in the occupational field of retailing are discussed.
Second semester. Mr. Rice. Three semester hours.

141 Selling Fashion Merchandise
A specialized course in the application of salesmanship to fashion merchandise. A study of color and design, fashion history, fashion functions, influences of changes, and the world's key designers and fashion centers.
Second semester. Mr. Trader. Three semester hours.

142 Color and Design in Retailing
Analysis and evaluation of color and design in merchandise. Research, psychology, theory, harmony, and selection of color are emphasized.
Second semester. Miss Many. Three semester hours.

150 Retail Salesmanship
This course analyzes successful retail selling. Actual sales demonstrations made by experts in the field are an integral part of the course. The various steps in a sale are studied along with their accompanying customer reactions.
First semester. Mr. Rice. Three semester hours.
151A Merchandise Information—Non-Textiles

An organized study of non-textile merchandise especially aimed at correlating retail experience with classroom work. Merchandise manuals are studied and developed.

First semester. Mr. Trader, Mr. Powell. Two semester hours.

151B Merchandise Information—Textiles

A study of fabrics and textile merchandise. The course includes identification and analysis, sources of fibers, processes of creating and finishing cloth, and the fabric suitability and salability as related to specific merchandise.

Second semester. Mr. Trader. Two semester hours.

200A Coordinated Business Experience

Limited to second-year students who are currently enrolled in Store Organization 251. Credit will be granted upon completion of (1) a minimum of 200 clock hours of approved store work, (2) a report from the employer, and (3) a term paper by the student.

First semester. Mr. Rice. One semester hour.

200B Coordinated Business Experience

Continuation of 200A open to students currently enrolled in Retail Personnel Management 252.

Second semester. Mr. Rice. One semester hour.

240 Retail Advertising

Newspaper, radio, direct-mail advertising; display plans and techniques of sales promotion; the publicity calendar and budget.

First semester. Mr. Trader. Two 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.

Second semester. Mr. Matthews. Three semester hours.

242 Selling Home Furnishings

A study of period styles, materials, construction, and arrangement of furniture as a selling factor. The proper use of accessories, such as lamps, wall decorations, plastics, etc., is emphasized.

Second semester. Mr. Scranton. 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. Mr. Trader. Two semester hours.
251 Store Organization

A study of the basic principles and accepted practices of successful store organization, operation, and management. An opportunity is given to each student to make a study of some particular phase of retailing.

First semester. Mr. Rice. Two semester hours.

252 Retail Personnel Management

Problems of selection and placement of employees, employee induction and training, personnel ratings, records needed in personnel offices, labor relations, sources of labor supply, wage plans, and personnel budgeting.

Second semester. Mr. Rice. Two semester hours.

SALESMANSHIP AND MANAGEMENT

340 Salesmanship

This is an introduction to the principles of selling as a career and a profession. A detailed study of the principles of selling along with an analysis of customer reactions in the various fields of selling are studied.

First semester. Mr. Trader. Three semester hours.

341 Sales Management

The development of sales staff. The promotion of local, state, and national sales programs. The development of various types of sales promotions and campaigns.

Second semester. Mr. Trader. Three semester hours.

342 Advertising

An analysis of the principles and practices used in various types of advertising such as newspaper, radio, and direct mail advertising. Attention is devoted to preparing copy and analyzing current advertising practices.

Second semester. Mr. Trader. Three semester hours.

343 Industrial Organization and Management

Basic organization of industrial line and staff functions and their relation to each other in the production process.

First semester. Mr. Wetnight. Three semester hours.

344 Industrial Management Problems

Case studies of advanced industrial management problems. Industrial Management majors will take this in lieu of Management Problems 339 as offered.

Second semester. Mr. Wetnight. Three semester hours.

345 Credit Management

An introduction to the principles of credit, credit control, and credit management from the viewpoint of manufacturing, wholesale and retail firms. Effective use of credit as a financial and sales device and certain definite aspects of credit such as policies and procedures, collection and legal aspects are studied.

First semester. Mr. Trader, Mr. Wetnight. Three semester hours.
347 Marketing and Market Analysis
The fundamental principles and techniques employed in the conduct and analysis of qualitative marketing surveys, with specific research projects to show how the findings are used in the formulation of policies.
Second semester. Mr. Trader. Three semester hours.

348 Purchasing Principles and Practices
Organization and operation of the purchasing department, basic materials, substitutes, imitations, sources of supply, catalogs, terms, discounts, and relations with salesmen.
Second semester. Mr. Sokolowski. Three semester hours.

Open to Qualified Upperclassmen and Graduates

440 Advanced Salesmanship
A detailed course with background of basic principles and analysis of selling techniques applied principally to specialty fields.
Mr. Trader. Three semester hours.

442 Advanced Advertising
A course with special concentration on media, copy and layout. Study and projects on radio, television, newspapers and magazines.
Mr. Trader. Three semester hours.

SECRETARIAL COURSES

100A Shorthand
A study of the theory and principles of Gregg shorthand. Typewriting 101A or its equivalent is a requirement for course credit.
Each semester. Miss Anderson, Mrs. Kirby. Three semester hours.

100B Shorthand
A continuation of 100A. Dictation is given at various rates of speed. Typewriting 101B or its equivalent is a requirement for course credit. Prerequisite: Shorthand 100A and Typewriting 101A.
Each semester. Miss Anderson, Mrs. Kirby. Three semester hours.

101A Elementary Typewriting
The mastery of the keyboard and the proper techniques of typewriting are developed in this course. Open to students with less than one year of high-school typewriting credit.
Each semester. Miss Anderson, Mr. Lindquist, Mrs. Kirby. Two semester hours.

101B Intermediate Typewriting
Special stress is placed upon perfecting the techniques necessary for accuracy and speed in typewriting. A writing rate of 40 words net per minute is required for passing. Prerequisite: Elementary Typewriting 101A or its high-school equivalent.
Each semester. Miss Anderson, Mrs. Kirby. Two semester hours.
103  Filing Principles and Techniques
   A study of the indexing and filing rules and all types of filing methods
   and card systems.
   Each semester. Mrs. Schneider. Two semester hours.

130A  Secretarial Science
   Designed for the development of occupational efficiency of a secretary.
   Special emphasis is given to the building of accuracy and speed for office
   transcription. Prerequisite: Shorthand 100B and Typewriting 101B or its
   high-school equivalent.
   Each semester. Miss Anderson, Mrs. Kirby. Five semester hours.

130B  Secretarial Science
   A continuation of the development of speed and accuracy in shorthand,
   typewriting, and transcription. Prerequisite: Secretarial Science 130A.
   Each semester. Miss Anderson, Mrs. Kirby. Five semester hours.

200A  Coordinated Business Experience
   This is a work-experience course limited to those students who are cur-
   rently enrolled in the cooperative office-training program and are currently
   enrolled in Secretarial Science 130A.
   First semester. Mr. Null. Two semester hours.

200B  Coordinated Business Experience
   A continuation of course 200A open to students currently enrolled in
   Secretarial Science 130B.
   Second semester. Mr. Null. Two semester hours.

230A  Office Machines
   This course provides the student with the operating knowledge of office
   machines that are commonly used in the modern business office.
   Each semester. Mr. Null. Two semester hours.

230B  Office Machines
   A continuation of Office Machines 230A. This course is intended primarily
   for the student preparing for the various office occupations.
   Each semester. Mr. Null. Two semester hours.

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. Mr. Lindquist. Two semester hours.
501 Principles of Business Education
Dr. Schneider, Mr. Cooper. Two semester hours.

502 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.
First semester. Dr. Schneider, Mr. Cooper. Two semester hours.

503 Improvement of Instruction in Shorthand and Secretarial Business Subjects
A study of the latest research findings, materials, teaching procedures, tests, and measurements, and possible future development in shorthand.
Mrs. Kirby, Miss Anderson, Mr. Cooper, Mr. Lindquist. Two semester hours.

504 Improvement of Instruction in Typewriting
A study of the latest research findings, materials, teaching procedures, tests and measurements, and possible future developments in typewriting.
Dr. Schneider, Miss Anderson, Mr. Lindquist, Mrs. Kirby, Mr. Cooper. Two semester hours.

505 Improvement of Instruction in Bookkeeping and General 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.
Second semester. Dr. Schneider, Mr. Lindquist, Mr. Cooper. Two semester hours.

506 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.
Mr. Null. Two semester hours.

509 Improvement of Instruction in Retailing Subjects
A study of the latest research findings, materials, teaching procedures, testing, and possible future developments in the retailing subject matter field. Field trips and lectures by specialists in the field are included in this course.
Not offered in 1954-1955. Mr. Rice. Two semester hours.
511 Seminar in Business Education

An individually guided program for teachers in service. Students select a problem, present plans, and report on their progress. Prerequisite: Student should have at least one half of his graduate work completed. Dr. Schneider. Two semester hours.

VOCATIONAL DISTRIBUTIVE EDUCATION

WENDALL FIDLER

Teachers or coordinators of vocational distributive education subjects should contact Mr. Adrian Trimpe, Distributive Education Teacher Trainer at Western Michigan College, for enrollment in courses which may be conducted in local communities or on the campus of this institution.

Open to Qualified Upperclassmen and Graduates

400A Store Laboratory Experience

This course provides further opportunity for those in distributive education to acquire recent coordinated work experience on a full-time basis. It requires the cooperation of an employer who will agree to give the student paid employment. Provision will be made for securing experience in different departments. Conferences will be held and the student will be required to make written reports and submit a term report based on his store experience. This course may be taken on or off campus on an individual basis.

First semester. Mr. Trimpe and Mr. Fidler. Two semester hours.

400B Store Laboratory Experience

A continuation of 400A.

Second semester. Mr. Trimpe and Mr. Fidler. Two semester hours.

410 Organization and Operation of Distributive Education

Deals with the organization and operation of distributive education in relation to the total educational program. It is concerned with preparatory, cooperative and adult programs. Consideration is given to advisory committees and local, state, and federal relationships.

First semester. Mr. Fidler. Two semester hours.

420 Teaching Techniques in Distributive Education

This course deals with the methods and techniques of teaching distributive education subjects in high school and post high school programs. Special emphasis will be given to the correlation of classroom activities and on-the-job experiences.

First semester. Mr. Trimpe. Two semester hours.
425 Instructional Materials in Distributive Education

A study of the sources and use of such instructional materials as visual aids, field trips, trade publications, pamphlets, books, speakers, display materials, dummy merchandise, demonstrations and exhibits.

Second semester. Mr. Fidler. Two semester hours.

430 Coordination Techniques in Distributive Education

This is a study of the duties and responsibilities of the coordinator. The organization and establishment of training programs, supervision of trainees on the job, development of individual training programs, establishing working relationships between the school, business, and home; and participation in extra-curricula activities in the community. Especially adapted to prospective coordinators.

Second semester. Mr. Fidler. Two semester hours.

435 Job Analysis and Training Programs

This course deals with the principles and techniques of job analysis in the business field. Extensive job studies will be made and training schedules prepared for representative jobs in business. A very helpful course for students preparing to coordinate cooperative programs.

First semester. Mr. Trimpe. Two semester hours.

Open to Graduates

500A Problems in Distributive Education

Designed to provide an opportunity to study and organize problems in the field of distributive education. It will be possible for each member to select a problem in this field. Open to advanced students, experienced teachers and personnel in the distributive field, or by special permission of instructor. May be taken on an individual basis.

First semester. Mr. Trimpe and Mr. Fidler. Two semester hours.

500B Problems in Distributive Education

This course provides individuals with an opportunity for further study or the selection of another problem in the field of distributive education.

Second semester. Mr. Trimpe and Mr. Fidler. Two semester hours.

510 Job Supervisory Training

This course provides for mastery of the techniques and skills used in supervision of employees. It deals with conference leading, how to train, how to develop the skills of leadership and the corrective interview. This training is useful for vocational teachers and those preparing for supervisory positions.

Second semester. Mr. Trimpe. Two semester hours.
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.

Only persons who meet the requirements for a vocational certificate can teach in the vocational home-economics departments in Michigan. The required courses are Chemistry 105A, B, Biology 100A, B, or Biology 100A and an elective; at least one course each in economics and sociology; Elementary Design 105, Costume Design 209, Home Furnishings 221; Clothing and Textiles 103, Clothing 205, Family Clothing 305; Foods 111, Nutrition 211, Advanced Foods 311, Quantity Food Management 312; Home Management Theory 322, Home Management Practice 324, Effective Living 145, Marriage and Family Relationships 325, Home Nursing and Family Health 223; Housing and House Planning 421; Problems in Home Economics Education 300, Human Growth and Development 251; an elective, two or more semester hours; and courses in the Department of Education to fulfill the requirements for a secondary provisional certificate.

The Department of Home Economics offers four-year programs for dietitians, homemakers, and business persons. These programs do not require a student to take all education courses which are required for teachers. A two-year program in Homemaking is offered.

The following courses are open to students not majoring or minoring in home economics: Home Economics 103, 118, 120, 203, 209, 222, 223, 325, 439. Students may enter other courses with the consent of the instructor.

CLOTHING AND TEXTILES

103 Clothing and Textiles

A basic course in clothing. One problem gives opportunity for learning elementary techniques of construction. Textiles is taught from the consumer point of view. Some testing of fabrics is required.

Each semester. Miss Stamm. Three semester hours.
105 Elementary Design
A beginning course in art structure, emphasizing principles of design and color theory and their application to the making of original borders, surface patterns, and other school art problems.
Each semester. Miss Paden. Two semester hours.

203 Clothing
This course is planned to give experience in using commercial patterns and learning elementary construction techniques. Elective non-majors.
Summer 1954. Miss Volle. Each semester. Miss Stamm or Miss Volle or Dr. Galbraith. Two semester hours.

205 Clothing
Consists of making garments to develop a knowledge of construction techniques. Includes problems in pattern alteration. Prerequisite: Home Economics 103.
Each semester. Miss Volle. Three semester hours.

209 Costume Design
This course is intended to develop more discriminating judgment in the selection of appropriate clothes for individuals. Prerequisite: Elementary Design 105 (or equivalent).
First semester. Miss Volle. Two semester hours.

305 Family Clothing
This course is flexible in content to meet the needs of advanced students and those preparing to teach clothing selection and construction. A study is made of clothing budgeting. A child's garment is made from either new or old material. Prerequisite: Home Economics 103, 205, Costume Design 209.
First semester. Miss Volle. Two semester hours.

306 Clothing (Draping and Flat Pattern)
Students are given an opportunity to drape master patterns in muslin on a dress form padded to their own size. Some experience is given in drafting sleeves and flat pattern making. Emphasis is placed on the principles and techniques of fitting. Prerequisite: Home Economics 205, 209, 305.
First semester. Miss Volle. Two semester hours.

FOODS AND NUTRITION

111 Principles of Food Preparation
This course is planned to give a knowledge of basic principles underlying preparation of food. Laboratory experience in the preparation of all classes of food. Home Economics majors only. Parallel or follow Chemistry 105A.
Each semester. Miss Taylor. Three semester hours.
846 DESCRIPTION OF COURSES

118 Food for the Family
An elementary survey of principles of cookery with emphasis on family food problems. An introduction to the planning and serving of meals in the home; some study of purchasing of food and work in analysis of food costs. Elective for non-majors.
Each semester. Miss Acree or Miss Taylor. Two semester hours.

211 Nutrition
A study of the essential nutrients and their function in the human body.
Prerequisite: Chemistry 105A, B, Home Economics 111.
First semester. Miss Taylor. Three semester hours.

219 Nutrition
A study of the principles of good nutrition for the individual, family groups and community. Laboratory experience is given in the basic principles of cooking. For first semester nurses.
First semester. Miss Taylor. Two semester hours.

222 Everyday Nutrition
This course includes problems related to signs of good and poor nutrition, for growing children as well as for adults. No prerequisite. Open to non-majors.
Summer 1954. Each semester. Miss Taylor. Two semester hours. Three semester hours by extension.

311 Advanced Food Preparation and Table Service
Meal preparation, methods of table service for all occasions, marketing, and costs of meals. Laboratory preparation of special foods. Emphasis on planning and conservation of the family food supply. Prerequisite: Nutrition 211.
Second semester. Miss Acree or Miss Taylor. Three semester hours.

312 Quantity Food Management
A study of the problems of buying, preparing and serving large amounts of food with special emphasis on management of school lunches. Laboratory time is spent in a college residence hall kitchen and the school lunchroom at the high school on the campus. Field trips are taken to commercial restaurants, schools and hospitals in the vicinity. Prerequisite: Home Economics 111, 311.
Second semester. Miss Taylor. Two or three semester hours.

317 Diet and Disease
Study of dietetic treatment of impaired digestive and metabolic conditions. Planning of diets and reports of current research. Prerequisite: Bio-Chemistry 300 and 351, Physiology 211B.
Not offered 1954-1955. Miss Taylor. Two semester hours.
318 Food Demonstration
Principles and techniques of demonstration as applied to teaching and for those who are preparing for commercial work in foods. Prerequisite: Home Economics 311.
First semester. Miss Acree. Two semester hours.

HOME MANAGEMENT, CHILD DEVELOPMENT, AND FAMILY RELATIONSHIPS

120 Personal and Social Problems
An elective course for non-majors. Social usage and personality development are considered.
Each semester. Miss Acree, Miss Stamm. One semester hour.

142 Consumer Problems
Analysis is made of consumer problems pertaining to buying specific types of commodities such as food, clothing, shelter, equipment and furnishings for the home, health, and recreation. Some consideration of agencies and laws affecting consumers considered.
Second semester. Miss Acree. Three semester hours.

145 Effective Living
This is an orientation course required of all freshmen in home economics. Personal appearance, personal problems, social relationship, study and recreation are discussed. Planning for marriage and the home of the future are included. Freshmen in other departments are welcome.
First semester. Dr. Galbraith. Two semester hours.

211 Home Furnishings
Color, design, room arrangement, historic and modern furniture are studied. Selection of floor coverings, curtains, draperies and other furnishings are given consideration. Models for room arrangements are made. Prerequisite: Elementary Design 105 or Art Structure 106 or Industrial Art 110 or Learning Thru Art 112.
Second semester. Miss Stamm. Two semester hours.

223 Home Nursing and Family Health
Training in the simple procedures for the prevention and care of illness and accidents in the home. Consideration is given to community resources for protection and care of health and problems relating to the school. Open to second semester freshmen or sophomores in Home Economics. No other prerequisites.
Each semester. Miss Acree. Two semester hours.

224 Personality Development
This course is designed for students in the Airline Hostess Curriculum. Problems will be adapted to the needs and interests of these students.
251 Human Growth and Development
This course deals with the physical, social, emotional and intellectual growth and development of children and adolescents.
Second semester. Miss Volle. Three semester hours.

322 Home Management Theory
The use of the knowledge, the abilities, the interests, time, energy, and material resources of families are studied. This includes the selection, use and care of equipment, furnishings and other household goods. Prerequisite: a course in Economics.
First semester. Miss Stamm. Two semester hours.

324 Home Management Practice
Students live together in family-size groups in a house where opportunity is provided for practice in the composite duties of homemaking. The house is managed on two 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. Miss Stamm. Three semester hours.

325 Marriage and Family Relationships
This course is a study of the contributions and problems of the family in modern society. It includes a consideration of marital and personality adjustments in family living. It places emphasis on preparation for marriage and gives a perspective of the new tasks in urban and rural living as they affect social relationships and legal problems. Prerequisite: General Psychology 200 or Principles of Sociology 241. Open to both men and women.
Summer 1954. Each semester. Dr. Galbraith. Two semester hours.

HOME ECONOMICS EDUCATION

300 Problems in Home Economics Education
Major consideration is given to the problems which the student is meeting in teaching. The course also includes a study of vocational legislation and requirements; homemaking for adults and out-of-school youth; evaluation of textbooks, magazines, and illustrative material; how to secure a position; investigation of laboratory equipment; value of state and national associations. Prerequisite to Directed Teaching 371.
Second semester. Dr. Galbraith. Three semester hours.

Open to Qualified Juniors, Seniors, and Graduates

400 Teaching of Family Living in Elementary Schools
This course is designed to help elementary teachers vitalize their offerings and home economics teachers better understand the elementary program in family living.
Summer, 1954. Dr. Galbraith. Two semester hours.
403 Recent Trends in Textiles
   New developments in the textile field. Selection, use, and care of the newer textile fabrics which are used in clothing and home furnishings. Prerequisite: at least one course in Textile and Clothing.
   First semester. Miss Stamm. Two semester hours.

404 Tailoring
   This course is planned to give experience in tailoring techniques, with emphasis on the making of coats and suits. Prerequisite: Home Economics 205 or consent of instructor.
   Second semester. Miss Volle. Three semester hours.

416 Advanced Nutrition
   Study of recent developments in nutrition through readings and experiments. Prerequisite: Home Economics 211.
   First semester. Miss Taylor. Three semester hours.

419 Experimental Food Study
   Not offered in 1954-1955. Miss Acree or Miss Taylor. Two semester hours.

421 Housing and House Planning
   This course is planned to show the interrelation of social and aesthetic phases of housing. The adaptation of the house to the needs and interests of the young, adolescent, and adult members of a family is studied. An analysis is made of recent developments in rural single and multiple-housing projects. Prerequisite: Elementary Design 105 or consent of instructor. Open to both men and women.
   First semester. Miss Stamm. Two semester hours.

423 Institutional Management
   Study of institutional administration, job analysis, labor policies, personal problems, and cost control in different types of food-service institutions. Prerequisite: Home Economics 311, 312, Accounting 210A.
   Summer 1954. Miss Taylor. Three semester hours.

439 Consumer Buying
   An advanced study of marketing problems and consumer credit. Each student carries out an individual problem which may concern the technique of buying a special type of consumer goods. Study of consumer literature is made. Prerequisite: Approval by the department.
   Not offered in 1954-1955. Miss Acree. Two semester hours.
Open to Graduate Students

500 Supervision of Home Economics
New developments in teaching home economics will be studied. Problems the students have met on the job will receive major consideration. Recent changes in the vocational homemaking program, methods of evaluation, use of visual aids, recent textbooks, magazines, and plans and equipment for laboratories will be studied. Consent of Instructor.
Second semester. Dr. Galbraith. Two semester hours.

504 Advanced Clothing Techniques
This course is planned to meet the needs of the advanced student in clothing construction techniques. Prerequisites: Clothing 205, 305 and consent of instructor.
Summer 1954. Miss Volle. Two semester hours.

INDUSTRIAL ARTS COURSES
The Industrial Arts Department offers shop and professional courses for teachers and supervisors of industrial arts.
A student who plans to qualify as an industrial arts teacher in both the general and unit shops must take a minimum of 40 semester hours of technical work. All students will be required to take the following courses: Woods 100 and 205A, Metals 130, and Machine Shop 234A, Printing 140, Drawing 120 and 226, Electricity 150 and 350, Introduction to Industrial Arts 160, Industrial Design 266, and three professional courses in Industrial Arts during the junior and senior years.
A group minor in Industrial Arts consists of the following courses: Woods 100, Woods 205A, Drawing 120, Drawing 226, Metals 130, Machine Shop 234A, Electricity 150, Electricity 350, plus the professional course Teaching of Industrial Arts. A student may also take a 15-semester-hour minor in any course sequence such as woods, metals, drawing, or printing plus the professional course Teaching of Industrial Arts.

Woodwork
A survey course in the field of woodwork. It provides experiences in the care, purchasing, and use of hand woodworking tools. Related information about production and consumption of wood products will be covered. In addition caning, wood classification and elementary wood finishing will be covered.
Each semester. Mr. Nichols. Two semester hours.
104 Rural Practical Arts
A special course in general shop with emphasis on woodworking activities designed for prospective rural school teachers. This course is limited to students enrolled in the rural education department.
Each semester. Mr. Farnan. Two semester hours.

106 Advanced Hand Woodworking
This course gives students the practice in advanced hand bench processes and in wood turning. The course will include the care and use of tools, grinding and sharpening, finishing, and turning techniques. Prerequisite: Woods 100.
First semester. Mr. Nichols. Three semester hours.

305A 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. Prerequisite: Woods 100.
First semester. Mr. Nichols. Three semester hours.

305B General Woodwork
This course provides experiences in several areas of woodwork: namely, wood turning, caning, upholstery, inlaying, wood carving, and pattern making. Prerequisite: Woods 100 and 205A.
Second semester. Mr. Nichols. Three semester hours.

307 Finishing
A course in the plans and methods in modern wood finishing. All types of finishes will be studied. Related information on color theory, mixing, and the application of finishes to various surfaces will be included.
Second semester. Mr. Farnan. Three semester hours.

308 O.T. Special Education Shop
A basic course in shop fundamentals, including the use of hand tools, construction design, fastening devices, and finishing. This course is limited to students enrolled in occupational therapy.
Each semester. Mr. Nichols. Three semester hours.

Drawing

120 Drawing
A survey course in the field of general drafting. The student will have an opportunity to explore all types of drawing, including machine, free hand, architectural, and others.
Each semester. Mr. Beukema. Two semester hours.

121 Drawing
A beginning course in the fundamentals of drafting for students in pre-professional and general degree courses.
Each semester. Dr. Feirer. Two semester hours.
221 Mechanical Drawing
Special attention is given to orthographic projection, detailing assemblies, and other fundamentals of drafting. This course is the equivalent of Drawing I of the School of Engineering, University of Michigan, and satisfies the requirements of engineering students.
Each semester. Mr. Beukema, Mr. Huff. Three semester hours.

222 Descriptive Geometry
Instruction and exercises are given in combinations of the point, line, and plane, intersections, developments, tangent planes, and warped surfaces. This course is the equivalent of Drawing II of the School of Engineering, University of Michigan. Not offered in summer.
Each semester. Mr. Beukema, Mr. Huff. Three semester hours.

226 Mechanical Drawing
A continuation of principles emphasized in Drawing 120. Basic elements of machine design are studied together with project drawing and illustration. Emphasis is placed on modern drafting room practice including reproduction of tracings and intermediates. Prerequisite: Drawing 120 or equivalent.
Second semester. Mr. Beukema. Three semester hours.

227 Mechanical Drawing
More advanced problems in mechanical drawing, detailing, design, theory and application, ranging from simple geometrical problems through surface development, cams, gears, and some architectural drawing. Special emphasis on review of the fundamentals of drawing and discussion problems.
Each semester. Mr. Huff. Two semester hours.

325A Architecture
Each semester. Mr. Huff. Two semester hours.

325B Architecture
Plans, elevations, details, mechanical perspective, rendering, tracing, and prints of a modern house. Emphasis placed on styles of architecture and architectural appreciation.
Each semester. Mr. Huff. Two semester hours.

Metal Work

130 Metals
Hand tool processes on the fabrication of metal projects suitable for construction by junior high school students in the areas of bench metal, forging, sheet metal, and art metal.
Each semester. Mr. Weaver. Three semester hours.
234A Machine Shop

A course in the fundamentals of machine tool operation, involving turning, milling, shaping, and grinding practices in machining parts of selected projects to be assembled at the bench.

Each semester. Mr. Weaver. Three semester hours.

234B Machine Shop

Advanced practice in the operation of machine tools in finishing machine parts, making of jigs and fixtures for producing duplicate parts, tempering and heat treatment of steel.

Each semester. Mr. Weaver. Three semester hours.

235 Sheetmetal

An introduction to the application of hand and machine processes. Cutting, forming, seaming, burring, crimping, notching, and wiring as applied to the making of sheetmetal projects.

First semester. Mr. Plough. Two semester hours.

236 Metal Fabrication

A course in gas and arc welding for beginners. Safety precaution, care and operation of welding equipment, selection of welding rod, methods of welding will be stressed.

Second semester. Mr. Weaver. Two semester hours.

338 Advanced Metals

Hand tool and machine processes in fabricating projects that provide a variety of metal working experiences suited to junior and senior high school industrial arts classes. Includes foundry practice, metal spinning, electroplating, and welding processes.

Second semester. Mr. Weaver. Three semester hours.

Printing and Graphic Arts

140A Graphic Arts

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. Mr. Pullin. Two semester hours.

140B Printing

This course emphasizes proportion, balance, and the study of type faces. Practical work is given in the composition of more complicated printed matter which involves rule work, borders, and ornaments. Practical work is given in make-ready and presswork.

Second semester. Mr. Pullin. Three semester hours.
144 Occupational Therapy Printing
This course is intended to acquaint students with the various tools and equipment of the print shop, and to acquaint them with fundamentals of planning type composition. Limited to students enrolled in the Occupational Therapy department.
Each semester. Mr. Pullin. Three semester hours.

240 Printing
Keeping of records and accounts, purchase of materials, planning and laying out of equipment, and study of school publications. Students will work out courses of study with job sheets, using original ideas.
Second semester. Mr. Pullin. Two semester hours.

241 Presswork
This is a beginning course in presswork, which includes simple lockup, make-ready, and feeding.
First semester. Mr. Brink. Two semester hours.

242 Printing
Advanced work in the complete designing and producing of printed matter, with a study of plates, papers, and inks. Advanced imposition and presswork are also included.
First semester. Mr. Pullin. Three semester hours.

243 Layout and Design
Students will undertake the complete layout, design, and composition of such jobs as tickets, name cards, letterheads, programs, newspaper 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. Mr. Brink. Three semester hours.

245A Linotype Composition
This course deals primarily with the operation of the linotype keyboard. Straight composition is emphasized.
First semester. Mr. Brink. Three semester hours.

245B Linotype Composition
This course considers the problems of job, advertisement, and newspaper composition.
First semester. Mr. Brink. Three semester hours.

246A Linotype Mechanism
This course is designed to acquaint the students with the many intricacies of the machine. Simple adjustments are made.
First semester. Mr. Brink. Two semester hours.
246B Linotype Mechanism
This course gives the student practical experience in caring for the machines in operation.
Second semester. Mr. Brink. Two semester hours.

341 Advanced Presswork and Lockup
This course is a continuation of course 241. Practical presswork and imposition of forms, make-ready of forms for jobbers and cylinder presses. Practical work on the cutter and folder will also be emphasized.
Second semester. Mr. Brink. Two semester hours.

Electrical

150 Introductory Electricity
A survey course in the field of electricity. Special attention will be given to elementary wiring, construction of school shop electrical projects, and a general introduction into the field of electronics and electrical appliances.
Each semester. Mr. Plough. Two semester hours.

350 Advanced Electricity
A study of the principles of electricity and their practical application. Work experiences in electric motors, transformers, heating devices and batteries are supplemented by a usable technical background. Techniques and practice of electric wiring are included. Prerequisite: Shop Mathematics.
Each semester. Mr. Plough. Three semester hours.

General Shop

160 Introduction to Industrial Arts
The purpose of this course is to provide initial experiences in the industrial arts area. This course will include individual experiences in laboratory and classroom.
Each semester. Mr. Plough. One semester hour.

164 Industrial Arts for Elementary Teachers
This course is planned for prospective elementary school teachers and will include a study of Industrial Arts for grades one through six. Construction techniques in the fields of woods, metals, leather, and plastics will be included. An understanding of our industrial life in our modern society will be emphasized.
Each semester. Mr. Farnan. Three semester hours.
Special Education students may take this course for four semester hours of credit.

167 O.T. General Shop
A course designed exclusively for individuals training for occupational therapy. This course will cover the fundamentals of drawing, sketching, plastics, cold metals, copper work, and elementary electricity.
Each semester. Mr. Farnan. Three semester hours.
261A  Art Metal
An introductory course in the study of art metal. Methods of layout, cutting, forming, and assembly will be stressed. Practical application in the form of finished projects of an artistic nature will be emphasized.
Second semester. Mr. Weaver. Two semester hours.

262B  Jewelry
A beginning course dealing with the design and construction of items of jewelry and enameling.
Second semester. Mr. Weaver. Two semester hours.

263A  Related Arts and Crafts
A general course in arts and crafts including work in thin metal, plastics, leather, elementary wood, and other related craft activities.
Each semester (Extension only). Mr. Schoenhals, Mr. Farnan, and Mr. Russell. Three semester hours.

263B  Related Arts and Crafts
Advanced work in arts and crafts including advanced art metal, plastics, and other crafts not previously included.
Each semester (Extension only). Mr. Schoenhals, Mr. Farnan, and Mr. Russell. Three semester hours.

264A  Farm Shop
Experience in cement work, metal work, electrical work, rope work, glazing and other areas related to their application in farm mechanics. The work is to help meet the requirements for certification as a farm shop teacher.
First semester. Mr. Plough. Two semester hours.

264B  Farm Shop
A continuation of 264A, with the addition of special problems related to farm mechanics and farm shop management.
Second semester. Mr. Plough. Two semester hours.

265A  Auto Mechanics
A survey course dealing with the design and function of the various parts of the automobile; and the servicing and adjustment of some of the popular models.
First semester. Mr. Plough. Three semester hours.

265B  Auto Mechanics
Advanced work in automobile maintenance and servicing. Special emphasis will be given to the study of testing equipment used in auto mechanics.
Second semester. Mr. Plough. Three semester hours.
266 Industrial Design

A study of modern industrial design and its application to industrial arts projects. Development of suitable and well designed articles for school shop practice.

Each semester. Mr. Farnan. Two semester hours.

267 Leather, Plastics, and Archery

A course for prospective Industrial Arts Teachers in the major crafts of leather, archery, and plastics. Students will have an opportunity to construct projects and do activities suitable to leisure time work.

Second semester. Mr. Farnan. Two semester hours.

370 General Shop

A comprehensive course covering a variety of media used in the industrial arts field with introductory laboratory experience. This course is planned for students who will teach in a general shop organization. General shop planning, methods, and organization of the shop are included.

First semester. Mr. Plough. Three semester hours.

VOCATIONAL-INDUSTRIAL AND TECHNICAL EDUCATION

J. W. GIACHINO
HENRY J. BEUKEMA
DONALD BLACK
LAWRENCE J. BRINK
HERBERT E. ELLINGER
ANDREW C. LUFF

DON W. NANTZ
ROBERT RING
NORMAN K. RUSSELL
WILLIAM SCHREIBER
WILLIAM WEEKS
WILLIAM WICHERS

The various curriculums offered by the Vocational-Industrial and Technical Education Department serve a two-fold purpose, namely:

1. To train teachers who will be qualified to teach trade and industrial subjects.

2. To provide opportunities for students interested in preparing for a specific industrial occupation.

Some of the programs are four years in length and lead to a Bachelor of Science Degree. Others are of two years' duration and lead to a certificate of occupational competency. The two-year technical programs are particularly significant since they offer unusual opportunities to youth who are not interested in acquiring a college degree. The various technical programs permit concentration in some definite industrial area to the extent that individuals will be readily employable upon completion of the course. In general, these programs provide training for such jobs as: servicemen, trouble diagnosticians, industrial and plant supervisors, inspectors, laboratory technicians, estimators, testers of equipment, engineering products salesmen and quality control technicians.
MAJORS AND MINORS

A student will not be permitted to secure a major unless he is enrolled in a specific industrial curriculum. However, any student may obtain a minor. A minor will consist of sixteen to twenty semester hours depending upon the area of specialization. Acceptable sequence of courses may be arranged with the departmental advisor.

Aviation

102 Aircraft Sheetmetal
A study of the properties and types of aluminum alloys, practice in laying out, fabricating, and riveting sheetmetal parts.
First semester. Mr. Ring. Two semester hours.

103 Aircraft Structures
This course provides practical experience in repairing wooden and plastic components of aircraft, splicing and swaging cables, covering, patching, and doping fabric surfaces.
First semester. Mr. Russell. Three semester hours.

104 Carburetion and Lubrication
Theory and principles of carburetion, disassembly, inspection, adjustment and assembly of carburetors; theory and purpose of lubrication, types, grades, and specifications of various lubricants and lubricating mechanisms.
Second semester. Mr. Ring. Two semester hours.

105 Electricity and Ignition
Theory and practical application of basic electricity to aircraft and aircraft engines.
Second semester. Mr. Ring. Three semester hours.

106 Engine Assembly and Disassembly
Practical experience in disassembling, assembling, and proper handling of different types of aircraft reciprocating engines.
Each semester. Mr. Ring. Three semester hours.

110 Elementary Aviation
An introductory course covering basic principles and terminology of various phases of aviation.
First semester. Dr. Giachino. Three semester hours.

200 Aircraft Hydraulics and Instruments
Nomenclature and identification of hydraulic units, physical laws of fluids, types of fluids, methods of inspection, removal, installation and servicing of hydraulically operated units, mechanical brakes, tires and wheels. A study is also made of all flight and engine instruments and aircraft radio.
First semester. Mr. Ring. Three semester hours.
201 Inspection Regulations
Civil Aeronautics Regulations pertaining to aircraft and engine repairs and alterations. A study is made of all CAA forms governing the repair and licensing of aircraft.
Second semester. Mr. Ellinger. Two semester hours.

202 Aircraft Sheetmetal
Theory and practice in making sheetmetal repairs on metal covered aircraft.
Second semester. Mr. Ring. Two semester hours.

203 Aircraft Maintenance
Practice in disassembling, assembling, and rigging of various types of aircraft, performing repairs, and alterations conforming to CAA requirements, periodic inspections, weight and balance, and general servicing of aircraft.
Second semester. Mr. Russell. Three semester hours.

204 Engine Operation
Installation of engines in aircraft, making all connections; test stand operation, trouble shooting, servicing and inspection of different types of operating aircraft engines.
Second semester. Mr. Ellinger. Three semester hours.

205 Propellers
Theory of propellers, types, repairs, maintenance, removal, disassembly, inspection, assembly and installation of controllable, constant speed, hydraulic, and electric propellers.
Second semester. Mr. Ring. Two semester hours.

206 Engine Overhaul
Practical work in overhauling aircraft engines including refacing valves, valve seats, fitting piston rings, valve timing, valve clearance adjustment, magnaflux inspection, overhaul of cylinder, crankcase, power section, crankshaft, rods, pins, bushings, bearings, cam mechanism, blower section and oil pumps.
First semester. Mr. Ellinger. Three semester hours.

207 The Airline Hostess
A general orientation course to familiarize students with the duties and working conditions of the airline hostess.
Second semester. Mr. Wichers. Two semester hours.

208 Jet Engine
Theory, disassembly, assembly and operation of jet power plants.
Second semester. Mr. Ring. Two semester hours.
409 Education in An Air Age

A course dealing with the educational, social, economical, and political implications of aviation in the modern world. A study will be made of basic aviation materials and activities that are appropriate for different grade levels. Consideration will be given to aviation literature and visual aids suitable for youngsters. Opportunities will be provided for participation in a variety of aviation experiences. This course is open to elementary and secondary education students.

Second semester. Mr. Russell. Two semester hours.

210 Model Airplane Construction

A course planned to prepare prospective teachers to organize and conduct aviation club activities in junior and senior high schools. Actual practice is provided in designing and constructing scale and flying model airplanes.

Second semester. Mr. Russell. Two semester hours.

214A Pilot Training and Flight Theory

This unit provides 35 to 40 hours of flight instruction and necessary ground-school theory to qualify a student for a private pilot's license.

Each semester. Mr. Wichers. Two semester hours.

214B Pilot Training and Flight Theory

This unit is intended for those who already have their private and commercial pilot's license, and who wish to secure their instructor's rating. The maximum number of hours of flight instruction allowed will be 40.

Each semester. Mr. Wichers. 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 pilot's license. The maximum number of hours allowed will be 40 for one semester.

Each semester. Mr. Wichers. Two semester hours.

214D Pilot Training and Flight Theory

This unit is planned for students who wish a few hours of flight experience and are not necessarily interested in obtaining a license.

Each semester. Mr. Wichers. 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. Staff.

Four semester hours.
115B Commercial Refrigeration

This course covers refrigeration units of standard design and construction, installation, service operations, testings and factory-recommended repair procedures.

Each semester. Mr. Schreiber. Five semester hours.

215A Air Conditioning and Heating

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 maintenance of various types of heating systems.

Each semester. Mr. Schreiber. Five semester hours.

215B Air Conditioning and Heating

A continuation of course 215A, including calculations, design, layout and installation of air conditioning and heating units.

Each semester. Mr. Schreiber. Five semester hours.

Drafting

124A Elements of Industrial Drafting

A general course in drafting fundamentals, involving sketching, lettering, blueprint reading, instrument drawing, and conventional practices through job assignments of representative drafting-room problems.

Each semester. Mr. Beukema. Five semester hours.

124B Machine Drawing and Design

A course in the principles of machine design, detail and assembly drawing of simple machine parts and assemblies. Special emphasis is given to modern drafting-room practice.

Each semester. Mr. Beukema. Five semester hours.

224A Tool Drawing and Die Design

Design of jigs, fixtures, and production tools with attention to production methods and die design.

Each semester. Mr. Beukema. Five semester hours.

224B Product Design and Illustration

Design of consumer products with attention to manufacturing processes and costs, together with illustration drawings for display purposes and publications.

Each semester. Mr. Beukema. Five semester hours.

Printing

125 Printing

This is a general course in printing and is intended to acquaint the student with the tools and terms of the trade. Work is given in the simpler hand-set jobs and in platen presswork.

Each semester. Mr. Brink. Five semester hours.
127 Printing

In this course the student undertakes the layout, design, composition, and presswork of more complicated printed matter. Work is also begun on the linotype machine.

Each semester. Mr. Brink. Five semester hours.

225 Printing

Further work is given on the linotype machine. Imposition, lockup, and folding of multiple page forms is studied, cylinder presswork is begun, and both pamphlet and binding are undertaken.

Each semester. Mr. Brink. Five semester hours.

227 Printing

Practical work in planning and printing of production jobs. Attention will be given to record keeping and estimating cost of printed material.

Each semester. Mr. Brink. Five semester hours.

Machine Shop

130A Industrial Machine Shop

A course in basic machine shop practice involving practical work on the following machines: lathe, milling machines, grinders, shapers, and drill presses.

Each semester. Mr. Nantz. Five semester hours.

130B Industrial Machine Shop

A course in advanced machine shop practice, including the inspection, assembly, heat treating, and tool grinding of tools and parts which are made to meet prevailing industrial standards.

Each semester. Mr. Nantz. Five semester hours.

230 Tool Fabrication

A course in the making of tools and fixtures. Special attention is given to precision layout and inspection.

Each semester. Mr. Nantz. Five semester hours.

250 Die Making

A course in making of dies for blanking, shaving, bending, forming, and embossing.

Each semester. Mr. Nantz. Five semester hours.

Radio

135A Introductory Radio

A course dealing with the operation of transmitting and receiving equipment and radio test procedures.

Each semester. Mr. Black. Five semester hours.
135B  Radio Transmission
A course treating the basic principles and operation of radio transmitters
as well as the methods of proper transmitter maintenance.
Each semester. Mr. Black. Five semester hours.

235A  Principles of Television
A course in the basic principles of television reception and the service
techniques used to obtain the most satisfactory television operation.
Each semester. Mr. Black. Five semester hours.

235B  Commercial Radio and Television Techniques
In this course practical experience is provided through the construction
and operation of various types of radio receiving and transmitting appa-
ratus, as well as television equipment. Students are expected to pass the
Federal Communications Commission examination before completing the
course. Opportunity will be given to gain practical engineering experience
in connection with the FM broadcast station operated by the college.
Each semester. Mr. Black. Five semester hours.

Automotive Maintenance

155A  Automotive Engines and Accessories
A study of the construction features and operation of all component parts
of modern automobiles.
Each semester. Mr. Ellinger. Five semester hours.

155B  Automotive Chassis and Running Gear
Practical work in servicing and repairing of springs, steering gears,
brakes, and drive lines with special emphasis on automatic transmissions,
power steering, power brakes, and wheel alignment.
Each semester. Mr. Ellinger. Five semester hours.

255A  Automotive Analysis
The study of complete engine analysis and adjustment using motor ana-
lyzers, distributor testers, generator-regulator testers, and chassis dyna-
mometer.
Each semester. Mr. Ellinger. Five semester hours.

255B  Automotive Engine Overhaul
Practical work in disassembly, cleaning, inspection, repair, and assembly
of the complete engine with special emphasis upon overhaul equipment and
processes.
Each semester. Mr. Ellinger. Five semester hours.

Electricity

145  Fundamentals of Electricity
This course deals with elementary principles of direct and alternating
current electricity. Practical laboratory experience is provided in electrical
connections, bell and annunciator wiring, switches and switch connections, house wiring layout, estimating, preparing contracts and wiring permits.

Each semester. Mr. Luff. Four semester hours.

146 Direct Current Electricity
In this course practical experience is provided in the construction, operation, repair and servicing of direct current machinery and control devices such as series, shunt, and compound motors.

Each semester. Mr. Luff. Four semester hours.

245 Alternating Current Electricity
This course offers basic theory and practical experience in the construction, operation, repair, and servicing of alternating current machinery and control devices such as single and polyphase motors, generators and transformers.

Each semester. Mr. Luff. Four semester hours.

246 Industrial Electronics
In this course electronics and electronic controls are presented from the standpoint of industrial applications. Practical experience is provided in the construction, operation, and repair of various electronic controls and devices such as timers, photo tubes, and motor speed controls.

Each semester. Mr. Luff. Four semester hours.

Related Subjects

170A Drawing
A basic course in drawing involving blue-print reading, schematic drawing, and sketching.

Each semester. Mr. Beukema and others. Two semester hours.

170B Drawing
A continuation of Drawing 170A with emphasis on instrument drawing involving lettering, dimensioning, orthographic projection, and sectional views.

Each semester. Mr. Beukema and others. Two semester hours.

173 Applied Physics
An introductory course dealing with heat, simple mechanics, forces, time, rate, motion, thermal expansion, properties of solids, liquids, and gases.

Each semester. Mr. Wichers. Three semester hours.

174 Electricity
A basic course in electricity intended to familiarize students with electrical terminology, circuits, motors and various testing equipment.

Each semester. Mr. Black. Two semester hours.
175 Basic Metal Work
A beginning machine-shop course involving correct usage of tools, layout, bench work, and simple lathe work.
Each semester. Mr. Nantz. Two semester hours.

176 Machine Shop
A continuation of 175 with emphasis on work involving the shaper, lathe, milling machine, grinder and drill press.
Second semester. Mr. Nantz. Two semester hours.

178 Testing of Materials
An analysis is made of the properties of ferrous and non-ferrous materials, their methods of manufacture and their use in the fabrication of products.
Each semester. Mr. Weeks. Three 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.
First semester. Mr. Weeks. Two semester hours.

231 Basic Metallurgy
This course offers practice in heat treating and testing all standard materials used in machine, tool, and die work.
Each semester. Mr. Weeks. Three semester hours.

270 Tool and Die Designing
Layout and design of jigs, fixtures, dies and production tools, related to the machinist and tool and diemaker trades.
Second semester. Mr. Beukema. Two semester hours.

272 Principles of Industrial Electronics
A course dealing with the fundamental theory and technical applications of circuits used in various standard electronic equipment.
Second semester. Mr. Luff. Three semester hours.

273 Technical Physics
A study of magnetism, electricity, sound and light.
Each semester. Three semester hours.

274A Welding
A course involving the safe use of oxy-acetylene and arc-welding equipment and acquisition of essential welding skills and technical knowledge.
Each semester. Mr. Weeks. Two semester hours.
274B Welding
A continuation of 274A.
Each semester. Mr. Weeks. Two semester hours.

275 Sheetmetal
Basic sheetmetal layout, application of hand and machine processes in cutting, forming, seaming, crimping, soldering, and other operations used in the fabrication of sheetmetal products.
Each semester. Mr. Schreiber. Two semester hours.

279 Personnel Relations
A basic course dealing with the principles of employee-employer relations, trade unions, workmen's compensation, social security, and psychology of human relations.
Each semester. Mr. Wichers. Three semester hours.

INDUSTRIAL SUPERVISION

353 Fundamentals of Industrial Supervision
A basic course in the study of the foreman's duties, responsibilities, and employer-employee relationships in modern industrial practice.
First semester. Mr. Luff. Two semester hours.

354 Quality Control
A course dealing with the systems for controlling the quality of material within desired limits by means of a sampling procedure and continuing analysis of inspection results.
Second semester. Mr. Luff. Three semester hours.

355 Plant Maintenance and Safety
A study of modern industrial maintenance and safety methods and their relationship to production and production costs.
First semester. Mr. Luff. Two semester hours.

356 Production Control
A study of methods of controlling and coordinating the factors of production, including materials, time and labor.
Second semester. Mr. Luff. Three semester hours.

358 Motion and Time Study
This course deals with the analysis of motions involved in performing a job, timing the execution of operations, and determining efficient time standards.
First semester. Mr. Luff. Three semester hours.
COORDINATED INDUSTRY

150 Coordinated Industry
This course is limited to students who are enrolled in the Vocational-Industrial curriculum. It consists of supervised work experience in industry to enable students to meet certification requirements for a Vocational Teaching Certificate.
Each semester. Mr. Russell. Three semester hours.

152 Coordinated Industry
Continuation of 150.
Each semester. Mr. Russell. Three semester hours.

250 Coordinated Industry
Continuation of 152.
Each semester. Mr. Russell. Three semester hours.

252 Coordinated Industry
Continuation of 250.
Each semester. Mr. Russell. Three semester hours.

350 Coordinated Industry
Continuation of 252.
Each semester. Mr. Russell. Three semester hours.

352 Coordinated Industry
Continuation of 350.
Each semester. Mr. Russell. Three semester hours.

PROFESSIONAL COURSES IN INDUSTRIAL ARTS AND VOCATIONAL-INDUSTRIAL EDUCATION

200 Introduction to Vocational Education
A course designed to familiarize prospective industrial education teachers with the basic philosophy of vocational education and its function in an educational program.
First semester. Dr. Giachino. Two semester hours.

347 Plan and Organization of a School Shop
This is a course to help teachers plan and organize the school shop. Topics concerned include physical needs of the subject, selection of activities, shop layout, purchasing equipment, establishing a supply routine, planning personnel organization, and shop management.
Each semester. Dr. Feirer. Two semester hours.

348 Teaching of Industrial Arts
This course deals with the problems in teaching industrial-arts subjects, the techniques employed in the analysis of instructional units, construction
of tests and rating scales, and problems dealing with administration and work. The principal methods of instruction used in industrial-arts subjects will be emphasized.

Each semester. Dr. Feirer. Three semester hours.

351 Course Making in Industrial Education

Deals with a study of the techniques used in selecting and analyzing teaching activities for various grade levels. Opportunities will be provided to work out a detailed course of study for some specific industrial education subject.

Each semester. Dr. Giachino. Two semester hours.

352 Teaching of Vocational Industrial Education

This course deals with specific techniques used in teaching trade and industrial subjects. Attention will be given to various teaching problems associated with this type of education.

First semester. Dr. Giachino. Three semester hours.

357 Testing and Grading in Industrial Education

A study of written and practical types of examination and methods of grading student achievement.

Second semester. Dr. Giachino. Two semester hours.

GRADUATE COURSES IN INDUSTRIAL ARTS AND VOCATIONAL-INDUSTRIAL EDUCATION

400 Problems in Metalworking

Practical laboratory experiences in forging, foundry, heat treating, machine shop, and arc and acetylene welding. Course will emphasize methods of selecting and developing course materials for junior and senior high school students. Course content will be adapted to meet the needs of individual students.

Second semester. Mr. Weaver. Two semester hours.

405 Problems in Woodworking

Advanced laboratory experiences in some of the more common areas of woodworking such as patternmaking, carpentry, upholstery, caning and finishing. Content selection, project building and new techniques will be covered.

First semester. Mr. Nichols. Two to four semester hours.

407 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.

Second semester. Mr. Nichols. Three semester hours.
410 Problems in Electricity
Special problems in the technical and social phases of electricity which arise in the planning of courses, shops, and equipment for instruction in this field.
Not offered in 1954-1955. Mr. Plough, Mr. Luff. Two to four semester hours.

412 Radio and Television
A course dealing with the basic principles of radio and television. Each student will be expected to develop the necessary instructional material for use in a teaching situation.
Not offered in 1954-1955. Dr. Giachino and staff. Two semester hours.

415 Arts and Crafts Techniques
Advanced laboratory experiences in the fields of internal plastic carving, leather work, model work, archery, photography, and related crafts in conjunction with a study of current technical literature in these areas. Written reports will be required. Course content will be adapted to individual needs.
Not offered in 1954-1955. Mr. Farnan. Two to four semester hours.

416 Advanced Problems in Graphic Arts
Opportunity is provided for the individual student to undertake advanced study of the technical problems in the field of graphic arts. Advanced instruction in imposition, presswork, and linotype composition will be available.
First semester. Mr. Brink, Mr. Pullin. Two to four semester hours.

420 Advanced Drafting Practices
Advanced laboratory experiences in the fields of mechanical, architectural and machine drawing in conjunction with a study of current technical literature in these areas. Written reports will be required. Advanced instruction in engineering drawing and descriptive geometry will also be available. Course content will be adapted to individual needs.
Second semester. Mr. Beukema, Mr. Huff. Two to four semester hours.

422 Automotive Transportation Workshop
Practical experience is provided to secure an understanding of the basic elements of automotive and aircraft transportation. Instructional material will be developed for use in teaching units of transportation in junior or senior high schools.
Not offered in 1954-1955. Mr. Russell, Mr. Ellinger. Two semester hours.

424 Automotive Diagnosis and Correction Workshop
This course deals with the correct usage of testing equipment for locating and correcting automotive engine malfunctions. It is designed particularly for teachers of auto mechanics.
430 Materials of Construction
Various types of ferrous and non-ferrous metals, woods, cement, and plastic will be tested with precision testing equipment. Characteristics of these materials will be studied and their suitability and application determined for fabricating processes.
Not offered in 1954-1955. Two semester hours.

450 The General Shop Program
A review of the current philosophies concerning the place of the general shop in general education. The historical development of the general shop program will also be surveyed. Problems of organization, administration, methods, articulation, equipment and supplies will be investigated.
Second semester. Dr. Feirer. Two semester hours.

460 Cooperative Education in Secondary Schools
This course deals with the nature and purposes of cooperative education in the secondary schools. Problems and procedures involved in the organization and operation of cooperative work-study programs are discussed. Especially designed for coordinators.
Not offered in 1954-1955. Dr. Kohrman. Two semester hours.

463 Arts and Crafts for Teachers
This course will cover craft techniques in the areas of art metal, jewelry, leather, plastics, wood crafts, and other related experiences. Teaching procedures, methods, and materials will be emphasized.
Not offered in 1954-1955. Dr. Feirer and Staff. Three semester hours.

464 Industrial Arts for the Elementary School
Deals with the problems of organizing and teaching Industrial Arts for the elementary grades. Course materials, techniques, and materials in the industrial and craft areas will be stressed.
Second semester. Mr. Farnan. Two semester hours.

472 Course Planning and Construction
Principles and techniques of selecting and analyzing suitable teaching activities and arranging such material into a functional instructional order. Instructional units prepared will be based on an analysis of a trade, occupation or activity. Opportunity will be provided to prepare a detailed course of study.
First semester. Dr. Giachino. Two semester hours.

474 Testing and Grading in Industrial Education
A study of the technique for preparing and using correctly written and practical tests. Attention will be given to interpretation of test results and grading student achievement.
Not offered in 1954-1955. Dr. Giachino. Two semester hours.
477 Welding for Teachers
Instruction will cover oxy-acetylene, DC and AC arc, Heli-arc and Atomic Hydrogen welding. Attention will be given to organizing instructional material for setting up welding units in junior and senior high school shop classes.
Not offered in 1954-1955. Two semester hours.

Open to Graduates

478 Exploring Industry
This course is designed primarily for elementary and secondary school teachers who wish to acquire a better understanding of the various types of industries and their relationship to our social structure. The study of industrial organization including management, labor, consumer products, and distribution of goods will be through numerous visitations and discussions with industrial representatives and other resource personnel.
Not offered in 1954-1955. Two semester hours.

500 Research in Machine Shop Practices
A course designed for teachers who wish to carry out advanced techniques in the area of machine shop. Students will have freedom of choice in selecting a problem that they wish to develop.
Second semester. Mr. Weaver. Two semester hours.

551 Trends in Industrial Education
Major emphasis will be on current literature in the field. Significant research studies will be reviewed. State, local, commercial and industrial publications will be studied to determine their place in the school shop program.
Not offered in 1954-1955. Dr. Feirer. Two semester hours.

553 Project Planning and Designing
A study of the principles of design and their application to shop projects. Special attention will be given to planning and designing new projects that will enrich the school shop program.
Not offered in 1954-1955. Dr. Feirer. Two semester hours.

573 Instructional Aids
Methods of selecting, constructing, and using effectively appropriate aids in various teaching situations.
Not offered in 1954-1955. Mr. Russell. Two semester hours.

580A Special Problems in Industrial Arts
This course provides for the study and organization of a specific teaching problem in industrial arts. Each member of the class selects a suitable problem, develops material for it, and organizes it for instructional use.
Each semester. Dr. Feirer. Two semester hours.
580B Special Problems in Industrial Arts

Open to graduate students who are capable of developing a problem independently. The problem is chosen by the student and developed throughout the conferences and activities.

Each semester. Dr. Feirer. Two semester hours.

585 Shop Planning

Problems in the planning of the shop and selecting the equipment and supplies for an Industrial Arts laboratory. A study of the basic principles of planning and equipment selection to harmonize with modern Industrial Arts philosophy. Whenever possible, actual remodeling or new building will be used as a basis for study.

Not offered in 1954-1955. Dr. Feirer. Two semester hours.
GRADUATE DIVISION

ADMINISTRATIVE OFFICERS

ELMER H. WILDS, Ed.D., Director of the Graduate Division
MARGARET T. MABIE, A.B., Secretary of the Graduate Division
GEORGE G. MALLINSON, PH.D., Chairman of Graduate Advisers

GRADUATE ADVISORY COUNCIL

CHARLES H. BUTLER, PH.D., Department of Mathematics
ELWYN F. CARTER, Ed.D., Department of Music
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JAMES H. GRIGGS, Ed.D., Department of Education
JAMES O. KNAUSS, PH.D., Department of History
GEORGE E. KOHRMAN, Ed.D., Division of Vocational Education
ALICE LOUISE LEFEVRE, M.S., Department of Librarianship
GEORGE G. MALLINSON, PH.D., Department of Education and Psychology
ELSWORD P. WOODS, PH.D., Department of Political Science
ELMER H. WILDS, Ed.D., Chairman
MARGARET T. MABIE, A.B., Secretary
PAUL V. SANGREN, PH.D., Ex Officio

FACULTY OF THE GRADUATE DIVISION

1954-1955

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HOLON MATTHEWS, PH.D., Professor of Music
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FLOYD W. MOORE, PH.D., Professor of Economics
HOWARD A. MOWEN, A.M., Assistant Professor of History
JACK W. MURPHY, PH.D., Associate Professor of Speech
CHARLES S. NICHOLS, A.M., Associate Professor of Industrial Arts
LUCILE A. NOBBS, A.M., Assistant Professor of English
GRADUATE DIVISION

WERNER MICHIGAN COLLEGE OF EDUCATION

ANNOUNCEMENT 1954-1955

General Statement.

Graduate instruction has been given at Western Michigan College of Education since February, 1939, under a cooperative arrangement with the University of Michigan. The Board of Regents of the University of Michigan at their meeting in July, 1938, passed a resolution approving a formal request from the State Board of Education that the University of Michi-
igan cooperate with the three Michigan Teachers Colleges (as they were known at that time) and Michigan State Normal College in planning a program of graduate instruction. According to this action, a Graduate Division, organized and administered as an extra-mural unit of the Horace H. Rackham School of Graduate Studies, was set up at each of the four colleges.

On October 12, 1951, the State Board of Education approved the proposal of the Presidents of the Colleges of Education to set up independent graduate divisions in each of the four colleges to offer graduate curricula in all areas involved in the preparation of teachers, administrators and supervisors for the public schools of Michigan as soon as each college felt that it was desirable and possible to do so. The State Board authorized the Colleges of Education to grant the master's degree with specialization in Education to those completing such a program under the rules, regulations and procedures adopted by each institution and approved by the State Board of Education. Western Michigan College of Education in October, 1951, decided to inaugurate its own graduate program at the beginning of the fall semester of 1952 as permitted by this State Board action.

The major purposes of the graduate program at Western Michigan College of Education are:

1. to increase the effectiveness of elementary and secondary school teachers in present and future positions.
2. to prepare teachers for supervisory, administrative and guidance positions.
3. to prepare curriculum coordinators, school librarians, and teachers of special education.
4. to improve abilities of school people in human relations with pupils, teachers, supervisors, administrators, and the general public.
5. to develop ability of school people to evaluate and use results of research in practical situations.

**Administration.**

The Graduate Division is administered by a Director and a Graduate Council of nine members, each appointed for a term of three years with the Director acting as Chairman and the President of the College as a member ex officio.

**Admission to Enroll.**

Admission to enroll in graduate courses will be granted to those students who present evidence that they have received the bachelor's degree from an accredited college whose requirements for the degree are on as high a scholastic level as those maintained by Western Michigan College of Education.

A graduate from a non-accredited college may be admitted to take up to six hours of graduate work with a review of his status after he has taken these six hours. Any student from Western Michigan College of
Education who is within six hours of receiving his bachelor's degree may be admitted to enroll in up to six hours of graduate credit during the last semester before receiving his degree.

Admission to Candidacy for the Master's Degree.

A student may apply for admission to candidacy for the degree only after the completion of at least ten semester hours of graduate work with an average grade of B.

At the time he applies for candidacy he must present references testifying to his success in teaching or promise of success.

A candidate must present at least fifteen hours of undergraduate credit in education courses or the equivalent.

A candidate must show evidence of personal qualities essential to the teaching profession and an ability to use the English language effectively before being admitted.

At the time of his application for candidacy, a candidate must submit a program of study approved by his curriculum adviser.

Students who have been admitted to the Horace H. Rackham School of Graduate Studies under the cooperative plan before the fall semester of 1953 shall be automatically admitted to candidacy for the master's degree.

Transfer Credit.

After the student has been admitted to candidacy for the degree, a total of six hours of satisfactory work taken at other approved institutions, for which such institutions grant graduate credit, may be transferred to a master's degree program in the Graduate Division of Western Michigan College of Education, provided such courses are approved by the Curriculum Adviser as a part of the student's program of studies. The application of graduate extension credit from other institutions toward a student's program shall be referred to the Director. The student must ask that a transcript of such credits be sent by the institution to the Director of the Graduate Division and then request that the Graduate Division apply the credit to the degree.

Extension Credit.

A total of twelve hours of satisfactory graduate work taken through the Extension Division of Western Michigan College of Education may be counted toward the requirements for a degree provided such courses are approved by the student's Curriculum Adviser as a part of the student's program of studies.

Requirements for the Degree.

The Graduate Division will require a minimum of thirty hours of graduate work with an average grade of B for a master's degree with a thesis being optional and not to count for more than six hours in the thirty-hour program. The degree granted will be designated as the "Master of Arts."

All students will be required to complete one of the outlined curricula which have been set up as leading to the degree. The details of these curricula have been set up in terms of the vocational objectives of those
preparing for types of educational service such as: Elementary Teaching; Elementary Administration and Supervision; Teaching in the Fields of Art, Business Education, Distributive Education, Home Economics, Industrial Education, Literature and Language, Music, Occupational Therapy, Physical Education, Science and Mathematics, Social Science, and Speech Education; Guidance; Special Education; School Librarianship; Curriculum Development and Coordination; Secondary Administration and Supervision; and General Administration and Supervision.

At least fifteen hours must be earned in courses restricted to graduate students.

A minimum of eighteen hours must be taken in on-campus residence credit from the Graduate Division, leaving twelve hours that may be taken through (1) off-campus courses offered by the Western Michigan Extension Division or (2) up to six hours of advanced credit transferred from another approved institution.

All credits earned by the student before September, 1952, under the cooperative arrangements with the University of Michigan will be transferred automatically to Western Michigan College of Education, but the student must assume the responsibility of submitting transcripts of such work not taken through the Graduate Division of Western Michigan College of Education. Students who have started a program of work under the cooperative plan before September, 1952, may, if they desire, complete the required thirty hours for the degree by taking courses recommended under the University sequences.

No student will be granted the degree unless he has been enrolled for at least two semester hours of credit in the Graduate Division of Western Michigan College of Education after September, 1952.

Students who enroll for the first time in the summer session of 1954 or thereafter shall complete the work for the Master's Degree within six consecutive years from that date. Students who have enrolled prior to the summer session of 1954 shall complete the work for the Master's Degree no later than June 1960.

Diploma Application.

Before the degree is awarded, the student must fill out the diploma application blank in the Graduate Office. This should be done early in the semester in which the student is reasonably certain of completing all requirements of the degree.

Registration.

Registration for the first semester of the Graduate Division will be on Saturday, September 18 from 8 to 12 A.M., and from 1 to 4 P.M. Registration for the second semester will be on Saturday, February 5, at the same hours. Registration will take place in the Graduate Division Offices in the Administration Building, under the direction of the Registrar.

Saturday classes for the first semester will begin on Saturday, September 25 and will continue through Saturday, January 29. Saturday classes for the second semester will begin on Saturday, February 12, and continue
through Saturday, June 4. Weekday evening classes in both semesters will meet during the week preceding the Saturday classes. Most classes meet two class hours each Saturday throughout the semester. The student should consult the Schedule of Classes for instructors, hours, and places of meeting. Prerequisites for a course should be carefully determined by the student before enrolling in a 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 college work 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.

Graduate students, employed as full time teachers, shall be limited to four semester hours of graduate work each semester in not to exceed two courses. This maximum applies to a student's entire program whether it be taken on this campus or elsewhere, in residence or extension. The Director may, at his discretion, make one exception to this policy during a graduate student's entire program, by allowing the student to take five semester hours of work encompassing not more than two courses.

A full load of graduate work during a semester shall be considered to be twelve hours; during the summer session, six hours. A student may elect as many as fifteen hours during a semester at the discretion of the Director.

All enrollments should be completed by the end of the first complete week of a semester. Any necessary changes in enrollment must have been made by the end of the second complete week of a semester. These changes must be made with the instructor's approval. Permission to drop courses may be given up to the end of the sixth week. Permission to drop a course or to change enrollment must be secured from the Director of the Graduate Division.

Living Expenses.

All questions regarding room, board, and other living expenses should be addressed to the Dean of Men or Dean of Women, Western Michigan College of Education, Kalamazoo, Michigan.

Graduate students are subject to the rules of the Dean of Men and the Dean of Women and to other general regulations of this institution.

Tuition and Fees.

Graduate students will be charged fees as follows:

<table>
<thead>
<tr>
<th>Resident Students</th>
<th>Non-Resident Students</th>
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<tbody>
<tr>
<td></td>
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<tr>
<td>Sem. Hrs.</td>
<td>Tuition</td>
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<tr>
<td>9 or more</td>
<td>$42.00</td>
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<tr>
<td>7 and 8</td>
<td>28.00</td>
</tr>
<tr>
<td>5 and 6</td>
<td>21.00</td>
</tr>
<tr>
<td>3 and 4</td>
<td>14.00</td>
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<tr>
<td>1 and 2</td>
<td>7.00</td>
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</table>
These local fees are collected each semester for the general maintenance of the Graduate Division Office and the graduate student’s share of the support of such activities as athletics, health service, student union, library, departmental laboratories, graduation, etc.

Double Registration.

The regulation covering any student taking both graduate and undergraduate work will be:

A student taking more graduate hours than undergraduate hours will pay the fees during graduate enrollment for the total number of hours taken in both graduate and undergraduate work. In this instance, the undergraduate enrollment card will be stamped “double enrollment.”

A student taking more undergraduate hours than graduate hours will pay the fees during undergraduate enrollment for the total number of hours taken in both undergraduate and graduate work. The graduate card will be stamped “double enrollment.”

In case the student is taking an equal number of hours in both graduate and undergraduate work, he will pay whichever fee is higher for the total number of hours taken.

Refunds.

1. Refunds are not automatic upon withdrawal from graduate classes but must be applied for at the Graduate Office within the prescribed time limits.

2. A 90% refund will be granted to a student who withdraws not more than two weeks after the beginning of the semester during the school year.

3. A 50% refund will be granted to a student who withdraws more than two weeks and not later than four weeks after the beginning of the semester during the school year.

4. A 40% refund will be granted to a student who withdraws more than four weeks and not later than eight weeks after the beginning of the semester during the school year.

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

Marking System

Each course receives one grade which combines the results of class work, term papers, tests and examinations. Grades are indicated by letters to which plus or minus may be added at the instructor's discretion.

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<thead>
<tr>
<th>Grade</th>
<th>Description</th>
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<td>A</td>
<td>Excellent</td>
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<td>C</td>
<td>Fair</td>
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<td>D</td>
<td>Failure</td>
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<td>I</td>
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<td>W</td>
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DATES OF SATURDAY CLASS MEETINGS

First Semester

September 18, 1954—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, and Jan. 1—Christmas Holiday
January 8
January 15
January 22
January 29—Examinations

Second Semester

February 5, 1955—Registration
February 12—*Saturday Classes Begin
February 19
February 26
March 5
March 12
March 19
March 26
April 2
April 9, 16—Easter Holiday
April 23
April 30
May 7
May 14
May 21
May 28
June 4—Examinations

*Weekday classes will meet during the week immediately preceding these dates.
COURSES OFFERED

1954-1955

First Semester

Art
410 Painting .................................................. Paden

Biology
500E Recent Advances in Biology ..................... Reynolds
501 Problems in Ecology ................................. Van Deventer
400E Recent Advances in Biological Science ...... Reynolds
401 General Ecology ........................................ Van Deventer
410 Economic Botany ...................................... Bartoo
421 Parasitology ............................................ Steen

Business Studies
502 Curriculum in Business Education .............. Schneider
511 Seminar in Business Education .................... Schneider
412 Income Tax Accounting ............................ Wetnight
436 Personnel Administration ............................ Healey

Chemistry
403A Physical Chemistry ................................. Knowlton
496A Organic Preparations ............................... Eldridge

Distributive Education
500A Problems in Distributive Education .......... Trimpe, Fidler
400A Store Laboratory Experience .................... Trimpe, Fidler
410 Organization and Operation of Distributive Education ........................................ Trimpe
420 Teaching Techniques in Distributive Education ........................................ Trimpe
435 Job Analysis and Training Program ................. Trimpe

Economics
420 Public Finance ........................................ Bigelow
421A Labor Problems ...................................... Bowers
423 Collective Bargaining ................................. Eck
425 Consumption and Standards of Living .......... Bigelow
426 Business and Government ............................. Carlson
427 History of Economic Thought ......................... Moore

Education
501 Educational Research ................................ Mallinson
502 The School Curriculum ................................. Frederick
503 Foundations of American Education .............. Chiara, Sebaly
504 Educational Psychology ............................... Ellis, Govatos
520 Improvement of Teaching in Secondary Schools ................................................ Bryan
525 High School Supervision ......................... Frederick
530 Improvement of Reading in Secondary Schools ................................................ Carter, McGinnis
533 Hearing Rehabilitation ............................... Thea
560 Principles of Educational Administration .... Norrix
570 Directed Teaching .................................... Staff
581 Interpretation and Use of Tests in Guidance .... Manske
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<td>600</td>
<td>Thesis in Education</td>
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<td>Special Individual Studies</td>
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<td>610</td>
<td>Seminar in Elementary Education</td>
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<td>620</td>
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<td>Curriculum Workshop</td>
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<td>410</td>
<td>Parent Education</td>
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<td>431</td>
<td>Education of Exceptional Children</td>
<td>Ellis</td>
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<td>436</td>
<td>Mental Hygiene of Childhood and Adolescence</td>
<td>Ellis</td>
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<td>438</td>
<td>Audio-Visual Education</td>
<td>Snow</td>
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<td>480</td>
<td>Introduction to Guidance Service</td>
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<td>522</td>
<td>The American Character and Society in American Literature 1850-1950</td>
<td>Miller</td>
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<td>Teaching of Secondary English</td>
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<td>Elizabethan Tragedy</td>
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<td>English Literature of the Romantic Period</td>
<td>Limpus</td>
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<td>Intellectual History of Western Man</td>
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<td>Germany Through the Centuries</td>
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<td>405A Counterpoint</td>
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<td>455A Orchestration</td>
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<td>460 Workshop in Special Problems</td>
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<td>Occupational Therapy</td>
<td>511 Advanced Clinical Training</td>
<td>Spear</td>
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<td>512 Seminar in Occupational Therapy</td>
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<td>528 Advanced Weaving</td>
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<td>410B Medical Lectures</td>
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<td>425 Ceramics and Jewelry</td>
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<td>Physical Education for Men</td>
<td>501 Current Studies in the Administration of Physical Education</td>
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<td>502 Community Recreation</td>
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<td>Physical Education for Women</td>
<td>520 Curriculum Building in Physical Education</td>
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<td>530 The Dance in Education</td>
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<td>445 Administration and Organization of Physical Education</td>
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<td>465 Conduct of American Foreign Relations</td>
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<td>461 Basic Voice and Speech Science</td>
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<td>Principles of Practical Arts and Vocational Education</td>
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**Second Semester**

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<td>408</td>
<td>History of Biology</td>
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<td>Education and Control of Mentally Handicapped .......... Ellis</td>
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<td>Introduction to Lip Reading ................. Thea</td>
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<td>Audio-Visual Education ....................... Snow</td>
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<td>Techniques of Guidance ....................... Manske</td>
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<td>Occupational Information for Counselors and Teachers .................. Kohrman</td>
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<td>The Functions of Literature ................. Limpus</td>
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COMMUNITY COLLEGE

COLLEGE OF EDUCATION COOPERATIVE TEACHER TRAINING

The State Board of Education has approved a program whereby students may satisfy the minimum requirements for the State Limited Certificate as described in the 1942 Revision of the Certification Code. Three of the four semesters may be spent upon the campus of the Community College and the fourth semester may be spent upon the campus of any one of the four State Colleges of Education in Michigan.

During at least the third semester of the student’s program a Coordinator from the Teachers College shall counsel all prospective students on the Community College Campus and make out the student’s program for the final semester on the campus of the College of Education. The final recommendation for the State Limited Certificate shall be made by the College of Education.

The Approved Minimum Program

**Junior College—three semesters**

**Group I. Language and Literature** .............................................. 9 sem. hours
   (Including Rhetoric or Communication and Children’s Literature*)

**Group II. Science and Mathematics** ......................................... 8 sem. hours
   (Including Elementary Science* and Geography)

**Group III. Social Science** .................................................... 9 sem. hours
   General Sociology or Rural Soc.* ........................................... 3 sem. hours
   U. S. History ................................................................. 3 sem. hours
   American Government ....................................................... 3 sem. hours

**Group IV. Education** ............................................................. 6 sem. hours
   Education Psychology or Human Growth and Development** .......... 3 sem. hours
   Introduction to Directed Teaching** ....................................... 3 sem. hours

**Group V and VI. Fine and Practical Arts** ................................. 6 sem. hours
   Art, Music and Practical Arts

**Group VII. Physical Education** ............................................... 2 sem. hours

**Electives** ................................................................. 5-8 sem. hours

45-48 sem. hours

*May be offered either on the Junior College Campus or at the College of Education.

**Given on the Junior College Campus either by qualified Junior College faculty members or by College of Education faculty members through extension.

N.B. At least 30 semester hours must be taken in Groups I, II, III.

N.B. To meet the needs of various institutions, equivalents will be accepted.
College of Education—one semester .......................... 15-16 sem. hours

Education .......................................................... 9 sem. hours

( Including Directed Teaching Methods in Elementary
School Subjects Problems in Rural Education or Rural
Sociology or Curriculum)

Electives .......................................................... 6-7 sem. hours

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