



Western Michigan University
ScholarWorks at WMU

Western Michigan University Course Catalogs
(1904-present)

Western Michigan University

5-1955

Bulletin: Western Michigan College Undergraduate Catalog 1955-1956

Western Michigan University

Follow this and additional works at: https://scholarworks.wmich.edu/course_catalogs



Part of the Higher Education Commons

WMU ScholarWorks Citation

Western Michigan University, "Bulletin: Western Michigan College Undergraduate Catalog 1955-1956" (1955). *Western Michigan University Course Catalogs (1904-present)*. 92.
https://scholarworks.wmich.edu/course_catalogs/92

This Catalog is brought to you for free and open access by the Western Michigan University at ScholarWorks at WMU. It has been accepted for inclusion in Western Michigan University Course Catalogs (1904-present) by an authorized administrator of ScholarWorks at WMU. For more information, please contact wmu-scholarworks@wmich.edu.



U N D E R G R A D U A T E

BULLETIN

1955

CATALOG + ANNOUNCEMENTS

1956

WESTERN MICHIGAN COLLEGE

K A L A M A Z O O , M I C H I G A N

WESTERN MICHIGAN COLLEGE is located in Kalamazoo, midway between Chicago and Detroit. It is served by the New York Central and Pennsylvania Railroads, by Lake Central and North Central Airlines. Three major highways and numerous bus routes connect the city with other mid-western cities. The population of greater Kalamazoo is nearly 100,000.

DIRECTIONS FOR CORRESPONDENCE

Admissions Officer

Admissions, College literature, Credits, Provisional certificates, Scholarships and Transcripts

Comptroller

Business and financial arrangements

Dean of Men or Dean of Women

Student housing and part-time employment

Director of Extension and Adult Education

Adult Education, In-Service courses and credits, Consultative services to schools, Speakers for special occasions

Director of the Graduate Division

Graduate offerings

Director of Personnel and Guidance

Counselling and guidance

Director of Placement

Teacher placement

Director of the Summer Session

Summer session offerings

Director of the Division of Military Science

R.O.T.C.

Director of the Division of Rural Life and Education

Rural life and education, the community college cooperative teacher education program and State limited certificates

Director of the Division of Teacher Education

Permanent certification and professional courses

Director of the Division of Vocational and Practical Arts

Matters relating to vocational education

BULLETIN

WESTERN MICHIGAN COLLEGE KALAMAZOO, MICHIGAN

UNDERGRADUATE CATALOG

1954-1955

WITH

ANNOUNCEMENTS

FOR 1955-1956



This college is a member of the American Association of Colleges for Teacher Education, and of the North Central Association of Colleges and Secondary Schools. It is on the approved list of the Association of American Universities and the American Association of University Women.

Vol. 50

MAY, 1955

No. 5

Published five times annually by Western Michigan College, July, October, March, April and May. Entered as Second Class Matter, January 5, 1905, at the Post Office at Kalamazoo, Michigan, Under Act of August 24, 1912.



CONTENTS

	Page
Part I —Administration	
Administrative Officers	7-9
Admission	32-34
Calendar	5-6
Control	30
Degrees and Certificates	35-43
Enrollment Data	31
Faculty	11-27
Faculty Standing Committees	9-10
History	31
Michigan Veterans Vocational School	29
Student Responsibilities	45-52
Tuition, Fees and Living Expense	47-49
Part II—Curricula	53-105
See Page 53 for list.	
Part III—Courses of Study	107-247
See Page 107 for list.	
Part IV—Miscellaneous Information	249-270
Awards, Loans, Scholarships	249-255
Buildings and Grounds	256-258
Student Organizations	259-262
Student Opportunities	263-268
Student Related Services	268-270
Part V—Graduate Division	271-272

1955

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
..	..	3	4	5	6	7 8	..	..	1	2	3	4	5	..	..	1	2	3	4	5
9	10	11	12	13	14	15	6	7	8	9	10	11	12	6	7	8	9	10	11	12
16	17	18	19	20	21	22	13	14	15	16	17	18	19	13	14	15	16	17	18	19
23	24	25	26	27	28	29	20	21	22	23	24	25	26	20	21	22	23	24	25	26
30	31	..	..	..	..	..	27	28	..	..	..	..	..	27	28	29	30	31	..	..
..
APRIL							MAY							JUNE						
..	..	3	4	5	6	7 8	1	2	3	4	5	6	7	..	..	1	2	3	4	
10	11	12	13	14	15	16	8	9	10	11	12	13	14	5	6	7	8	9	10	11
17	18	19	20	21	22	23	15	16	17	18	19	20	21	12	13	14	15	16	17	18
24	25	26	27	28	29	30	22	23	24	25	26	27	28	19	20	21	22	23	24	25
..	..	..	..	..	..	..	29	30	31	..	..	..	..	26	27	28	29	30	..	..
..
JULY							AUGUST							SEPTEMBER						
..	..	3	4	5	6	7 8	..	1	2	3	4	5	6	..	..	..	..	1	2	3
10	11	12	13	14	15	16	7	8	9	10	11	12	13	4	5	6	7	8	9	10
17	18	19	20	21	22	23	14	15	16	17	18	19	20	11	12	13	14	15	16	17
24	25	26	27	28	29	30	21	22	23	24	25	26	27	18	19	20	21	22	23	24
31	..	..	..	..	..	..	28	29	30	31	..	..	..	25	26	27	28	29	30	31
..
OCTOBER							NOVEMBER							DECEMBER						
..	..	3	4	5	6	7 8	..	..	1	2	3	4	5	..	..	..	..	1	2	3
9	10	11	12	13	14	15	6	7	8	9	10	11	12	4	5	6	7	8	9	10
16	17	18	19	20	21	22	13	14	15	16	17	18	19	11	12	13	14	15	16	17
23	24	25	26	27	28	29	20	21	22	23	24	25	26	18	19	20	21	22	23	24
30	31	..	..	..	..	..	27	28	29	30	..	..	..	25	26	27	28	29	30	31
..

1956

JANUARY							FEBRUARY							MARCH						
S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S
1	2	3	4	5	6	7	..	..	1	2	3	4	..	..	1	2	3	4		
8	9	10	11	12	13	14	5	6	7	8	9	10	11	4	5	6	7	8	9	10
15	16	17	18	19	20	21	12	13	14	15	16	17	18	11	12	13	14	15	16	17
22	23	24	25	26	27	28	19	20	21	22	23	24	25	18	19	20	21	22	23	24
29	30	31	..	..	..	..	26	27	29	29	..	..	..	25	26	27	28	29	30	31
..
APRIL							MAY							JUNE						
1	2	3	4	5	6	7	..	..	1	2	3	4	5	..	..	1	2	3	4	
8	9	10	11	12	13	14	6	7	8	9	10	11	12	3	4	5	6	7	8	9
15	16	17	18	19	20	21	13	14	15	16	17	18	19	10	11	12	13	14	15	16
22	23	24	25	26	27	28	20	21	22	23	24	25	26	17	18	19	20	21	22	23
29	30	..	..	..	..	..	27	28	29	30	31	..	..	24	25	26	27	28	29	30
..
JULY							AUGUST							SEPTEMBER						
1	2	3	4	5	6	7	..	..	1	2	3	4	..	..	..	..	1	2	3	
8	9	10	11	12	13	14	5	6	7	8	9	10	11	2	3	4	5	6	7	8
15	16	17	18	19	20	21	12	13	14	15	16	17	18	9	10	11	12	13	14	15
22	23	24	25	26	27	28	19	20	21	22	23	24	25	16	17	18	19	20	21	22
29	30	31	..	..	..	..	26	27	28	29	30	31	..	23	24	25	26	27	28	29
..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	..	..	..	..	..	..
OCTOBER							NOVEMBER							DECEMBER						
..	1	2	3	4	5	6	..	..	..	1	2	3	..	..	..	..	1	2	3	
7	8	9	10	11	12	13	4	5	6	7	8	9	10	2	3	4	5	6	7	8
14	15	16	17	18	19	20	11	12	13	14	15	16	17	9	10	11	12	13	14	15
21	22	23	24	25	26	27	18	19	20	21	22	23	24	16	17	18	19	20	21	22
28	29	30	31	..	..	..	25	26	27	28	29	30	..	23	24	25	26	27	28	29
..	..	..	..	..	..	..	..	..	..	..	..	..	..	30	31	..	..	..	..	..

General Information

COLLEGE CALENDAR

Summer Session 1955 (6 weeks)

June 20, Monday	Enrollment
June 21, Tuesday	Recitations Begin
July 4, Monday	Independence Day
July 28, Thursday	Commencement
July 29, Friday	Session Closes

Semester I, 1955-1956

September 12 and 13, Monday and Tuesday	Freshman Days
September 14, Wednesday	Enrollment of Freshman, Seniors and Transferees
September 15, Thursday	Enrollment of Sophomores and Juniors
September 16, Friday	Recitations Begin
September 17, Saturday	Graduate Division Enrollment
November 23, Wednesday, 12:30 p.m.	Thanksgiving Recess Begins
November 28, Monday, 8:00 a.m.	Classes Resume
December 16, Friday, 4:30 p.m.	Christmas Recess Begins
January 3, 1956, Tuesday, 8:00 a.m.	Classes Resume
January 19-January 27	Final Examinations
January 22, Sunday, 2:30 p.m.	Mid-Year Commencement
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 a.m.	Recitations Begin
March 30, Friday, 12:30 p.m.	Spring Vacation Begins
April 9, Monday, 8:00 a.m.	Classes Resume
May 30, Wednesday	Memorial Day
May 31-June 8	Final Examinations
June 9, Saturday, 9:30 a.m.	Commencement
June 9, Saturday	Semester II Ends

Summer Session 1956 (6 weeks)

June 18, Monday	Enrollment
June 19, Tuesday	Recitations Begin
July 4, Wednesday	Independence Day
July 26, Thursday	Commencement
July 27, Friday	Summer Session Closes

COLLEGE CALENDAR

Semester I, 1956-1957

September 17 and 18, Monday and Tuesday	Freshman Days
September 19, Wednesday	Enrollment of Freshmen, Seniors and Transferees
September 20, Thursday	Enrollment of Sophomores and Juniors
September 21, Friday	Recitations Begin
September 22, Saturday	Graduate Division Enrollment
November 21, Wednesday, 12:30 p.m.	Thanksgiving Recess Begins
November 26, Monday, 8:00 a.m.	Classes Resume
December 19, Wednesday, 4:30 p.m.	Christmas Recess Begins
January 7, 1957, Monday, 8:00 a.m.	Classes Resume
January 24-February 1	Final Examinations
January 27, Sunday, 2:30 p.m.	Mid-Year Commencement
February 2, Saturday	Semester I Ends

Semester II, 1956-1957

February 9, Saturday	Graduate Division Enrollment
February 11, Monday	Enrollment of Freshmen and Seniors
February 12, Tuesday	Enrollment of Sophomores and Juniors
February 13, Wednesday, 8:00 a.m.	Recitations Begin
April 19, Friday, 12:30 p.m.	Spring Vacation Begins
April 29, Monday, 8:00 a.m.	Classes Resume
May 4, Saturday	Competitive Scholarship Examinations
May 30, Thursday	Memorial Day
June 6-June 14	Final Examinations
June 15, Saturday, 9:30 a.m.	Commencement
June 15, Saturday	Semester II Ends

Summer Session 1957 (6 weeks)

June 24, Monday	Enrollment
June 25, Tuesday	Recitations Begin
July 4, Thursday	Independence Day
August 1, Thursday	Commencement
August 2, Friday	Summer Session Closes

PART I—Administration

STATE BOARD OF EDUCATION

CHARLES G. BURNS

STEPHEN S. NISBET

WALTER F. GRIES

CLAIR L. TAYLOR

STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

CLAIR L. TAYLOR

EXECUTIVE COUNCIL OF PRESIDENTS

CHARLES L. ANSPACH
Central Michigan College

PAUL V. SANGREN
Western Michigan College

EUGENE B. ELLIOTT
Michigan State Normal College

HENRY A. TAPE
Northern Michigan College

OFFICERS OF ADMINISTRATION

Paul V. Sangren, Ph.D. President
A.B., A.M., Michigan State Normal; A.M., Ph.D., Michigan

Wynand Wichers, LL.D. Vice President
A.B., LL.D., Hope; A.M., Michigan; Litt.D., Rutgers.

John C. Hoekje, Ed.M. Dean of Administration-Registrar
A.B., Ed.M., Hope.

James H. Griggs, Ed.D. Director of Teacher Education
A.B., Harvard; A.M., Ed.D., Columbia.

George H. Hilliard, Ph.D. Director of Student Personnel and Guidance
A.B., A.M., Ph.D., Iowa.

George E. Kehrman, Ed.D. Director of Vocational Education
B.S., A.M., Ed.D., Missouri.

Elizabeth E. Lichty, Ph.D. Dean of Women
A.B., Lake Forest; A.M., Ph.D., Wisconsin.

Vern E. Mabie, A.M. Director of Placement and Alumni Relations
A.B., Western Michigan College; A.M., Michigan.

Cornelius B. MacDonald, A.M. Comptroller
A.B., Western Michigan College; A.M., Michigan.

George G. Mallinson, Ph.D. Director of Graduate Division
A.B., A.M., New York State College; Ph.D., Michigan.

J. Towner Smith, A.M. Dean of Men
A.B., Western Michigan College; A.M., Michigan.

Otto Yntema, A.M. Director of Extension and Adult Education
A.B., A.M., Hope.

KANLEY MEMORIAL CHAPEL

Leonard Gernant, A.M.

Dean of the Chapel

MAINTENANCE OFFICIALS

John A. Goldsworth	Superintendent, Buildings and Grounds
Irving Barber	Supervisor, Grounds Service
Robert H. Williams, B.S.	Supervisor, Supplies
Ralph Willis	Supervisor, Janitorial Services

MANAGERIAL EXECUTIVES

Donald N. Scott, A.M.	Manager, Union Building and Dormitories
John M. Thompson	Manager, Campus Stores

ADMINISTRATIVE ASSISTANTS

Mary B. Anderson, M.S.	Nursing Consultant
Isabel Beeler, A.M.	Foreign Student Adviser
Robert S. Bowers, Ph.D.	Director, Vandercreek Hall
Katherine B. Chapman	Director, Siedschlag Hall
Lewis Crawford, A.M.	Assistant Director, Student Personnel and Guidance
Homer M. Dunham, A.B.	Athletic Records and Publicity
Eva Falk, A.B.	Secretary, Dean of Women
Margaret Feather, A.B.	Secretary, Dean of Men
Leonard Gernant, A.M.	Associate Director, Adult Education
Louis A. Govatos, Ph.D.	Director, Ernest Burnham Hall
Kenneth R. Hawkins, A.M.	Assistant Manager, Campus Store
Berniece G. Hesselink	Financial Secretary
Mable Peabody Hinkle	Director, Walwood Hall
Edna L. Hirsch, B.S.	Secretary, Student Personnel and Guidance
Elizabeth Householder, A.M.	Assistant Dean of Women
Helen Inman, A.M.	Director, Davis Hall
Virginia M. Jarman	Secretary, Campus School
Lloyd E. Jesson, A.B.	Secretary to the President
Edith M. Lake, B.S.	Director, Spindler Hall
Eleanor Linden, B.S.	Secretary, Teacher Education
Margaret T. Mabie, A.B.	Secretary, Graduate Division
Clayton J. Maus, M.S.	Assistant Registrar
Marilyn Mott	Secretary, Dean of Administration
Loy Norrix, Ph.D.	Education Consultant
Archie Potter, A.M.	Director, Smith Burnham Hall
Myrna Ross	Secretary, Adult Education
Lucille E. Sanders, A.B.	Secretary, Rural Life and Education
Alice Smith	Placement Secretary
Leah M. Smith	Secretary, Extension
Russell A. Strong, A.B.	Publicity Director
Lucille Yost	Director, Draper Hall

ADMINISTRATIVE GROUPS

THE ADMINISTRATIVE COUNCIL

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

The members of the Council are: the President, Vice President, Dean of Administration-Registrar, Comptroller, Director of the Graduate Division, Director of Teacher Education, Director of Student Personnel and Guidance, and the 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.

Terms expiring 1955—Fred A. Beeler; Alice L. LeFevre; Willis F. Dunbar; Josephine Nicolette; Elsworth P. Woods; Marcella Faustman.

Terms expiring 1956—Clayton Maus; Cyril Stout; Otto Yntema.

Terms expiring 1957—George Bradley; Bernyce Cleveland; Russell H. Seibert (Chairman).

M.E.A. Representative—Leonard Gernant.

Ex-Officio, Paul V. Sangren; Wynand Wichers.

THE ATHLETIC BOARD OF CONTROL FOR 1954-55

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.

THE ATHLETIC BOARD OF CONTROL FOR 1955-56

Cornelius B. MacDonald, Comptroller, Chairman; Mitchell J. Gary, Director of Athletics; William J. Berry; Robert B. Trader; Wm. V. Weber, John W. Gill, appointed by the President; President of the W Club; Sports Editor of *The Western Herald*; President of the Student Council; The Registrar.

FACULTY STANDING COMMITTEES FOR 1955-56

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.

FACULTY COMMITTEES

- ADMISSIONS AND SCHOLARSHIP** G. Osborn, Chairman
1. Beeler, Chiara, Russell
 2. Feirer, Maus, Van Deventer
 3. Bradley, Hilliard, Osborn
- EDUCATIONAL POLICIES** R. Seibert, Chairman
1. Crawford, Hefner, Lumaree, Mable
 2. Griggs, Marburger, Woods, York, Maus
 3. Kohrman, Limpus, L. Meyer, Seibert, Wichers
- GRADUATE COUNCIL** G. Mallinson, Chairman
1. E. Carter, Knauss, LeFevre
 2. Griggs, Kohrman, Mallinson, Stokes
 3. Kuffel, Sebaly, Van Deventer
- INSTITUTIONAL SERVICE** O. Yntema, Chairman
1. Govatos, Hilliard, Wichers
 2. Galbraith, Garneau, McClure
 3. Berry, Buelke, Yntema
- PUBLIC RELATIONS** W. Wichers, Chairman
1. Mable, T. Smith, Yntema
 2. Master, Patton, Sebaly, Wichers
 3. Garneau, Kercher, MacFee, Strong
- RESEARCH** O. Frederick, Chairman
1. Bradley, DeMeyer, Giachino, Kuffel
 2. Brown, Butler, Frederick, Murphy
 3. Archer, Kercher, Kohrman
- STUDENT ACTIVITIES** T. Smith, Chairman
1. MacFee, T. Smith
 2. Householder, Luff, plus five students
 3. Russell, Stine, Govatos
- TEACHER EDUCATION AND RELIGION** L. Gernant, Chairman
- Clark, Gernant, Mowen, Woods, Sebaly, K. Rogers
 Ex officio: Vice President and the Chairman of the Educational Policies
 Committee
- VISITATION, RECRUITMENT AND ORIENTATION** Hoekje, Chairman
1. Beukema, Hoy, Starring
 2. Lawson, Schneider, Sebaly
 3. Mable, MacFee, Maus, Null

THE FACULTY

1954-1955

EMERITI

Laverne Argabright, A.M.	Associate Professor—Biology
Helen M. Barton, A.M.	Assistant Professor—Education
Grover C. Bartoo, A.M.	Professor—Mathematics
Amelia Bauch, A.M.	Assistant Professor—Education
Elsie L. Bender, A.M.	Assistant Professor—Education
Jane A. Blackburn, A.M.	Assistant Professor—Education
Harold Blair, A.M.	Professor—Mathematics
Leoti C. Britton, M.S.	Assistant Professor—Music
Grace L. Butler, A.M.	Assistant Professor—Education
Edith M. Eicher, A.M.	Associate Professor—English
John P. Everett, Ph.D.	Professor—Mathematics
Anna L. French	Librarian
Harry P. Greenwall, A.M.	Associate Professor—Languages
Marion I. Hall, A.M.	Assistant Professor—Education
Lucia C. Harrison, M.S.	Associate Professor—Geography
M. Amelia Hockenberry, A.B.	Associate Professor—Languages
Leslie A. Kenoyer, Ph.D.	Professor—Biology
Katherine A. Mason, A.M.	Assistant Professor—Education
Eloise McCorkle, A.M.	Assistant Professor—Education
Florence E. McLouth	Assistant Professor—Education
Mary E. Moore, B.S.	Assistant Professor—Home Economics
Ray C. Pellett, L.H.D.	Dean of Men
Effie B. Phillips, A.M.	Assistant Professor—Education
Herbert W. Read, A.M.	Associate Professor—Physical Education
Sophia Reed, A.M.	Professor—Home Economics
Nancy E. Scott, Ph.D.	Professor—History
G. Edith Seekell, A.M.	Associate Professor—History
Laura A. Shaw, A.M.	Professor—Speech
Marion J. Sherwood, A.M.	Associate Professor—Industrial Education
D. C. Shilling, Ph.D.	Professor—Political Science
Bess Baker Skillman, A.M.	Assistant Professor—Education
Lavine Spindler, A.B.	Professor—Education
George Sprau, A.M.	Professor—English
Roxanna A. Steele, A.M.	Associate Professor—Education
Louise B. Steinway, A.M.	Assistant Professor—Education
Louise F. Struble, A.M.	Assistant Professor—Education
Clella Stufft, A.M.	Assistant Professor—Education
Elmer H. Wilds, Ed.D.	Professor—Education

HEADS OF DEPARTMENTS

- Hubert G. Archer, A.M. Superintendent, Paw Paw Schools
A.B., Central Michigan College; A.M., Michigan.
- William J. Berry, Ph.D. Geography and Geology
A.B., Iowa State Teachers College; M.S., Ph.D., Chicago.
- William R. Brown, Ph.D. English
A.B., Texas; A.M., Ph.D., Harvard.
- Roy C. Bryan, Ph.D. Director, Campus Schools
A.B., Monmouth College; B.Ed., A.M., Ph.D., Teachers College,
Columbia.
- Charles H. Butler, Ph.D. Mathematics
A.M., Chicago; Ph.D., Missouri.
- Elwyn F. Carter, Ed.D. Music
A.B., Alma College; A.M., Ed.D., Teachers College, Columbia.
- Howard D. Corbus, M.S. Agriculture
B.S., Michigan State; M.S., Cornell.
- John L. Feirer, Ed.D. Industrial Arts
A.B., Stout Institute; A.M., Minnesota; Ed.D., Oklahoma.
- Orie I. Frederick, Ph.D. Research
A.B., A.M., Findlay College; Ph.D., Michigan.
- Lilyan K. Galbraith, Ed.D. Home Economics
B.S.H.E.; M.S.H.E., West Virginia; Ed.D., Pennsylvania State.
- Mitchell J. Gary, A.M. Physical Education for Men
B.S., A.M., Minnesota.
- Joseph W. Giachino, Ed. D. Vocational-Industrial and Technical Education
B.S., Wayne; A.M., Detroit; Ed.D., Pennsylvania State.
- Comet Gibson, Lt. Col.; B.S. Military Science and Tactics
B.S., Oregon.
- James H. Griggs, Ed.D. Education
A.B., Harvard; A.M., Ed.D., Teachers College, Columbia.
- Leonard C. Kercher, Ph.D. Sociology
A.B., A.M., Ph.D., Michigan.
- James O. Knauss, Ph.D. History
A.B., Lehigh; A.M., Harvard; Ph.D., Cornell.
- Stanley Kuffel, Ed.D. Psychology
B.A., St. Thomas; A.M., Minnesota; Ed.D., Western Reserve.
- Alice Louise LeFevre, M.S. Librarianship
A.B., Wellesley College; M.S., Columbia.
- Floyd W. Moore, Ph.D. Economics
A.B., Albion College; A.M., Michigan; Ph.D., Northwestern.
- Alfred H. Nadelman, Ph.D. Paper Technology
A.M., Ph.D., Berlin.

Gerald Osborn, Ph.D.	Chemistry
A.B., Michigan State Normal College; M.S., Ph.D., Michigan.	
Gayle Pond, A.M.	Health Service
Presbyterian Hospital, Chicago; B.S., Northwestern; A.M., Columbia.	
Wm. McKinley Robinson, Ph.D.	Rural Life and Education
B.S., Hiram College; A.M., Ph.D., Teachers College, Columbia.	
Paul Rood, Ph.D.	Physics
A.B., Albion College; A.M., Ph.D., Michigan.	
Arnold E. Schneider, Ph.D.	Business Studies
B.S., Iowa State Teachers College; A.M., Iowa; Ph.D., Michigan.	
Lydia Siedschlag, A.M.	Art
B.A.E., The Art Institute of Chicago; A.M., Teachers College, Columbia.	
Marion R. Spear, O.T.R., A.M.	Occupational Therapy
B.S., Massachusetts School of Art; A.M., Michigan.	
Mathilde Steckelberg, A.M.	Languages
A.B., Nebraska; A.M., Teachers College, Columbia.	
Katharine M. Stokes, A.M.L.S.	Librarian
B.S., Simmons College; A.M.L.S., Michigan.	
William C. Van Deventer, Ph.D.	Biology
A.B., Central College; M.A., Ph.D., Illinois	
William V. Weber, Ph.D.	Political Science
A.B., A.M., Ph.D., Iowa.	
Elsworth P. Woods, Ph.D.	Basic Studies
A.B., A.M., Ph.D., Iowa.	
Crystal Worner, A.M.	Physical Education for Women
A.B., Michigan State Normal College; A.M., Michigan.	
Zack York, Ph.D.	Speech
A.B., Western Michigan College; Ph.D., Wisconsin.	

PROFESSORS

Fred A. Beeler, Ph.D.	Mathematics
B.S., University of Alaska; A.M., Indiana; Ph.D., Michigan.	
Albert B. Becker, Ph.D.	Speech
A.B., Western Michigan College; A.M., Michigan; Ph.D., Northwestern.	
Howard F. Bigelow, A.M.	Economics
A.B., Wesleyan; A.M., Harvard.	
Robert S. Bowers, Ph.D.	Economics
A.B., Kansas Wesleyan; A.M., American University; Ph.D., Wisconsin.	
Charles T. Brown, Ph.D.	Speech
A.B., Westminster College; A.M., Ph.D., Wisconsin.	

William H. Cain, A.M. A.B., Michigan; A.M., Teachers College, Columbia.	Mathematics
Theodore L. Carlson, Ph.D. A.B., Augustana College; A.M., Ph.D., Illinois.	Economics
Homer L. J. Carter, A.M. (Director of Psycho-Educational Clinic) B.S., Wayne; A.M., Ohio State.	Psychology
Clara R. Chiara, Ph.D. B.S., Miami; A.M., Western Reserve; Ph.D., Ohio State.	Education
Willis Frederick Dunbar, Ph.D. B.A., Kalamazoo College; A.M., Ph.D., Michigan.	History
Manley M. Ellis, Ph.D. A.B., A.M., Ph.D., Michigan.	Education
Wallace L. Garneau, A.M. A.B., Western Michigan College; A.M., Michigan.	Speech
Donald R. Hagerman, D.D.S. A.B., D.D.S., Michigan.	Dental Specialist
Frank G. Harrell, M.D. A.B., Pacific Union College; M.D., College of Medical Evangelists.	Medical Director
Frank J. Hinds, A.M. A.B., Western Michigan College; A.M., Michigan.	Biology
Lawrence G. Knowlton, Ph.D. A.B., Oberlin College; Ph.D., Cornell.	Chemistry
Harry W. Lawson, A.M. B.S., Boston; A.M., Michigan.	Personnel and Guidance
Robert M. Limpus, Ph.D. A.B., Northwestern; A.M., Ph.D., Chicago.	English
Morris McClure, Ed.D. A.B., Western Michigan College; A.M., Michigan; Ed.D., Michigan State.	Education
Margaret E. MacMillan, Ph.D. A.B., A.M., Michigan; Ph.D., Columbia.	History
Charles H. Maher, A.M. A.B., Western Michigan College; A.M., West Virginia.	Physical Education for Men
George G. Mallinson, Ph.D. A.B., A.M., New York State College for Teachers; Ph.D., Michigan.	Education and Psychology
A. Edythe Mange, Ph.D. A.B., Greenville College; A.M., Ph.D., Illinois.	History
Arthur J. Manske, Ph.D. A.B., Wayne; A.M., Ph.D., Teachers College, Columbia.	Education
Walter G. Marburger, M.S. A.B., M.S., Michigan.	Physics

- Holon Matthews, Ph.D. Music
B.M., M.M., Cincinnati College of Music; Ph.D., Rochester.
- Leonard V. Meretta, M.M. Music
B.M., M.M., Michigan.
- Lillian H. Meyer, Ph.D. Chemistry
A.B., M.S., Washington; Ph.D., Illinois.
- Ralph N. Miller, Ph.D. English
A.B., Wayne; A.M., Michigan; Ph.D., Northwestern.
- Robert R. Russel, Ph.D. History
A.B., McPherson College; A.M., Kansas; Ph.D., Illinois.
- Alexander Schuster Music
Graduate of Odessa Conservatory and of the Hochschule,
Berlin.
- Avis L. Sebaly, Ph.D. Education
A.B., Western Michigan College; A.M., Ph.D., Michigan.
- Russell H. Seibert, Ph.D. History
A.B., College of Wooster; A.M., Chicago; Ph.D., Ohio State.
- Edwin B. Steen, Ph.D. Biology
A.B., Wabash College; A.M., Columbia; Ph.D., Purdue.
- Cyril L. Stout, Ph.D. Geography and Geology
B.S., Knox College; Ph.M., Wisconsin; Ph.D., George Peabody
College for Teachers.
- Julius Stulberg, A.M. Music
B.S., A.M., Michigan State.
- Sara Ruth Swickard, Ph.D. Education
B.S., M.A., Ph.D., Ohio State.
- Charles Van Riper, Ph.D. Speech
A.B., A.M., Michigan; Ph.D., Iowa.
- Elmer C. Weaver, A.M. Industrial Arts
B.S., A.M., Teachers College, Columbia.
- Merrill R. Wiseman, M.S.P.H. Biology
A.B., Ohio Northern; M.S.P.H., Michigan.

ASSOCIATE PROFESSORS

- Rachel Acree, A.M. Home Economics
B.S., Kentucky; A.M., Teachers College, Columbia.
- James O. Ansel, Ed.D. Rural Life and Education
A.B., Western Michigan College; A.M., Northwestern; Ed.D.,
Teachers College, Columbia.
- Maude W. Arthur, A.M. Mathematics, Paw Paw School
M.Pd., Colorado State Teachers College; A.B., Iowa State
Teachers College; A.M., Teachers College, Columbia.
- Harriette V. Bartoo, Ph.D. Biology
A.B., Hiram College; Ph.D., Chicago.

- Isabel Beeler, A.M. Personnel and Guidance
R.N., Ford Hospital, Detroit; B.S., A.M., Michigan.
- Elmer R. Beloof, Ed.D. Campus School, Music
B.M., B.B.S., Illinois; A.M., Ed.D., Teachers College, Columbia.
- Henry J. Beukema, A.M. Vocational-Industrial and Technical Education
B.S., Western Michigan College; A.M., Michigan.
- Mary Bottje, A.M. Physical Education for Women
A.B., Western Michigan College; A.M., Michigan.
- James W. Boynton, M.S. Chemistry
A.B., Western Michigan College; M.S., Michigan.
- George Edgar Bradley, Ph.D. Physics
A.B., Miami; M.S., Ph.D., Michigan.
- Lawrence J. Brink, A.M. Vocational-Industrial and Technical Education
A.B., Western Michigan College; A.M., Michigan.
- John Alton Buelke, Ed.D. Education
B.S., Wisconsin State Teachers College; A.M., Northwestern;
Ed.D., Cincinnati.
- William L. Burdick, M.B.A. Business Studies
B.A., Milton College; M.B.A., Wisconsin.
- Samuel L. Clark, Ph.D. Political Science
A.B., Ph.D., Chicago.
- George Dales, A.M. Physical Education for Men
B.S., Miami; A.M., Michigan.
- Robert J. Eldridge, M.S. Chemistry
B.S., Kalamazoo College; M.S., Chicago.
- Robert Elias, M.S. Paper Technology
B.A., Lawrence College; M.S., Institute of Paper Chemistry.
- Herbert E. Ellinger, A.M. Vocational-Industrial and Technical Education
B.S., Western Michigan College; A.M., Michigan.
- 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; Ph.D., Purdue.
- Wendall B. Fidler, Ed.M. Distributive Education
B.S., Ohio State; Ed.M., Pittsburgh.
- Pearl L. Ford, A.M. Mathematics
A.B., Western Michigan College; A.M., Michigan.
- Robert Friedmann, Ph.D. History and Philosophy
A.B., Goshen College; Ph.D., Vienna.
- 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., Michigan.
- John W. Gill, A.M. Associate Director of Athletics
A.B., Western Michigan College; A.M., Teachers College,
Columbia.
- M. M. Gillender, A.M. Principal, Paw Paw High School
A.B., Western Michigan College; A.M., Michigan.
- Louis A. Govatos, Ph.D. Education
B.S., Minnesota; M.S., Ph.D., Michigan.
- Ethel M. Green, A.M. Music
A.B., Ball State Teachers College; A.M., Teachers College,
Columbia.
- Herbert H. Hannon, Ed.D. Mathematics
A.B., Western Michigan College; A.M., Michigan; Ed.D., Colo-
rado State College.
- John B. Healey, J.D. Business Studies
B.C.S., Ph.B., A.M., J.D., DePaul.
- Harry S. Hefner, A.M. Art
A.B., Western Michigan College; A.M., Teachers College, Co-
lumbia.
- H. Glenn Henderson, M.M. Music
M.M., Western Michigan College.
- Paul B. Horton, Ph.D. Sociology
A.B., Kent State; Ph.D., Ohio State.
- Joseph T. Hoy, A.M. Physical Education for Men
B.S., Western Michigan College; A.M., Michigan.
- Fred S. Huff, A.M. Industrial Arts
A.B., Western Michigan College; A.M., Michigan.
- Chester L. Hunt, Ph.D. Sociology
A.B., Nebraska Wesleyan; A.M., Washington; Ph.D., Nebraska.
- Mate Graye Hunt, A.M. Librarianship
B.S.L.S., George Peabody College for Teachers; A.B., A.M.,
Southern Methodist.
- Roy E. Joyce, M.S. Biology
A.B., Ohio Wesleyan; M.S., Ohio State.
- George A. Kirby, A.M. Business Studies
B.Ed., Western Illinois State Teachers College; A.M., Columbia.
- Eunice E. Kraft, A.M. Languages
A.B., A.M., Michigan.
- Haym Kruglak, Ph.D. Physical Science
A.B., A.M., Wisconsin; Ph.D., Minnesota.
- Angelo LaMariana, Ed.D. Music
B.S.M., A.M.M.E., New York; Ed.D., Teachers College, Co-
lumbia.

Anna E. Lindblom, A.M. A.B., A.M., Iowa.	Speech
Lester R. Lindquist, A.M. B.S., A.M., Michigan.	Business Studies
Marguerite Logan, M.S. A.B., Iowa State Teachers College; M.S., Chicago.	Geography and Geology
M. Dezena Loutzenhiser, A.M. B.S., Northwestern State Teachers College; A.M., Washington.	English
Andrew C. Luff, A.M. B.S., Wayne; A.M., Michigan.	Vocational-Industrial and Technical Education
Phoebe Lumaree, M.S.L.S. A.B., Western Michigan College; B.S., Simmons College; M.S.L.S., Columbia.	Assistant Librarian
Helen E. Master, A.M. A.B., A.M., Michigan.	English
Jack W. Murphy, Ph.D. B.S., M.S., Ph.D., Wisconsin.	Speech
Don W. Nantz, Ed.D. B.S., M.S., Stout Institute; Ed.D., Bradley.	Vocational-Industrial and Technical Education
Charles S. Nichols, A.M. A.B., Western Michigan College; A.M., Michigan.	Industrial Arts
Lucille A. Nobbs, A.M. A.B., Kalamazoo College; A.M., Michigan.	English
Frances E. Noble, Ph.D. A.B., A.M., Ph.D., Northwestern.	Languages
Thomas W. Null, A.M. A.B., Ottawa; A.M., Iowa.	Business Studies
Joseph K. Peterson, A.M. A.B., Vanderbilt; A.M., Harvard.	Mathematics
Ernest Jack Petoskey, A.M. B.S., A.M., Michigan.	Physical Education for Men
Don O. Pullin, A.M. B.S., Wayne; A.M., Teachers College, Columbia.	Industrial Arts
Glen C. Rice, A.M. B.S., A.M., Western Michigan College.	Business Studies
Frederick J. Rogers, A.M. A.B., Western Michigan College; A.M., Columbia.	English
Herman E. Rothfuss, Ph.D. B.S., A.M., Ph.D., Minnesota	Languages
Norman K. Russell, A.M. B.S., Western Michigan College; A.M., Michigan.	Vocational-Industrial and Technical Education
Conway C. Sams, A.M. B.S., Carson-Newman College; A.M., Michigan.	Mathematics

- Esther D. Schroeder, A.M. Education
B.S., Bemidji State Teachers College; A.M., George Peabody
College for Teachers.
- Ethel Shimmel, A.M. Campus School, Fourth Grade
A.B., Western Michigan College; A.M., Teachers College,
Columbia.
- Thomas C. Slaughter, A.M. Physical Education for Men
B.S., Western Michigan College; A.M., Michigan.
- Charles A. Smith, A.M. English
A.B., Western Michigan College; A.M., Michigan.
- Carl B. Snow, A.M. Education
B.S., Western Michigan College; A.M., Columbia.
- Dorothea S. Snyder, A.M. Music
A.B., Western Michigan College; A.M., Michigan.
- Raymond F. Sorenson, A.M. Physical Education for Men
B.S., Western Michigan College; A.M., Michigan.
- Charles R. Starring, A.M. History
A.B., A.M., Columbia.
- Leo C. Stine, Ph.D. Political Science
B.Ed., Illinois State Normal; A.M., Ph.D., Illinois.
- Bess L. Stinson, A.M. Campus School, Kindergarten
B.S., A.M., George Peabody College for Teachers.
- Betty Taylor, A.M. Home Economics
B.S., Iowa State College; A.M., Teachers College, Columbia.
- Adrian Trimpe, A.M. Distributive Education
B.S., Western Michigan College; A.M., Michigan.
- Ruth Van Horn, A.M. English
A.B., A.M., Michigan.
- Reva Volle, A.M. Home Economics
B.S., Illinois; A.M., Teachers College, Columbia.
- Louise J. Walker, A.M. English
A.B., Albion College; A.M., Columbia.
- Robert B. Wetnight, Ph.B., C.P.A. Business Studies
Ph.B., Toledo.
- Roy J. Wietz, A.M. Physical Education for Men
B.S., Illinois; A.M., Columbia.
- Robert N. Zabe, M.S. Paper Technology
B.S., M.S., Maine.

ASSISTANT PROFESSORS

- Sam B. Adams, A.M. Music
A.B., Kentucky; A.M., Teachers College, Columbia.
- Francis W. Allen, A.M.L.S. Library
B.S., Colby College; A.B.L.S., A.M.L.S., Michigan.

Agnes E. Anderson, M.S. B.S., Ferris Institute; M.S., Tennessee.	Business Studies
Thelma E. Anton, A.M. A.B., Michigan; A.M., Middlebury College.	English
Eston J. Asher, Ph.D. B.S., M.S., Ph.D., Purdue.	Psychology
Grover C. Baker, A.M. A.B., Michigan State Normal College; A.M., Michigan.	Physics
Lee O. Baker, M.S. B.S., Wisconsin State College; M.S., Wisconsin.	Agriculture
Edith Carlson Beals, B.M. B.M., MacPhail School of Music.	Music, Paw Paw School
Margaret Felts Belooof, B.S.M. B.S.M., Oberlin.	Music
Owen L. Berger, A.M. B.M., M.M., Boguslawski College of Music; B.S., A.M., Teachers College, Columbia.	Music
Ada E. Berkey, A.M. A.B., Mount Holyoke; A.B.L.S., Michigan; A.M., Iowa.	Reference Librarian
Eugene S. Bierer, Captain; B.S. B.S., U.S. Military Academy.	R.O.T.C.
Donald J. Black, B.S. A.B., Kalamazoo College; B.S.R.E., Valparaiso Technical In- stitute.	Vocational-Industrial and Technical Education
Ruth Boot, M.Ed. B.S., Illinois; M.Ed., Wayne.	Coordinator of Guidance, Paw Paw School
Helen Brown, A.M. B.S., A.M., Northwestern.	Physical Education for Women
Russell W. Brown, M.M. B.P.S.M., Oklahoma A. and M.; M.M., Notre Dame.	Music
Georgiann Burge, A.M. A.B., North Texas State Teachers College; A.M., Michigan.	English
Clara N. Bush, A.M. A.B., Western Michigan College; A.M., Michigan.	Speech
Elizabeth L. Caughran, A.M. A.B., Russell Sage College; A.M., Teachers College, Columbia.	Speech
Beatrice L. Chait, A.M. B.A., Hunter College; A.M., Michigan.	Campus School, Fifth Grade
Faye S. Chance, M.S. B.S., M.S., Ball State Teachers College.	Campus School, Business Studies
Edith E. Clark, A.B.L.S. A.B., Western Michigan College; A.B.L.S., Michigan.	Circulation Librarian
Bernyce Cleveland, A.M. A.B., Western Michigan College; A.M., Middlebury College.	Campus School, English

- LaDeitrich O. Coggin, Captain; A.B. R.O.T.C.
A.B., Mississippi.
- Carl R. Cooper, A.M. Personnel and Guidance
A.B., Western Michigan College; A.M., Teachers College,
Columbia.
- George K. Cooper, M.B.A. Business Studies
B.Ed., Western Illinois State College; M.B.A., Indiana.
- Isabel Crane, A.M. Personnel and Guidance
B.S., Battle Creek College; A.M., Teachers College, Columbia.
- Lewis D. Crawford, A.M. Personnel and Guidance
B.S., Western Michigan College; A.M., Michigan.
- Golda L. Crisman, A.M. Campus School, Girls' Advisor
A.B., Western Michigan College; A.M., Michigan.
- Robert E. S. Crowe, Major; M.B.A. R.O.T.C.
A.B., Seton Hall College; M.B.A., Northwestern.
- Hazel M. DeMeyer, B.S.L.S. Order Librarian
A.B., Western Michigan College; B.S.L.S., Columbia.
- Elizabeth Deur, A.M. Campus School Seventh Grade
A.B., Western Michigan College; A.M., Michigan.
- Raymond C. Deur, A.M. Campus School Science
B.S., Western Michigan College; A.M., Michigan.
- Eleanor N. Douglass, B.S. Physical Education for Women
B.S., Sargent College.
- Cora Ebert, A.M. Campus School, Eighth Grade
A.B., Iowa State Teachers College; A.M., Columbia.
- Sherwood Baker Eck, M.B.A. Economics
B.S., University of Richmond; M.B.A., Chicago.
- George N. Edwards, Captain; B.S. R.O.T.C.
B.S., Colorado.
- George O. Eglund, A.M. Speech
A.B., A.M., Iowa
- Edward O. Elsasser, Ph.D. History
A.B., Bethany College; M.A., Clark; Ph.D., Chicago.
- Bryan Emmert, A.M. Social Science, Paw Paw School
Ph.B., A.M., Chicago.
- William E. Engbretson, A.M. Education
A.B., Western Michigan College; A.M., Michigan State.
- Carl J. Engels, M.A. Campus School, Science
B.S., Wisconsin State Teachers College; M.A., Michigan.
- Wayne A. Falan, A.M. Physical Education, Paw Paw School
B.S., Western Michigan College; A.M., Michigan.
- Marcella S. Faustman, A.M. Music
B.S., A.M., Teachers College, Columbia.

Edwin S. Fox, B.S.C.E. B.S.C.E., Michigan.	Physics
Rosalie P. Fraser, A.M.L.S. A.B., Alabama; A.M.L.S., Michigan.	Librarian, Paw Paw School
Gwendolyn Freer, A.M. A.B., Lombard College; A.M., Michigan.	English, Paw Paw School
John R. Freund, A.M. A.B., A.M., Miami.	English
Jack J. Frey, M.A. B.S., Western Michigan College; M.A., Michigan.	Campus School, Music
A. Verne Fuller, A.M. A.B., Albion College; A.M., Michigan.	Biology
Helen Elizabeth Gibbens, R.N. Borgess Hospital, Kalamazoo; B.S., Nazareth College.	Health Service
Elizabeth Giedeman, M.A. B.S., Miami University; M.A., Michigan.	Campus School, Languages
Grace I. Gish, A.M. B.S., Kansas State College; A.M., Chicago.	Campus School, Eighth Grade
Emma B. Goodell, B.S. B.S., Western Michigan College.	Rural Education
Clarence W. Hackney, A.M. A.B., Western Michigan College; A.M., Michigan.	Campus School, Mathematics
Lois Hamlin, M.F.A. B.S., Western Michigan College; M.F.A., Columbia.	Occupational Therapy
Deldee M. Herman, A.M. A.B., Western Michigan College; A.M., Michigan.	Speech
Arlene E. Hollinger, A.M. A.B., Western Michigan College; A.M., Northwestern.	Special Education, Paw Paw
Frank C. Householder, A.M. A.B., Western Michigan College; A.M., Michigan.	English
Wendall J. Hunt, Ed.D. B.S., M.A., Nebraska; Ed.D., Teachers College, Columbia.	Elementary Principal, Paw Paw
Doris A. Hussey, B.S. B.S., Western Michigan College.	Physical Education for Women
Alice C. Jantzen, O.T.R. A.B., Wellesley; O.T.R., Boston O.T. School.	Occupational Therapy
Frank W. Jerse, M.S. B.S., Illinois; M.S., Wisconsin.	Campus School, Eighth Grade
A. Elizabeth Johnson, A.M. A.B., Kalamazoo College; A.M., Teachers College, Columbia.	Campus School, Sixth Grade
Herb B. Jones, A.M. B.S., Nebraska State Teachers College; A.M., Mexico.	Languages
John G. Kemper, A.M. B.F.A., Ohio State; A.M., Teachers College, Columbia.	Art

- Edna F. Whitney Kirby, A.M. Business Studies
B.S., Western Michigan College; A.M., Michigan.
- Ruth Yates Kirby, A.M. Languages, Paw Paw School
A.B., University of Washington; A.M., Illinois.
- Rosalia A. Kiss, O.T.R. Occupational Therapy
B.S., Wayne; O.T.R., Michigan State Normal College.
- Daniel A. Kyser, M.M. Music
B.P.S.M., Oberlin College; M.M., Michigan.
- Margaret Large, A.M. Physical Education for Women, Campus School
A.B., Toronto; A.M., Wayne.
- D. B. Leonardelli, M.A. Education
B.S., Northern Michigan College; M.A., Illinois.
- Carl V. Lindeman, M.S. Industrial Arts, Paw Paw School
B.S.E.E., Highland Park College; A.B., Des Moines; M.S., Iowa
State College.
- Jean E. Lowrie, B.S.L.S. Campus School Library
A.B., Keuka College; B.S.L.S., Western Reserve.
- Robert H. Lundy, A.M. English, Paw Paw School
B.S., Western Michigan College; A.M., Michigan State
- Winifred Congdon MacFee, A.M. Librarian, Educational Service
B.S., Western Michigan College; A.M., Michigan.
- Jean G. Malmstrom, A.M. English
A.B., A.M., Washington University.
- Jerome G. Manis, Ph.D. Sociology
B.A., Wayne; M.A., Chicago; Ph.D., Columbia.
- Emeline J. McCowen, A.M. Campus School, Third Grade
A.B., National College of Education; A.M., Teachers College,
Columbia.
- Dorothy J. McGinnis, A.M. Psychology
B.S., Western Michigan College; A.M., Ohio State.
- Vincent M. McGugan, A.M. English, Paw Paw School
A.B., A.M., Western Michigan College.
- Murrell B. McNeil, Major; A.B. R.O.T.C.
A.B., Nebraska
- Elizabeth L. McQuigg, A.M. Second Grade, Paw Paw School
B.S., A.M., Teachers College, Columbia.
- Jack R. Meagher, A.M. Mathematics
B.A., Western Michigan College; A.M., Michigan.
- Arthur Michmerhuizen, A.M. Social Science, Paw Paw School
A.B., A.M., Hope College.
- Lois B. Monroe, A.M. Campus School, Foreign Languages
A.B., Western Michigan College; A.M., Michigan.
- Howard A. Mowen, A.M. History
A.B., Baldwin-Wallace College; A.M., Western Reserve.

- Louise C. Myers, A.M. First Grade, Paw Paw School
B.S., A.M., Teachers College, Columbia.
- Arnold G. Nelson, Ph.D. English
A.B., Hamline; M.A., Ph.D., Minnesota.
- Josephine Nicolette, A.M. Sixth Grade, Paw Paw School
A.B., Western Michigan College; A.M., Michigan.
- Geraldine Ortaggio, M.S. Commerce, Paw Paw School
B.S., Kent State; M.S., Western Reserve.
- Hilda Mary Oster, A.M. Mathematics, Paw Paw School
A.B., Western Michigan College; A.M., Michigan.
- Lauri E. Osterberg, A.M. Chemistry
A.B., Western Michigan College; A.M., Michigan.
- Hazel I. Paden, A.M. Art
B.S., Massachusetts School of Arts; A.M., Syracuse.
- Marguerite Patton, A.M. Economics
A.B., Toronto; B.M., Michigan State; A.M., Toronto.
- Stanley K. S. Phillips, A.B. Art
A.B., Western Michigan College.
- Jack C. Plano, Ph.D. Political Science
B.A., Ripon; M.A., Ph.D., Wisconsin.
- John H. Plough, M.A. Industrial Arts
B.S., Western Michigan College; M.A., Michigan.
- Myrtle M. Powers, M.S. Biology
M.S., Michigan State.
- Leila Francis Presson, M.S. Home Economics
B.S., Tennessee; M.S., Iowa.
- Peggy Ann Ramstad, M.M.E. Campus School Music
B.M., M.M.E., Minneapolis College of Music.
- Paul L. Randall, B.S.L.S. Circulation Librarian
A.B., Western Michigan College; B.S.L.S., Illinois.
- Nellie N. Reid, A.M. Sociology
A.B., Iowa; A.M., Chicago.
- Ronald Rex, A.M. Eighth Grade, Campus School
B.S., Ball State; A.M., Western Michigan College.
- Edward E. Reynolds, M.S. Biology
A.B., Olivet College; M.S., Iowa.
- Robert E. Ring, B.S. Vocational-Industrial and Technical Education
B.S., Purdue.
- Lois Robinson, A.M. Education
B.S., Western Michigan College; A.M., Michigan.
- Katherine Rogers, A.M. Campus School, English
A.B., Kalamazoo College; A.M., Columbia.
- Gladys Rowe, B.S. Campus School, Home Economics
B.S., Michigan State.

- William A. Sack, A.B. Campus School, English, Speech
A.B., Western Michigan College.
- Hazel E. Cleveland Saye, A.B.L.S. Circulation Librarian
A.B., Western Michigan College; A.B.L.S., Michigan.
- Neil L. Schoenhals, A.M. Campus School, Industrial Arts
B.S., Western Michigan College; A.M., Michigan.
- William A. Schreiber, B.S. Vocational-Industrial and Technical Education
B.A., Cooper Union College.
- Helen G. Sellers, A.M. English
A.B., Michigan State College; A.M., Wisconsin.
- Hester B. Skehan, M.A. Kindergarten, Paw Paw School
A.B., George Washington; M.A., Western Michigan College.
- M. Elizabeth Smutz, A.M. Campus School, Art
A.B., Oberlin College; A.M., Teachers College, Columbia.
- Ruth Smythe, A.M. Fourth Grade, Paw Paw School
B.S., Michigan State Normal College; A.M., Michigan.
- Emil J. Sokolowski, A.M. Business Studies
B.S., Detroit Institute of Technology; A.M., Michigan.
- Marion A. Spalding, A.M. Physical Education, Paw Paw School
A.B., Western Michigan College; A.M., Teachers College,
Columbia.
- Nellie E. Sparks, M.S. Campus School, Physical Education
B.S., M.S., Illinois State Normal.
- Opal Stamm, A.M. Home Economics
A.B., Berea College; A.M., Teachers College, Columbia.
- Evelyn Steketee, A.M. Personnel and Guidance
A.B., Hope College; A.M., Illinois.
- Fred Stevens, A.M. Campus School, Physical Education and Science
B.S., A.M., Western Michigan College.
- Elaine L. Stevenson, A.M. Art
A.B., Western Michigan College; B.A.E., The Art Institute of
Chicago; A.M., Ohio State.
- Rufus R. Summarell, Captain; B.S. R.O.T.C.
B.S., Massachusetts.
- Charlotte Bishop Sumney, A.M. Psychology
B.S., Western Michigan College; A.M., Michigan.
- Marion Tamin, A.M. Languages
Ph.B., Chicago; A.M., Teachers College, Columbia.
- Robert D. Taylor, M.A. Campus School, Social Studies
B.A., Western Michigan College; M.A., Michigan.
- Nancy L. Thomas, A.M. Campus School, Second Grade
B.S., A.M., Western Michigan College.
- Joseph Carl Torok, A.M. English
A.B., Kalamazoo College; A.M., Chicago.

Robert B. Trader, M.S. B.S., Indiana; M.S., Pittsburgh.	Business Studies
Iona Loyd Troyer, M.A. B.S., Central Michigan College; M.A., Teachers College, Columbia.	Rural Education
Gertrude Van Zee, M.A.L.S. A.B., Hope College; M.A.L.S., Michigan.	Cataloging Librarian
Edwin O. Vaughn, A.M. A.B., Michigan State Normal College; A.M., Teachers College, Columbia.	Science, Paw Paw School
Jean Vis, A.M. A.B., Michigan State Normal College; A.M., Michigan.	English, Paw Paw School
Ruth L. Walker, M.A. A.B., M.A., Western Michigan College.	Campus School, First Grade
Roy Garth Walters, B.S. B.S., Minnesota State Teachers College.	Campus School, Physical Education and Science
Ernest Weber, A.M. A.B., Western Michigan College; A.M., Teachers College, Columbia.	Campus School Mathematics
William R. Weeks, B.S. B.S., Wayne.	Vocational-Industrial and Technical Education
William H. Whitner, M. Ed. B.S., Oklahoma A and M; M.Ed., Missouri.	Vocational-Industrial and Technical Education
William A. Wichers, A.B. A.B., Hope College; Certificate, Boeing School of Aeronautics.	Vocational-Industrial and Technical Education
Myrtle Windsor, A.M. A.B., A.M., Michigan.	Languages

INSTRUCTORS

John Alger, S.F.C.	R.O.T.C.
John W. Baker, S.F.C.	R.O.T.C.
Bette E. Barnes, M.S. B.A., Kalamazoo College; M.S., Wisconsin.	Biology
Joyce Berger, A.M. B.S., Minnesota; A.M., Teachers College, Columbia.	Campus School, Art
Donald E. Boven, B.S. B.S., Western Michigan College.	Physical Education
Bernadine P. Carlson, A.B. A.B., Western Michigan College.	English
Thomas Fulton, M.M. B.M., Western Michigan College; M.M., Eastman School of Music.	Music
Twyla N. Gay, A.M. A.B., Southern Methodist; A.M., Ohio State.	Speech

Maxine Gosline, B.S. B.S., Western Michigan College.	Paw Paw, Fifth Grade
Lester W. Gunter, M.S. B.S., M.S., Wisconsin.	Mathematics
H. Joette Hains, A.M. B.S., A.M., Western Michigan College.	Physical Education for Women
Kazie T. Killebrew, M/Sgt.	R.O.T.C.
Robert V. Lone, A.M. A.B., Northern Michigan College; A.M., Michigan.	Paw Paw, English
Kenneth E. McClure, M/Sgt.	R.O.T.C.
Joseph H. McKee, B.S. B.S., Western Michigan College.	Writing Clinic
Dorothy G. Niemi, R.N. R.N., Marietta Phelps Hospital.	Health
Dorothy M. Osborn, A.M. A.M., Michigan.	English
Clarence A. Rodden, M/Sgt.	R.O.T.C.
Vera Jean Russell, B.S. B.S., Western Michigan College.	Campus School, Nursery
Robert F. Smith, S.F.C.	R.O.T.C.
William H. Sullivan, M/Sgt.	R.O.T.C.
Walter F. Wegner, B.S. B.S., Wisconsin State College.	Paw Paw, Art
Robert V. Wilson, M/Sgt.	R.O.T.C.

ASSISTANTS

Dale Edward Case, M.S. A.B., Western Michigan College; M.S., Chicago.	Geography
Marcelle E. Dale, A.M. A.B., A.M., Western Michigan College.	Languages
Margaret C. Gill, A.M. A.B., A.M., Western Reserve.	History
Gerta G. Janisch, R.N. Nurses Training School, Vienna.	Health Service
Gladys Shepherd, R.N. Hackley Hospital, Muskegon, Michigan.	Health Service
Carma Van Liere, A.M. A.B., A.M., Indiana.	English
Shirley Cunningham Woodworth, B.A. B.A., Western Michigan College.	English
Eleanor C. York, A.M. A.B., Michigan; A.M., Michigan State.	Speech



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 north of Kalamazoo.

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

ADMINISTRATION

Oscar E. Harrington, A.M. B.S., Michigan State; A.M., Michigan.	Director
Lloyd G. Chapman, A.M. A.B., Hope College; A.M., Michigan.	Counselor and Assistant Director
Geptha F. Turnage	Business Manager
Ann W. Dobbyn, R.N. R.N., Harper Hospital School of Nursing, Wayne; Public Health Training, Michigan.	Health Service

INSTRUCTORS

William A. Alber	Business Machine Repair
James Y. Buchanan	Upholstering
Lloyd Decker, A.M. A.B., Stout Institute; A.M., Michigan.	Architectural and Machine Drafting
Frank J. Deschaine, B.S. B.S., St. Edwards	Watch Repair
Lawrence Edington, B.S. B.S., Western Michigan College.	Recreation, Remedial English and Arithmetic
Claude A. Harrington	Radio and Television
Robert Heydenberk, B.S. B.S., Western Michigan College.	Wood-Working
Lloyd I. Meadows, B.S. B.S., Western Michigan College.	Business Education
Kenneth Reemtsen	Appliance Repair
Raymond Selkirk	Machine Shop
Clarence Sundquist, B.S. B.S., Central Michigan College.	Printing

◀ Wide expanses of glass highlight the Administration building at Western Michigan College, center of student life.

CONTROL OF MICHIGAN COLLEGES OF EDUCATION

The Constitution of the state of Michigan places the Michigan Colleges of Education under the authority of the State Board of Education. The Board consists of four members elected by the people of the state.

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". While the college has been true to that purpose, it has gradually become necessary to expand the original intent. It is now one of the largest institutions in the United States primarily devoted to the training of teachers; but the college also has large numbers of students pursuing courses in pre-professional and vocational fields. The college offers the following degrees:

Bachelor of Art

Bachelor of Science

Bachelor of Music

Bachelor of Business Administration

It also conducts a graduate program leading to a master's degree with specialization in Education.

SCOPE OF CURRICULA

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 for the first and second years:

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 College Writing or its equivalent and at least fifteen semester hours from Groups I, II, III.

The program of study for the third and fourth years:

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, in the teaching curriculum, 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.

HISTORY

Western Michigan College was established in 1903 by an act of the Legislature as Western State Normal School. The first school year began in June, 1904, with Dwight B. Waldo as Principal. In 1905 the first building was completed. This building is now known as the Education Building. Since that time there has been a rapid expansion of the physical facilities. The original campus lies east of Oakland Drive and contained 20 acres of land. Now the college occupies more than 400 acres.

On August 5, 1936, President Waldo tendered his resignation and became President Emeritus. During his tenure of office the school grew from a two-year normal school into a college which was recognized as an outstanding leader in the field of education. Dr. Paul V. Sangren, a member of the faculty since 1923, became President of the college in August of 1936. 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 achieved membership in the National Association of Schools of Music.

ENROLLMENT DATA

Undergraduate		Graduate	Totals
960	Summer, 1953	507	1,467
4,005	Fall, 1953	362	4,367
3,786	Spring, 1954	372	4,158
1,087	Summer, 1954	577	1,664
4,687	Fall, 1954	417	5,104

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.

Matriculation is a privilege and carries with it certain responsibilities. The college reserves to itself 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.

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 catalog 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.

TRANSFERRING STUDENTS

Western Michigan College 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 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.)

METHODS OF ADMISSION

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 Registrar 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.

ADMISSION PROCEDURE

Freshmen

- a. A prospective freshman should request an official application form from the Registrar or his high school principal and complete that part as directed in the application.
- b. The application should then be returned to the high school principal who will be responsible for including his high school personal data and academic record.
- c. The completed application will be sent to the Registrar by the principal. It is not acceptable if presented by the student.
- d. The above three steps must be completed before the student can be considered for admission.
- e. The student must be officially admitted before he can be counseled or enrolled, therefore all credentials must be in the office of the Registrar in advance of registration for any course.
- f. Applications for admission may be sent to the college any time during or following the final semester in high school.

Transfers

- a. An application blank must be secured from the Registrar and completed according to instructions.
- b. The applicant must request an official transcript be sent directly to the Registrar from *each of the colleges* he has attended. These transcripts are not considered official if presented by the student. The record must be complete.
- c. The student must be officially admitted before he receives an official evaluation of credits, is counseled or enrolled.
- d. A prospective student desiring admission as a "Guest" student should write to the Registrar indicating the college he last attended. He should write to the college where he wishes to transfer the credit he expects to earn and have that college approve his program of study in advance of registration.

DEGREES

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

Degrees	Certificates
a. Bachelor of Arts	a. State Elementary Provisional Certificate
b. Bachelor of Business Administration	b. State Secondary Provisional Certificate
c. Bachelor of Music	c. State Limited Certificate
d. Bachelor of Science	d. State Elementary Permanent Certificate
e. Master of Arts	e. State Secondary Permanent Certificate
	f. Michigan Junior College Permanent Certificate

BACHELOR OF ARTS (A.B.)

The student who regularly completes a curriculum conforming to the degree requirements and embracing at least 70 hours from Groups I, II, and III, including at least eight 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 (B.B.A.)

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

BACHELOR OF SCIENCE (B.S.)

The student who regularly completes a curriculum conforming to the degree requirements and embracing 38 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 (B.M.)

This degree will be conferred upon the completion of the music curriculum as outlined in the Music Supplement Catalog. A total of 132 hours is required for graduation.

SECOND BACHELOR'S DEGREE

A graduate of Western Michigan College 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 hours of resident credit and to satisfy any other specific requirements for the degree. The 30 hours need not be taken subsequent to the first degree.

MASTER OF ARTS (A.M.)

Western Michigan College also confers the Master of Arts Degree with specialization in Education. For information ask for graduate bulletin.

SUBJECT GROUPINGS

- Group I. Language and Literature
All subjects in the Division and certain courses as indicated in the Departments of Librarianship and Speech.
- Group II. Science
All subjects in the Division and certain courses as indicated in the Department of Agriculture.
- Group III. Social Science
All subjects in the Division and 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
All subjects in the Division and certain courses as indicated in the Departments of Agriculture, Librarianship and Occupational Therapy.
- Group VII. Physical Education and Health
Health, physical education and recreation.

DEGREE REQUIREMENTS

Any curriculum leading to a bachelor's degree consists of at least 124 hours of credit including required physical education.

The student must meet the following requirements or their equivalent:

1. General Education and Group Requirements:

Group I, Language and Literature 14 hours

A. A student must choose one of the following:

(1) Communication—8 hours

(2) College Writing—6 hours

B. In addition to one of the above a student must take additional courses in Humanities, Literature, Foreign Languages or Speech to total 14 hours.

Group II, Science 12 hours

A. A student must elect a minimum of 8 hours from the following courses:

- (1) Biological Science 102 —4 hours
- (2) Human Geography 105A—4 hours
- (3) Physical Science 100A—4 hours
- (4) Physical Science 100B—4 hours

Group III, Social Science 12 hours

A. Students must choose one of the following courses:

- (1) Foundations of Western Civilization—8 hours.
- (2) Man and Society —8 hours.

B. In addition to the above, a student must take four additional hours in the social science area for a minimum of 12 hours.

C. All students must take three semester hours in Government.

The following is an act passed by the legislature of the state of Michigan April 15, 1954:

Sec. 2. In all county normal schools a course of 4 term hours shall be given in civics, and in all colleges receiving public money, courses of not less than 3 hours, or equivalent, shall be given in political science, or in government and public administration, covering the form and functions of our federal and state governments, and of counties, cities and villages. Throughout said course the rights and responsibilities of citizenship shall be stressed. No degree or diploma shall be granted after June 30, 1956, to any student of such normal school or college unless such student shall have successfully completed said courses.

Group IV, Education 20 hours

A. Students who wish to qualify for the bachelor's degree without the teaching certificate will not be required to take work prescribed under Group IV.

Group VII, Physical Education 4 hours*

A. A student must take a total of 4 hours of general physical education.

*(Except that only three semester hours of general physical education credit will be required of those men students who are enrolled before or during the college years 1954-'55-'56. The four hour requirement will be resumed effective at the beginning of the college year 1956-1957.)

B. These courses are to be taken in the freshman and sophomore years.

2. At least two-thirds of the work beyond the second year must be in courses not open to first-year students, except where curricular requirements demand otherwise.

3. Courses must be selected so that the requirements in at least one of the curricula are fulfilled before graduation.

4. The student must complete a major with a minimum of 24 hours and two minors with a minimum of 15 hours each. In elementary education the student may complete four minors.
5. Minimum residence requirements:
It is expected that all candidates for the Bachelor's degree or full certification will have earned at least 30 hours of credit on the campus of Western Michigan College.
Exceptions to the above policy, where such seem necessary or highly desirable, may be made with written permission from the Registrar.
6. Final residence requirements:
The final semester or summer session must be on campus or in courses offering residence credit.
The final six hours required for graduation may be taken in residence at any one of the four Michigan Colleges of Education.
The final six hours earned in residence at one of the other Colleges of Education may not substitute for any part of the 30 hours residence requirement at Western Michigan College.

MAJOR AND MINOR REQUIREMENTS

A major is a sequence of courses totaling a minimum of 24 hours; a minor is a sequence of courses totaling a minimum of 15 hours. Under certain conditions students may elect beyond this minimum up to a maximum of 40 hours offered by any department.

1. Your major and minors will be your subject specialization, such as: mathematics, accounting, biology and chemistry.
2. Your curriculum may be general or specific preparing you for a specialized career or profession such as business, medicine, law, auto mechanics and engineering.
3. 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.
4. Students should consult the departmental advisers for approval of their major and minor programs as soon as it is known what they are to be and by the last semester of the junior year.
5. The candidate for a degree must complete a major and two minors or the equivalent. A candidate for the elementary provisional certificate may elect, instead, four minors for a minimum of 15 hours each.
6. In certain cases "group" majors totaling a minimum of 30 hours and "group" minors totaling a minimum of 20 hours are permitted. 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).
7. General Education courses are partially acceptable toward major and minor requirements.

8. 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.
9. It is usually not permissible to use education as a major or minor in any undergraduate curriculum.
10. The following courses are not to be counted as satisfying major and minor requirements:
 - a. Required courses in College Writing or Communication
 - b. Required courses in education from Group IV.
 - c. Required courses in physical education
11. A combination of foreign languages, or of English or American Literature with a foreign language, is not permissible. A major or minor must be in one language only.
12. Mathematics may not be combined with science (physics, geography, chemistry, biology) for any major or minor sequence.

MICHIGAN TEACHERS' CERTIFICATION

The following types of teaching certificates are granted:

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 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 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 the date of issue in the secondary grades (seventh to twelfth) in any public school in Michigan, in subject 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 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 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 hours.
 - c. The candidate shall have satisfactorily completed in residence on campus at this institution 15 hours.
 - d. The candidate shall have been in residence at this institution the semester or summer session immediately preceding graduation.

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, 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.

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 hours;
 - b. toward the State Limited Certificate, 25 hours.
2. 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 10 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 the Registrar.
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 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 hours of credit, of an average grade of "C" or better, earned in an institution or accepted by an institution approved by the State Board of Education. These credits must be applicable toward the requirements of the curriculum prescribed for the State Limited Certificate and for the State Provisional Certificate.
 - (b) In order to assure that the credits earned toward renewal will apply on the State Limited Certificate curriculum and on the State Provisional Certificate curriculum at the institution where the candidate intends to qualify for either certificate, *the candidate should arrange in advance in each case to have his course selections approved by that institution.* Also all credits, wherever earned, should be submitted to that institution for evaluation and by it transmitted to the State Board of Education with recommendations.

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

ADDITIONAL REGULATIONS

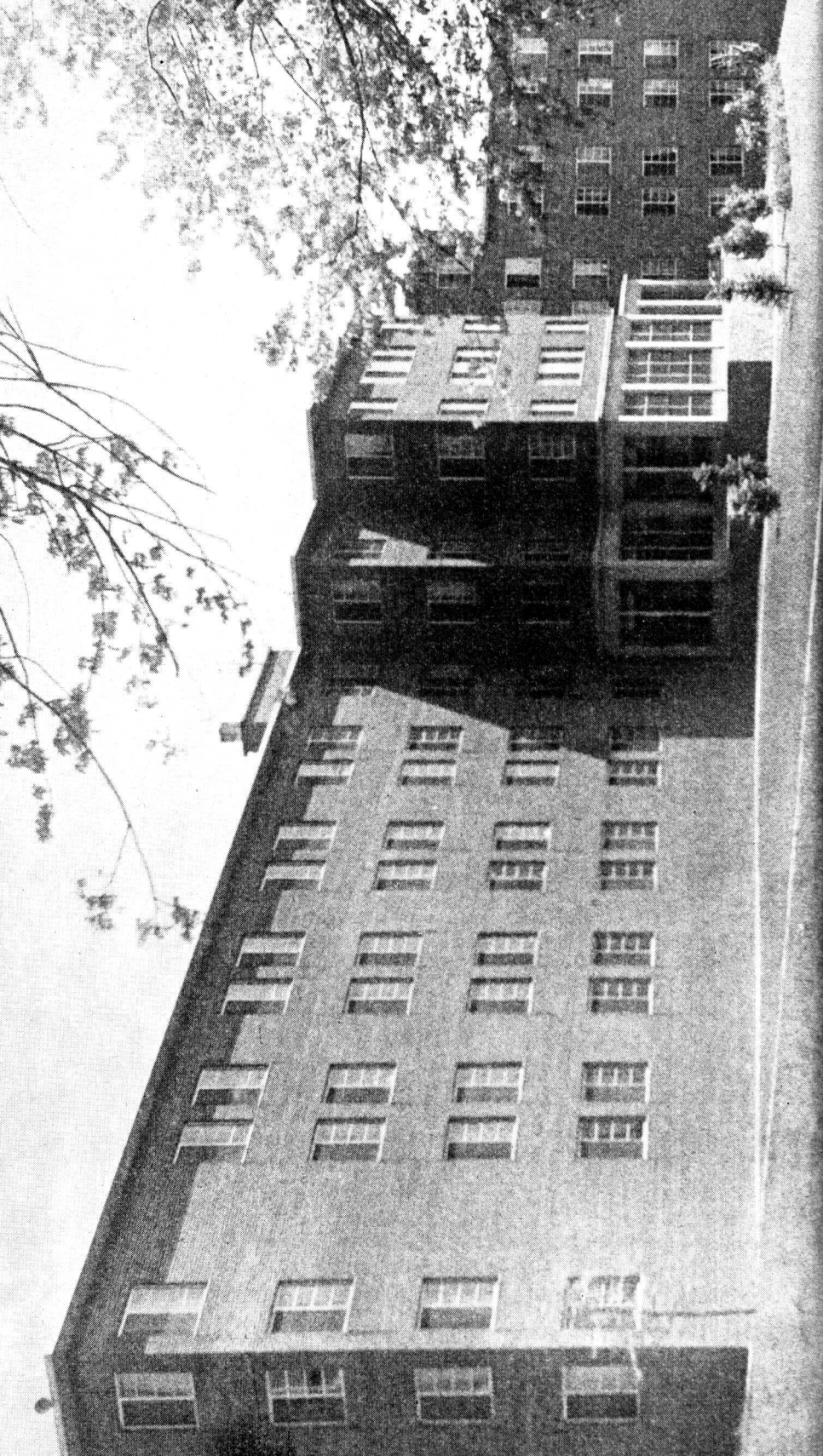
1. Before being admitted to the regular program of work of the third year, a candidate for a teaching certificate shall have earned at least 8 hours in each of the Groups I, II, and III. He shall have maintained at least a

“C” average, (point hour ratio 1.0) for work already completed and shall give evidence of his fitness for teaching.

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

3. 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.

4. Minimum residence requirements: It is expected that all candidates for the bachelor's degree or for full certification will earn at least 30 hours of credit on the campus of Western Michigan College. Deviation from the approved policy, where such cases seem especially necessary or highly desirable, may be made by the Registrar.



Student Responsibilities

CHANGING COURSES

Necessary changes in enrollment must have been made by the end of the first complete week of a semester. 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. A mark of "WP" will be recorded for a subject dropped after the above time limits, if the student is then doing passing work; a mark of "WE" if the student is then failing, and a mark of "E" if the course is dropped without written permission.

CLASS ATTENDANCE

Students are responsible directly to their instructors for class and laboratory attendance as well as for petitions for excuses for absences. Instructors must file weekly with the Deans detailed records of absences for a given week.

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. 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.

CLASS LOAD

A student may not enroll for less than twelve or for more than seventeen 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 Registrar, 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 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.

◀ Typical of housing on the campus is Draper hall for women, housing nearly 300, and adjacent to five other residence halls.

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 "in-completes," 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 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 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 hours in one calendar year in courses offered by the Extension Division.

CLASSIFICATION OF STUDENTS

Students at Western Michigan College are classified officially as follows:

Freshmen—Students credited with 0-25 hours inclusive.

Sophomores—Students credited with 26-55 hours inclusive.

Juniors—Students credited with 56-87 hours inclusive.

Seniors—Students credited with 88 hours or more.

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.

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.

CONDUCT

Conduct in harmony with the ideals of the institution is expected of each student. Effort is made to stimulate the student to earnest, honest endeavor, and to develop new and worthy interests. 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.

CREDIT FOR MUSIC ACTIVITIES

1. A maximum of two 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 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 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 hours (two hours until the fall of 1957). A minimum of one 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.

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 examinations in all courses in which they are enrolled.
3. Students may not request an examination at any other than the scheduled time. Any unavoidable conflict should be reported to the registrar as soon as known so that special arrangements can be made.
4. Failure to meet the schedule due to illness is to be reported to the appropriate Dean immediately.

EXPENSES

For Michigan Residents			Fees	For Non-Resident		
Tuition	Local Fees	Total	Semester Hours	Tuition	Local Fees	Total
9.50	20.00	29.50	1-3	19.00	20.00	39.00
19.00	26.00	45.00	4-6	38.00	26.00	64.00
28.50	26.00	54.50	7-9	57.00	26.00	83.00
47.50	42.50	90.00	10 or more	95.00	42.50	137.50

1. Applied Music—\$60 per semester for one hour per week of private instruction or \$30 for one half hour per week.

2. Extension and Adult Education—\$10.00 per hour.
3. Late Enrollment—\$5 for students who enroll after the established registration days.
\$2 penalty for late pre-enrollment.
4. Refund Policy—Tuition and Local Fees will be refunded (according to the following schedule) when a student withdraws from College
 - (1) Seven calendar days or less after the last official registration day—90 per cent of total.
 - (2) More than 7 calendar days and less than 22 days after the last official registration day—60 per cent of total.
 - (3) More than 21 calendar days and less than 36 days after the last official registration day—40 per cent of total.
 - (4) More than 35 calendar days and less than 50 days after the last official registration day—20 per cent of total.

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.

c. 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.

d. Refunds are not automatic but must be applied for at the Business Office within the prescribed time limits.

5. 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.

In determining the residence status the designated official will apply the following rules:

1. The residence of any student under the age of 21 will be determined by the residence of his parents or guardians.

2. Any student who starts as a non-resident student and who attends college continuously from the date of his first enrollment (semester after semester exclusive of summer session) will retain the same residence status with which he started out except as outlined in No. 3 below.
3. Any student over the age of 21 residing in Michigan and who starts out as a non-resident student can be given residence status as soon as he can prove he has been accepted by an election official as a resident elector in the State of Michigan and by filing a written statement with the college declaring his intention to continue his residence status in Michigan after leaving the college.

LIVING EXPENSES

Board and Room

Burnham Halls	}	\$268 per semester
Davis Hall		
Draper-Siedschlag Halls		
Spindler Hall		
Walwood Hall		

Room Only

Vandercook Hall	\$81 per semester
-----------------	-------------------

Address requests for reservation in women residence halls to the Dean of Women, for reservation in men's residence halls to the Dean of Men. All applications must be accompanied by a \$10 room deposit made by check, payable to Western Michigan College.

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.

GRADUATION

The candidate for degree is expected to make application for graduation by the last semester of his junior year so that his record may be checked before his senior year. The student can help to avoid the embarrassing situation of planing to participate in commencement activities when he has not met requirements.

Off-campus students are to apply before the last semester of the senior year.

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:

<i>Cum laude</i>	When having a point-hour ratio of 2.5 to 2.69 inclusive
<i>Magna cum laude</i>	When having a point-hour ratio of 2.7 to 2.89 inclusive
<i>Summa cum laude</i>	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 2 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 be counted toward honors.

HOUSING REQUIRED

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.

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.

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.

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.

Grade	Significance	Honor Points (Per hour of credit)
A	Excellent	3
B	Good	2
C	Fair	1
D	Passing	0
*U	Unsatisfactory	Not to be counted
E	Failure	0
I	Incomplete	
W	Withdrawn	

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.

*For Directed Teaching only.

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.

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).

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 hours in any one department may be counted. No more than five hours of B credit may be counted. The minimum number of hours to be taken must be fourteen.

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 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 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. Any student who receives E in 75 percent or more of the work attempted during a semester shall be automatically dropped from college.

5. 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.

6. In administering the above regulations, the Registrar has authority to permit deviations in unusual circumstances.

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.

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 all names under which he may have been 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.

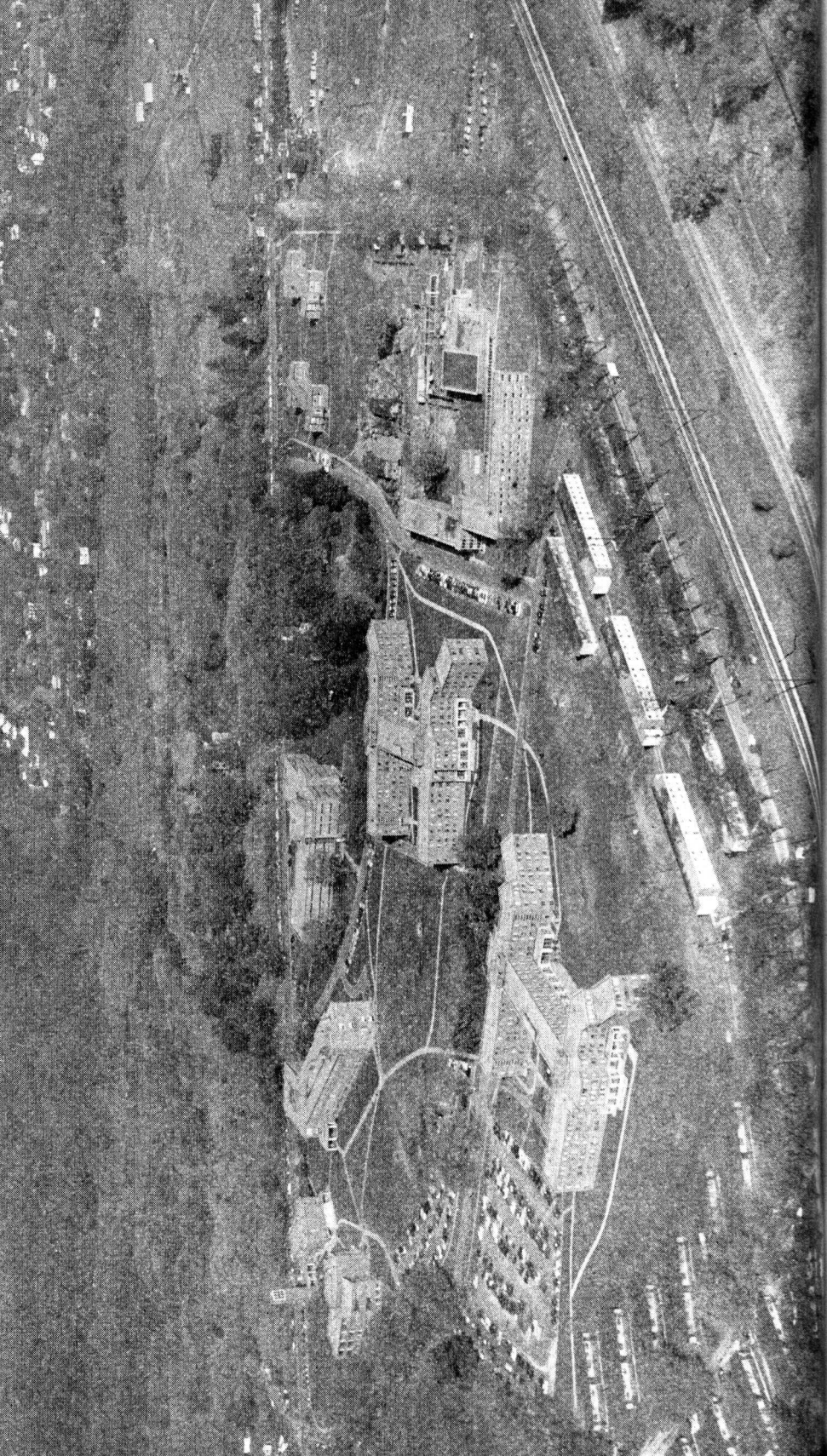
UNIT OF CREDIT

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.

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

LIST OF THE CURRICULA

	Page
I. General	55
II. For Prospective Teachers	55-74
Elementary	56-57
Secondary	57-58
Business Training	59
Home Economics	60-61
Industrial Arts	62
Librarianship	63
Music	64-65
Rural	66-68
Special Education	68-69
Deaf and Hard of Hearing	69-70
Mentally Handicapped	70-71
Occupational Therapy	71-72
Speech Correction	73
Vocational Distributive Education	74
Vocational Industrial Education	75-89
III. Degree and Non-Teaching	75-76
Airline Hostess	77
Air Transportation	78
Automotive Transportation	79-80
Business Administration	81
Dietetics	82
Home Economics	83
Industrial Supervision	83
Librarianship	84
Military Science	84
Music	84
Occupational Therapy	85-88
Paper Technology	88-89
Social Work	90-98
IV. Pre-Professional	90
Agriculture	91
Dentistry	92
Engineering	93
Forestry	93
Journalism	94
Law	95
Medicine	96
Medical Technology	97
Mortuary Science	97
Nursing	98
Pharmacy	98
Theology	98-105
V. Two-Year Curricula	98-101
Business (Technical)	99
Secretarial	99-100
Retailing	101
Homemaking	101-105
Industrial Technology	101-102
Aircraft	102
Automotive	103
Drafting and Design	103
Electrical and Electronics	104
Machine Tool	104
Radio and Television	104
Refrigeration, Air Conditioning, Heating	105



PART II—*Curricula*

I. THE GENERAL CURRICULUM

A.B. or B.S. Degree

In this curriculum a student may satisfy the requirements for pre-professional work. If 124 hours are completed in this program the student will be eligible for a degree of Bachelor of Arts or Bachelor of Science. Liberal arts requirements can be met in this curriculum.

GROUP REQUIREMENTS

Group I, Language and Literature

Communication 104A, B (8 hours)

or

College Writing 106A, B (6 hours)

plus courses in Literature, Speech, or Foreign Languages to make

a total of 14 hrs.

(8 hours of Foreign Language are necessary for an A.B. Degree.)

Group II, Science, a minimum of 8 hours from the following courses:

Biological Science 102 (4 hours)

Physical Science 100A (4 hours)

Human Geography 105A (4 hours)

plus courses in Science and/or Mathematics to make a total of... 12 hrs.

Group III, Social Science:

Foundations of Western Civilization 100A and B (8 hours)

or

Man and Society 101A and B (8 hours)

A 3 hour course in Government, plus courses in this division to
make a total of at least..... 12 hrs.

Group VII. Physical Education 4 hrs.

Courses to complete major and minors and electives to make a
total of 124 hrs.

II. CURRICULA FOR TEACHERS

The program for prospective teachers consists of three parts: (1) general education, designed to develop those understandings and competencies which make for effective living and good citizenship; (2) advanced specialized study, with major and minor interests in the fields of the student's choice; and (3) professional education designed to develop competent, efficient performance in the classroom and within a school system.

In general, prospective teachers choose to work for the State Elementary Provisional Certificate, valid for grades kindergarten through eight, or the

◀ Many of the newer buildings rise sharp and clear from the rolling west campus, broken by tree-lined avenues.

State Secondary Provisional Certificate valid for grades seven through twelve.

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 to teach his special subject in both the elementary and secondary grades when the candidate qualifies in both fields.

Students wishing to teach in selected school districts in Michigan which do not maintain an approved high school may pursue the Rural Education curriculum which leads to the State Limited Certificate. (See page 66)

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)

	S.H.
A. Group and General Education Requirements	
1. <i>Group I</i> , Language and Literature	14
Communication 104A, B or	8
College Writing 106A, B	6
Literature for Children 203	3
Literature, Speech or Foreign Language	3 or 5
2. <i>Group II</i> , Science and Mathematics	15
Biological Science 102*	4
Human Geography 105A*	4
Physical Science 100A*	4
Arithmetic for Teachers 101	3
*If the student demonstrates proficiency in any of these subjects, he may elect other courses from the division upon the recommendation of his counselor.	
3. <i>Group III</i> , Social Sciences	12
Western Civil. 100A, B* or	8
Man and Society 101A, B	8
Amer. Gov't. 334 or	3
State and Local 230B	3
*Students electing the Foundations course (100A, B) must take a three-hour course in American Government.	
4. <i>Group IV</i> , Education	24
Human Growth and Development 251	3
Psych. of Reading 212	3
Intro. to Directed Teaching 351	3
Directed Teaching, Laboratory in Ed. and General Education Problems 370A, B, C	15

- 5. *Groups V, VI, Fine Arts (Art and Music) and Practical Arts* 12
 (Include one course in Art, one teaching course in Music, and one course in Practical Arts.)
- 6. *Group VII, Physical Education* 4
 Must include Elementary School Physical Education 330.
 Electives 43
- B. Four minors of not less than 15 hours each, or one major of not less than 24 hours and two minors of not less than 15 hours each are required. The equivalent of at least two minors must be in subjects or subject fields taught in the elementary grades. Certain courses in some departments may not be counted toward majors or minors. See course descriptions.
- C. A minimum of 124 hours of credit with an honor point ratio of one or more is required.
- D. The candidate must satisfy the requirements of the A.B. or B.S. degree.

SECONDARY CURRICULUM

A.B. or B.S. Degree

State Secondary Provisional Certificate

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

- A. Group and General Education Requirements S.H.
- 1. *Group I, Language and Literature* 14
 Communication 104A, B or 8
 College Writing 106A, B 6
 Literature, Speech or Foreign Language 6 or 8
- 2. *Group II, Science and Mathematics* 12
 Student to choose 8 hours from the following courses:
 Physical Science 100A, B* 8
 Biological Science 102* 4
 Human Geography 105A* 4
 Electives in science and/or mathematics 4
 *If the student demonstrates proficiency in any of these subjects, he may elect other courses from the division upon the recommendation of his counselor.
- 3. *Group III, Social Science* 12
 Found. of Western Civ. 100A, B* or 8
 Man and Society 101A, B 8
 Electives from the division 4
 *Students electing the Foundations course (100A, B) must take a three hour course in American Government.

- | | |
|---|----|
| 4. <i>Group IV, Education</i> | 21 |
| 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 |
| 5. <i>Group VII, Physical Education</i> | 4 |
| Electives to complete majors and minors | 61 |
- B. A total of 124 hours are needed to complete a degree and to qualify for for a State Secondary Provisional Certificate.
- C. A student in the Secondary Curriculum must maintain an honor point ratio of one or more.
- D. In the 124 hours must be included a major (24 hours) and two minors (15 hours each) in subjects that are taught in secondary schools in Michigan. Certain courses in some departments may not be counted toward majors and minors. See course descriptions.
- E. Candidates for the State Secondary Provisional Certificate must present a methods course in a major or minor field.

BUSINESS TEACHER TRAINING CURRICULUM

B.S. Degree and Secondary Provisional Certificate
Counselor—Lindquist

A State Secondary Provisional Certificate for teaching of business subjects in grades 7 to 12 is granted to students who complete the degree requirements with a major (24 hours) in business, two minors (15 hours each), one of which may be in business, and 23 hours in education. A major and/or a minor may be selected from the following fields:

1. Secretarial and related business subjects.
2. Accounting and related business subjects.
3. Salesmanship, retailing and related business subjects.
4. General business and related subjects.

Students who intend to take a major or a minor in Business Teacher Training should confer with their advisor as early as possible in their sophomore year.

First Year	S.H.	Second Year	S.H.
College Writing 106A, B or Communication 104A, B	6 8	Lang., Lit., Speech	6-8
Western Civil. 104A, B or Man and Society 101A, B	8 8	Phy. Science 100A, B or Biology 102 and Geog. 105	8 8
Bus. Math. 120A	2	Government 230A or 334	3
Physical Education	1½	Physical Ed.	1
*Electives	12-14	*Electives	11-13
Third Year	S.H.	Fourth Year	S.H.
Human Growth 251	3	Education 370A, B, C	15
Intro. to Dir. Teach. 351	3	Phy. Ed.	½
Teach. of Bus. Subj. 346	2	*Electives	15
Physical Ed.	1½		
*Electives	22		

*Electives must include those courses to complete the group requirements, a major and two minors.

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	S.H.	Second Year	S.H.
Chemistry 105A, B	8	Advanced Foods 311	3
Communication 104A, B or College Writing 106A, B	6 or 8	Biological Science 102	4
Effective Living 145	2	Clothing 205	3
Elementary Design 105	2 or 3	Costume Design 209	2
Foods 111	3	Home Furnishings 211	2
Western Civ. 100A, B or Man and Society 100A, B	8	Home Nursing 223	2
Textiles 103	3	Human Growth 251	3
Physical Education	1	Nutrition 211	3
		Sociology 241	3
		Physical Education	2
		Electives (incl. Eng. or Lit.)	5

Home Economics Major with a Minor in Clothing

Third Year	S.H.	Fourth Year	S.H.
Am. Gov't 334 or St. and Loc. Gov't 230B	3	Clothing 306 or Advanced Textiles 403	2
Economics 220A	3	Mar. and Fam. Relations 325	2
Family Clothing 305	2	Quantity Foods 312	2
Home Management 322	2	Tailoring 404	3
Home Management Prac. 324	3	Directed Teaching 370A	8
Intro. to Dir. Teach. 351	3	Laboratory in Ed. 370B	4
Home Ec. Ed. 300	3	General Ed. Problems 370C	3
Physical Education	1	Electives	6 to 8
Electives (incl. Eng. or Lit.)	11		

Suggested electives: Housing 421, Institutional Management 423, Experimental Foods 419, Food Demonstration 318, Advanced Nutrition 416, Consumer Buying 439, Family Living in El. Schools 400, Art.

Home Economics Major with a Minor in Foods

Third Year	S.H.	Fourth Year	S.H.
Am. Gov't 334 or St. and Loc. Gov't. 230B	3	Experimental Foods 419 or Adv. Nutrition 416	2 or 3
Economics 220A	3	Mar. and Fam. Relations 325	2
Family Clothing 305	2	Directed Teaching 370A	8
Food Demonstration 318	2	Laboratory in Ed. 370B	4
Home Management 322	2	General Ed. Problems 370C	3
Home Management Prac. 324	3	Electives	11 or 12
Intro. to Dir. Teach. 351	3	Suggested electives: Housing 421, Clothing 306, Tailoring 404, Ad- vanced Textiles 403, Consumer Buy- ing 439, Institutional Management 423, Fam. Liv. in El. Schools 400, Art.	
Home Ec. Ed. 300	3		
Quantity Foods 312	2		
Physical Education	1		
Electives	7		

General Home Economics Major

Third Year	S.H.	Fourth Year	S.H.
Am. Gov't 334 or St. and Loc. Gov't. 230B	3	Directed Teaching 370A	8
Family Clothing 305	2	Laboratory in Ed. 370B	4
Home Management 322	2	General Ed. Problems 370C	3
Home Management Prac. 324	3	Electives	16
Intro. to Dir. Teach. 351	3		
Home Ec. Ed. 300	3		
Quantity Foods 312	2		
Physical Education	1		
Electives	12		

INDUSTRIAL ARTS CURRICULUM

B.S. Degree and 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	S.H.	Second Year	S.H.
College Writing 106A, B	6	Indus. Design 266	2
Physical Science 100A, B	8	Adv. Elect. 350	3
Drawing 120	2	Drawing 226	3
Woods 100	2	Machine Shop 234A	3
Intro. Elect. 150	2	Machine Woodwork 305A	3
Metals 130	3	Man and Society 100A, B	8
Graphic Arts 140	2	Phy. Ed.	2
Intro. to Indus. Arts 160	1	Electives	8-10
Phy. Ed.	2		
Electives	4-6		
Third Year	S.H.	Fourth Year	S.H.
Human Growth 251	3	Amer. Gov't 334	3
Teach. of Indus. Arts 348	3	Intro. to Dir. Teach. 351	3
Plan and Org. of School Shop 347	2	Integrated Pro. Ed. 370A, B, C	15
Course Plan. and Construc. 472	2	Shop Electives	5-7
Shop Electives	7-9	Electives	4-6
Electives	14-16		

LIBRARIANSHIP CURRICULUM

A.B. or B.S. Degree
State Elementary or Secondary Provisional Certificate

(For Teacher-Librarians)

First Year	S.H.	Second Year	S.H.
College Writing 106 or Communication 104		General Psych. 200	3
Physical Sci. Survey 100 or Biological Sci. 102	6-8	Amer. Nat'l Gov. 230A	3
Human Geography 105	4	Lit. for Children 203	3
Western Civil. 100	4	Electives	15
Modern Language	8	Physical Education	2
Physical Education	8	English Electives	6
	2	(It is recommended that students continue a second year of modern language.)	
Third Year	S.H.	Fourth Year—First Semester	S.H.
Human Growth 251	3	Intro. to Class. & Catalog. 470	3
Psych. of Reading 212	3	Audio-Visual Ed. 438	3
Intro. to Dir. Teach. 351	3	Story-Telling 406*	2
Michigan History 313	3	Curriculum Enrichment 405	2
Organ. of Lib. Materials 360	2	Admin. of School Lib. 361	2
Books and Materials for School Libraries 302A, B	6	Electives	3
Electives	10	Fourth Year—Second Semester	S.H.
		Integrated Pro. Ed 370A, B, C	15
		(Half the semester field work is spent in the school library.)	

*To be elected by those in elementary curriculum in place of 405.

MUSIC CURRICULUM

B.M. Degree with a major in Public School Music
State Elementary or Secondary Provisional Certificate

(For General Supervisor)

First Year	S.H.	Second Year	S.H.
College Writing 106A, B	6	Major Performance	4
*Major Performance	4	Sophomore Theory 206A, B	8
Freshman Theory 106A, B	8	†Elem. School Meth. & Matls.	
Music Appreciation 107A, B	4	208A, B	6
Elem. Acoustics 110	2	†Instru. Meth. & Matl. 209A, B	6
Piano Class 117A, B	2	Adv. Piano Class 217A, B	2
String Class 118A, B	2	Woodwind Class 219A, B	2
**English Dict. & Song Lit. 122	0	**Italian Dict. & Song Lit. 222	0
Phy. Ed. or Band	2	Human Growth & Devel. 251	3
***Elective (non-music)	6	Phy. Ed. or Band	2
		Elective (non-music)	5
Third Year	S.H.	Fourth Year	S.H.
Major Performance	4	Major Performance	4
Major Perform. Lit. 323 or		Major Perform. Lit. 323 or	
**French Dict. & Sg. Lit. 322	0	**German Dict. & Sg. Lit. 324	0
†Instr. Meth. & Matls. 209A, B	6	Hist. of Music 357A, B	6
†Junior & Senior H.S. Meth.		Meth. in Major Perform. Medium	3
& Matls. 301A, B		Integrated Pro. Ed. 370A, B, C	15
Instru. Conducting 311B	1	Elective (non-music)	4
Choral Conducting 311A	1		
Brass Class 320A, B	2	*General supervisors are required to study	
Percussion Class 321	1	voice two years and a single instrument two	
Intro. to Dir. Teach. 351	3	years.	
Amer. Gov't. 334	3	**The student is required to enroll for this	
Elective (non-music)	13-14	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 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 Instrumental or Vocal Supervisor)

First Year	S.H.	Second Year	S.H.
College Writing 106A, B	6	Major Performance	4
Major Performance	4	*Italian Dict. & Song Lit. 222	0
*English Diction & Song Lit. 122	0	Sophomore Theory 206A, B	8
Freshman Theory 106A, B	8	‡El. School Meth. & Matls. 208A, B	6
Music Appreciation 107A, B	4	‡Instru. Meth. & Matls. 209A, B	6
Elem. Acoustics 110	2	Adv. Piano Class 217A, B	2
Piano Class 117A, B	2	Woodwind Class 219A, B	2
String Class 118A, B	2	Human Growth & Develop. 251	3
Phy. Ed. or Band	2	Phy. Ed. or Band	2
Elective (non-music)	6	Elective (non-music)	5
Third Year	S.H.	Fourth Year	S.H.
Major Performance	4	Major Performance	4
**Major Perform. Lit. 323 or *French Dict. & Song Lit. 322	0	**Major Perform. Lit. 323 or *German Dict. & Song Lit. 324	0
‡Junior & Senior H.S. Meth. & Matls. 301A, B	6	Hist. of Music 357A, B	6
‡Instru. Meth. & Matls. 209A, B	6	Integrated Prof. Ed. 370A, B, C	15
Instru. Conduct. 311B	1	Elective (non-music)	7
Choral Conduct. 311A	1		
Brass Class 320A, B	2	*Courses required for students who will become vocal supervisors.	
Percussion Class 321	1	**Courses required for students who will become instrumental supervisors.	
Intro. to Dir. Teach. 351	3	‡Each student is required to take 12 of the 18 hours offered in music methods and mate- rials.	
Amer. Govt. 334	3		
Elective (non-music)	10-11		

RURAL LIFE AND EDUCATION

Degree and Provisional Certificate

Both Elementary and Secondary Education Degree Curricula, leading to the State Provisional Certificates, are offered with major attention given to preparation for work in rural schools and communities. Majors (24 hours) and minors (15 hours) in Rural Life and Education are provided that students may choose under guidance those courses that will in their judgment most adequately prepare them both personally and professionally. The majors and minors are not limited to students in the department.

Students preparing to teach in elementary schools choose four minors preferably, or a group major and two minors, and additional courses from among both group and general electives. They become familiar with the grades and subject areas of the entire elementary school. The Rural Elementary Curriculum (two years) is the first two years of the Rural Elementary Degree Curriculum.

Students preparing to teach in secondary schools choose majors, minors and additional subject matter courses with thought to the rural backgrounds of the students; also with thought to the variety of teaching and extra-curricular demands to be met in smaller high schools. The Rural Elementary Curriculum (two years) includes the foundation courses for the Rural Secondary Degree Curriculum.

Counsel and courses are offered for further professional specialization for principals, superintendents, supervisors and county superintendents. Those preparing to serve rural people in other professional or service occupations, such as ministers, librarians, social workers, and recreational leaders, will find considerable basic work in the offerings of the Department of Rural Life and Education.

State Limited Certificate Curricula

The following two-year, 62 hour curricula meet the requirements for the State Limited Certificate which is valid for three years and "qualifies the holder to teach in any primary school district or in any graded school district not maintaining grades above the eighth. All courses must be appropriate to the education of elementary teachers",* at least 30 hours being in Groups I, II and III. Students are encouraged to complete four-year curricula at the earliest possible moment.

*Teachers' Certification Code, Bulletin No. 601, 1942 revision.

Rural Elementary Curriculum (Two Years)

This curriculum is planned to give as broad, and at the same time as specific and practical professional preparation for working with children in farm and rural non-farm communities, as is possible in two years.

Group I, English¹

College Writing 106A (in addition)

S.H.

6

3

	S.H.
Group II, Science ²	8
Group III, Social Sciences ³	
Rural Sociology 220	3
Rural Economics 230	3
Political Science	3
Elective	3
Group IV, Education ⁴	
Curriculum 140	3
Intro. to Directed Teaching 240	3
Directed Teaching 241	4
Rural School Administration 340	3
Elective	3
Groups V and VI, Fine and Practical Arts ⁵	
Fine Arts	5
Practical Arts	1
Group VII, Physical Education ⁶	2
Men: General Physical Education 102A, B or 103A, B	
Women: Physical Education 100, Rural School Physical Education 233	
Electives ⁷	9

Provision is made for a flexibility of choice among the courses in the different groups, under guidance of the departmental counselor; preferences usually falling among the following:

1. Speech for Teachers 105; American Literature 221A, B; Literature for Children 203.
2. Rural School Agriculture 105; Teaching of Elementary Science 203; Outdoor Science (Nature Study) 231A or B; Human Geography 105A; Health Education 285.
3. State and Local Government 230B; United States History 201B.
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 hours credit.
5. Art Structure 106; Rural School Music 109; Industrial Art 110; Learning Through Art 112; Auxiliary Choir 134; Rural Practical Arts 104; Food for the Family 118; Clothing 203; Home Furnishing 211; Everyday Nutrition 222; Marriage and Family Relations 325; Teaching of Family Living in Elementary School 400; Housing and House Planning 421; Consumer Buying 439.
6. Square Dancing 101; Swimming 110; Tennis 113; Archery 118; Badminton 120; Social Dancing 122; Rural School Physical Education 233 (men).
7. These electives may well be chosen from the preferred courses listed in the above notes (1-6) not used to meet minimum group requirements, supplemented if necessary from such courses as follow: College Writing 106B; Reading Interests of Children 202; Literary Interpretation 210; The Familiar Essay 212; The English Bible 218A, B; Principles of Speech Correction 250; Regional Geography 105B; Physical Science 100A, B; United States History 201A; Illustrative Handwork 107.

JUNIOR OR COMMUNITY COLLEGE—COLLEGE OF EDUCATION COOPERATIVE TEACHER EDUCATION CURRICULUM

Michigan junior colleges and the colleges of education have a cooperative program in teacher education. In three semesters in a junior college and the fourth semester in a state college of education, minimum requirements may be met for a State Limited Certificate as prescribed in the 1942 Revision of the Teachers' Certification Code.

Recommendation for certification is made by the college of education. The program is coordinated by a representative from the college of educa-

tion who also serves as program counselor for the second year students. In the field service area of Western Michigan College are Grand Rapids Junior and Benton Harbor and Muskegon Community Colleges.

SPECIAL EDUCATION CURRICULUM—DEAF AND HARD OF HEARING

B.S. Degree

State Elementary Provisional Certificate

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

	S.H.
<i>Group I.</i> Language and Literature	14
Communication 104A, B; or	8
College Writing 106A, B (6) and Elective (2)	
Literature for Children 203	3
Problems of the Deaf and Hard of Hearing 232	3
<i>Group II.</i> Science	18
Biological Science 102	4
Healthful Living	2
Physical Science 100A or Human Geography 105	4
General Psychology 200	3
Abnormal Psychology 305	3
Mental Testing 307	2
<i>Group III.</i> Social Science	12
Western Civilization 100A, B; or	8
Man and Society 101A, B	
Amer. Gov't. 334	3
Elective	1
<i>Group IV.</i> Education	39-40
Human Growth and Development 251	3
Introduction to Directed Teaching 351	3
Psychology of Reading 212	3
Introduction to Special Education 231; or	2
Education of Exceptional Children 431	
Introduction to Mental Hygiene 235; or	3
Mental Hygiene of Childhood and Adolescence 436	2
Speech for the Deaf 433B	2
Language for the Deaf 433C	2
Introduction to Lip Reading 433A	2
Basic Audiometry 334	3
Anatomy and Pathology of the Aural Mechanism 435	2
Directed Teaching, Laboratory in Education and	
General Education Problems 370A, B, C	15
<i>Groups V and VI.</i> Fine Arts and Practical Arts	12
Industrial Arts for Elementary Teachers	4
Electives (must include at least one course in Music	
and one course in Art)	8

<i>Group VII. Physical Education and Health</i>	4
Electives	24 or 25

Note—The academic training shall include a major in Special Education (deaf and hard of hearing) and two minors. The two minors must be in subjects or subject fields taught in the elementary grades or in special classes for deaf or hard of hearing. Courses included in the major in Special Education must be elected under guidance and must include those subjects, groups, and hours required for certifications of the Department of Public Instruction, American Association of Instructors of the Deaf, and the American Speech and Hearing Association.

SPECIAL EDUCATION CURRICULUM—MENTALLY HANDICAPPED

B.S. Degree

State Elementary Provisional Certificate

(For the preparation of teachers of mentally handicapped children)

	S.H.
<i>Group I. Language and Literature</i>	14
Communication 104A, B; or	8
College Writing 106A, B (6) and Elective (2)	
Literature for Children 203	3
Literature, Speech, or Foreign Language	3
<i>Group II. Science and Mathematics</i>	22
Biological Science 102*	4
Human Geography 105*	4
Physical Science 100A*	4
Healthful Living 112 (or Health Education 285)	2
General Psychology 200	3
Abnormal Psychology 305	3
Mental Testing 307	2
*If the student demonstrates proficiency in any of these subjects, he may elect other courses from the division upon the recommendation of his counselor.	
<i>Group III. Social Science</i>	12
Man and Society 101A, B	8
Amer. Gov't. 334	3
Elective	1
<i>Group IV. Education</i>	38-39
Introduction to Education 100	2
Human Growth and Development 251	3
Introduction to Special Education 231; or	2
Education of Exceptional Children 431	2
Psychology of Reading 212	3
Mental Deficiency 434	3
Introduction to Mental Hygiene 235; or	3
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 Educational Problems 370A, B, C	15
<i>Groups V and VI.</i> Fine Arts (Art, Music) and Practical Arts (Includes at least one course in Art, one course in Music, and Industrial Arts for Elementary Teachers) (4 hours.)	12
<i>Group VII.</i> Physical Education and Health	4
Elective	21 or 22

Note—The academic training shall include a major in Special Education (mentally handicapped) 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 Instruction for certification.

SPECIAL EDUCATION CURRICULUM—OCCUPATIONAL THERAPY

B.S. Degree and Diploma

State Elementary Provisional Certificate

(For the Preparation of Teachers of Occupational Therapy)

	S.H.
<i>Group I,</i> Language and Literature	17-18
Communication 104A, B or	8
College Writing 106A, B and	6
Fundamentals of Speech 105A	3
Literature for Children 203	3
Intro. to Speech Correction 230 or Principles of Speech Correction 231	3
Elective (Literature or Foreign Language)	3
<i>Group II,</i> Science	28
Biological Science 102	4
Outdoor Science 231A or 231B	4
Anatomy 211A	4
Physiology 211B	4
Kinesiology 216A	2
Applied Kinesiology 216B	2
Theory of O.T. 410B	3
General Psychology 200	3
Abnormal Psychology 305	3
Psychiatry 330	3
(To be taken with Theory of O.T. 210A)	
<i>Group III,</i> Social Science	14
Western Civilization 100A, B or	8
Man and Society 101A, B	8
Political Science	3
Hospital Case Studies 352 (Done on affiliation)	3

<i>Group IV, Education</i>	20
Theory of Occupational Therapy 210A, B, 410A	6
Human Growth and Development 251	3
Introduction to Directed Teaching 351	3
General Educational Problems 370C	3
Directed Teaching 374	5
<i>Group V, Fine Arts</i>	14
Art Structure 106	3
Elementary Design 215	3
Ceramics 424A or Jewelry 424B	2
Weaving 428	3
Minor Crafts 225	3
<i>Group VI, Practical Arts</i>	18
O.T. General Shop 167	3
O.T. Special Wood Shop 308	3
O.T. Printing 144	3
Therapeutic Activities 324	2
Basic Needlecraft 223	3
Recreational Therapy 222	2
Clothing 203	2
<i>Group VII, Physical Education</i>	4
<p>All Students in Occupational Therapy are to take two class hours of physical education (including Physical Education 100). Two additional class hours of credit will be received for recreational therapy done on affiliation.</p>	
<i>Clinical Training 410</i>	5
<p>Nine calendar months at affiliating hospitals. The student will receive undifferentiated credit totaling 5 hours in addition to the hours earned in Psychiatry (3) and Hospital Case Studies (3).</p>	

Note—1. Thirty 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.

SPECIAL EDUCATION CURRICULUM—SPEECH CORRECTION

B.S. Degree

State Elementary Provisional Certificate

(For the preparation of teachers of speech correction)

<i>Group I. Language and Literature</i>	S.H.
Communication 104A, B	32
or	
College Writing 106A, B (6) and Elective (2)	
Speech for Teachers 105	3

Problems of Deaf and Hard of Hearing 232	3	
Introduction to Speech Correction 250	3	
Principles of Speech Correction 251	3	
Phonetics 318	3	
Basic Voice and Speech Science 451	3	
Stuttering and Allied Disorders 452	3	
Applied Speech Correction 453	3	
<i>Group II. Science</i>		18
Biological Science 102*	4	
Physical Science 100A*	4	
Healthful Living 112	2	
General Psychology 200	3	
Abnormal Psychology 305	3	
Mental Testing 307	2	
<i>Group III. Social Science</i>		14
Man and Society 101A, B	8	
Marriage and the Family 345	3	
Amer. Gov't. 334	3	
<i>Group IV. Education</i>		25-26
Human Growth and Development 251	3	
Introduction to Mental Hygiene 235	3	
or		
Mental Hygiene of Childhood and Adolescence 436	2	
Introduction to Special Education 231	2	
Introduction to Directed Teaching 351	3	
Directed Teaching, Laboratory in Education and General Educational Problems 370A, B, C	15	
<i>Group VII. Physical Education and Health</i>	4	
Electives		30-32
Suggested electives: Anatomy 211A, Illustrative Hand- work 107, Interpretive Reading 210, Public Speaking 206, Social Psychology 243, Principles of Social Work 355, Psychology of Reading 212.		

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

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.)

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.

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 hours in retailing courses.
3. Satisfactory evidence of having had one year of work experience in a distributive occupation.

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

Courses required unless previously taken to meet minimum group requirements:

Third Year	S.H.	Fourth Year	S.H.
Communication 104B or	4	Prin. of Vocational Ed. 470	2
College Writing 106B	3	Teach. Techniques in Dist.	
Physical Science 100A, B or	8	Ed. 420	2
Biological Sci. 102 and	4	Coord. Techniques in Dist.	
Human Geography 105	4	Ed. 430	2
Western Civil. 100A, B	8	Organ. and Operation of Dis.	
Man and Society 101A, B	8	Ed. 410	2
Electives (Group I)	0-6	Intro. to Dir. Teach. 351	3
Electives (Group II)	0-4	Directed Teaching 370A	8
Amer. Gov't. 334	3	Lab. in Education 370B	4
Human Growth 251	3	Physical Education	1
Physical Education	1	Electives	8

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 hours in drawing, wood, electricity and metal. An alternative may be a 15 hour minor in any course sequence such as wood, metal, drawing or printing.

First Year	S.H.	Second Year	S.H.
Communication 104A, B	8	Intro. to Vocational Ed. 200	2
Physical Science 100A, B	8	General Psych. 200	3
Applied Math. 112	3	Coordinated Industry 250, 252	6
Coordinated Industry 150, 152	6	Physical Education	2
Physical Education	2	Man and Society 101A, B	8
Electives—Industrial Arts	3	Electives—Industrial Arts	5
—Technical Shop	2	—Technical Shop	2
		—General	4
Third Year	S.H.	Fourth Year	S.H.
Plan and Organ. of a School Shop 347	2	Teach. of Voc. Ind. Ed. 452	3
Course Plan and Constr. 472	2	Intro. to Dir. Teach. 351	3
Human Growth 251	3	Integrated Pro. Education 370A, B, C	15
Amer. Gov't. 334	3	Testing and Grading in Ind. Ed. 474	2
Labor Problems 421A	2	Electives—Industrial Arts	5
Coordinated Industry 350, 352	6	—General	4
Electives—Industrial Arts	7	Total Semester Hours for Graduation	128
—Technical Shop	2	Major—Vocational-Industrial Ed.	35
—General	5	First Minor—Industrial Arts	20
		Second Minor—Elective	

III. DEGREE AND NON-TEACHING CURRICULA

AIRLINE HOSTESS

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	S.H.	Second Year	S.H.
Communication 104A, B	8	General Psych. 200	3
Physical Science 100A, B or General Biology 100A, B	8	Psych. of Person. 207	3
Business Mathematics 120	2	First Aid 171	2
Human Geography 105A	4	Foods for the Family 218	2
Elementary Aviation 110	3	Person. Development 224	3
Physical Education	2	The Airline Hostess 207	2
Electives	3	Man and Society 101A, B	8
		Physical Education	2
		Electives	7
Third Year	S.H.	Fourth Year	S.H.
Sociology 241	3	Airline Traffic 304	3
Amer. Gov't. 230A or 334	3	Airline Operations 305	2
Bus. Correspondence 232	3	Airline Admin. 306	2
Navigation, Communications 301	2	Pilot Train. and Flight 214A	
Personnel Relations 279	3	or D	2
Aero. Meteorology 302	3	Electives	21
Electives	15		

Required: A major of 24 hours in one of the following areas—Secretarial, General Business, Personnel, Office Supervision; one minor of 19 hours to be in Aviation; second minor, elective.

Major Sequence

Secretarial Administration	S.H.	Personnel Administration	S.H.
Secretarial Science 130A, B	10	Management Problems 339	3
Office Machines 230A, B	4	Person. Admin. 436	3
Office Organ., Management 239	3	Office Organ., Management 239	3
Filing Techniques 103	2	Bus. Correspondence 232 or	3
Personnel Admin. 436	3	Bus. Report Writing 433	2
Bus. Correspondence 232 or		Electives—Bus. Courses	12
Bus. Report Writing 433	2		
Shorthand 100A, B	6		
Secretarial Acctg. 211A, B	6		
Typewriting 101A, B	4		
		General Business	
Office Supervision	S.H.	Any courses in business.	
Office Machines 230A, B	4		
Office Organ. 239	3		
Personnel Admin. 436	3		
Filing Techniques 103	2		
Typewriting 101A, B	4		
Bus. Correspondence 232 or	3		
Bus. Report Writing 433	2		
Electives—Bus. Courses	5		

AIR TRANSPORTATION

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 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	S.H.	Second Year	S.H.
Communication 104A, B	8	Man and Society 101A, B	8
Applied Math. 112	3	Airframes 203	4
Physical Science 100A, B	8	Powerplants 206	4
Airframes 103	4	Drawing 170A	2
Powerplants 106	4	Welding 274A	2
Elem. Aviation 110	3	General Psych. 200	3
Physical Education	2	Psych. of Person 207	3
		Bus. Correspondence 232	3
		Physical Education	2
Third Year	S.H.	Fourth Year	S.H.
Amer. Gov't. 334	3	Bus. Report Writing 433	2
Indus. Organ. and Management 343	3	Person. Admin. 436	3
Indus. Cost. Acctg. 316A, B	4	Airline Traffic 304	3
Pilot Train. and Flight 214A	2	Airport Management 303	3
Navigation, Communications 301	2	Airline Operation 305	2
Aero. Meteorology 302	3	Airline Admin. 306	2
Personnel Relations 279	3	Labor Problems 421A	2
Indus. Sociology 346	2	Electives—General	10
*Electives—Business	3	*Electives—Business	6
—General	7		
*Business Electives:		Small Business Management 237	
		Salesmanship 340	
		Sales Management 341	
		Credit Management 345	
		Industrial Management Problems 344	
		Advertising 342	
		Marketing 347	
		Purchasing Principles 348	
Total Hours for Graduation			128
First Major—Aviation			43
Second Major—Business Administration			24
Minor—Psychology, Economics or Industrial Supervision			15

AUTOMOTIVE TRANSPORTATION

B.S. Degree

The Automotive Transportation curriculum is intended for those who wish to prepare themselves for employment in automotive servicing stations 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	S.H.	Second Year	S.H.
Communication 104A, B	8	Man and Society 101A, B	8
Physical Science 100A, B	8	Auto. Elec. & Ignition 255A	4
Auto. Eng. & Accessories 155A	4	Auto. Analysis 255B	4
Auto. Running Gear 155B	4	General Psych. 200	3
Electricity 174	2	Applied Psych. 204	2
Machine Shop 176	2	Bus. Correspondence 232	3
Physical Education	2	Sheetmetal 275	2
Drawing 170A	2	Welding 274A	2
		Physical Education	2
		Elective	2
Third Year	S.H.	Fourth Year	S.H.
Personnel Relations 279	3	Time and Motion Study 358	3
Quality Control 354	3	Production Control 356	3
Indus. Cost Acctg. 316A, B	4	Labor Problems 421A, B	4
Psych. of Personality 207	3	Intro. to Indus. Psych. 300	2
Plant Maintenance 355	2	Occupational Anal. & Class.	
Testing of Materials 178	3	404 or Vocational Psych. 406	2
Sales Management 341	3	Advertising 342	3
Salesmanship 340	3	Credit Management 345	3
Electives	8	Purchasing Practices 348	3
		Fundamentals of Indus. Super.	
		353	2
		Indus. Organ. & Management	
Second Major—Business	24	343	3
First Minor—Industrial Super- vision	16	Auto. Service Management 370	2
Second Minor—Economics or Psychology	15	Electives	2
		Total Hours for Graduation	128
		First Major—Automotive	31

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. A student under the Business Administration curriculum must have a minimum of thirty hours in the field of Business Administration, a minimum of 15 hours in Economics and at least forty-eight hours in the fields of Business and Economics. Students on the Business Administration curriculum must also meet the general degree requirements. The maximum number of hours a student may present for graduation is 45 in the Department of Business Studies.

First Year	S.H.	Second Year	S.H.
Communication 104A, B or College Writing 106A, B	8 6	Language or Lit. Speech 108	3-4 3
Man and Society 101A, B or West. Civil. 100A, B	8 8	Economics 220A, B Accounting Prin. 210A, B	6 6
Physical Science 100A, B or Biol. Sci. 102 or Human Geog. 105A	8 8	Business Corresp. 232 **Business Statistics 235 Physical Education	3 3 1
*Mathematics 105A, B Physical Education	6 1	Major and Minor Requirements	6
Third Year	S.H.	Fourth Year	S.H.
General Psych. 200 Prin. of Insurance 322 Amer. Nat'l. Gov't. 230A or Government 334	3 3 3	Management Problems 339 Physical Education Major and Minor Requirements and Electives	3 1 27
Business Law 320A, B Physical Education Major and Minor Requirements and Electives	6 1 15	General Electives Recommended: Economic Geography 218 Economic History of U.S. 312 Psych. Aspects of Bus. 210 Applied Psych. 204 Prin. of Soc. 241	3 3 3 2 3

Majors in Business Administration

- I. Accounting: Accounting 210A, B; Inter. Accounting 310A, B; Cost 411, Tax 412, Audit. 313, Accounting Theory and Problems 314. Students planning on majoring in Accounting should take 210A, B in their freshman year. Advisor: Wetnight.
- II. Air Transportation: (Students under the Air Transportation curriculum may major in Business Administration.)
- III. Economics: Elect 24 hours in the Economics Department. Advisor: Moore.

*If a student has not had 2 years of high school Mathematics, he must take Mathematics 120A, B instead of Mathematics 105A, B.

**Mathematics 209 may be taken instead of Statistics 235.

- IV. General Business: Upon the approval of advisor elect a logical sequence of courses from the Department of Business Studies which meets the student's vocational interests and needs. Advisors: Sokolowski and Burdick.
- V. Insurance: (1) Agency (Sales)—Insurance Principles 322; Property Insurance 324; Casualty Insurance and Suretyship 326; Life Insurance 423, Group, Indus. and Social Insurance 325; Salesmanship 340, and either Sales Management 341 or Advertising 342. (2) Insurance Management—Insurance Principles 322; Property Insurance 324, Casualty Insurance and Suretyship 326; Life Insurance 423; Group, Industrial and Social Insurance 325; Office Management 439, and either Business Report Writing 433 or Personnel Administration 436. Advisor: Burdick.
- VI. Secretarial Administration: Secretarial Science 130A, B; Office Machines 230A, B; Office Organization 239; Records Management 103; 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.) Advisor: George Cooper.
- VII. Management:
- (1) Office Management: Accounting 310A, B or 311 and 312; Survey of Office Machines 230; Office Management 439; Personal Administration 436; Records Management 103; Proficiency in Typewriting or 101A, B; Business Report Writing 433. (Minor in Psychology recommended.) Advisor: Cooper.
 - (2) Personnel Administration: Office Management 439; Bus. Report Writing 433; Personnel Admin. 436. (Minor in Psychology required.) Advisor: Healey.
 - (3) Sales Management: Salesmanship 340; Sales Management 341; Credit Management 345; Advertising 342; Personnel Admin. 436; Small Bus. Management 237; Purchasing 348. Advisor: Trader.
 - (4) Retail Store Management: Retail Salesmanship 150; Fund. of Retailing 140; Merchandise Information 151A, or B; Retail Merchandise Math. 111; Retail Advertising 240; Retail Credit and Collections 241 or Credit Management 345. Advisor: Trader.
 - (5) Small Business Management: Salesmanship 340; Sales Management 341; Credit Management 345; Real Estate Fundamentals 350; Advertising 342; Personnel Admin. 436; Small Bus. Management 237. Advisor: Trader.
 - (6) Industrial Management: Purchasing 348; Cost Accounting 411; Personnel Admin. 436; Bus. Report Writing 433; Indus. Organization and Management 343; Indus. Management Problems 344; Intro. to Indus. Psych. 300. Students required to take a minor in Vocational Indus. to be approved by the Major and Minor advisors. Advisor: Wetnight.

DIETETICS

First Year	S.H.	Second Year	S.H.
Chemistry 101A, B or Chemistry 100A, B	8	Biological Science 102	4
Communication 104A, B or College Writing 106A, B	6 or 8	Elementary Design 105	2 or 3
Effective Living 145	2	Foods 311	3
Foods 111	3	General Psychology 200	3
Western Civil. 100A, B	8	Nutrition 211	3
Physical Education	1	Organic Chemistry 306A	4
Electives	2	Sociology 241	3
		Textiles 103	3
		Physical Education	2
		Electives	3 or 4
Third Year	S.H.	Fourth Year	S.H.
Amer. Gov't. 334	3	Diet and Disease 317	2
Advanced Nutrition 416	3	Institutional Mgt. 423	3
Bacteriology 312A	4	Physiology 211B	3
Bio-chemistry 350, 351	4	Home Ec. Ed. 300	3
Principles of Economics 220A	3	Electives	19
Quantity Foods 312	3		
Physical Education	1		
Electives	8		

Recommended minors: Chemistry and Combined Social Science.

Recommended electives: Home Management 322, Consumer Buying 439, Home Management Practice 324, Experimental Foods 419, Housing 421, Food Chemistry 341, Advanced Textiles 403, Food Demonstration 318.

Each student is required to work twelve months in a hospital approved by the American Dietetics Association.

Home Economics in Business

First Year	S.H.	Second Year	S.H.
Chemistry 105A, B	8	Biol. Science 102	4
Communication 104A, B or College Writing 106A, B	6 or 8	Clothing 205	3
Effective Living 145	2	Costume Design 209	2
Elementary Design 105	2 or 3	Home Furnishings 221	2
Foods 111	3	Home Nursing 223	2
Western Civil. 100A, B or Man and Society 100A, B	8	Journalism 201A	3
Textiles 103	3	Nutrition 211	3
Physical Education	1	Sociology 241	3
		Typewriting 101A, B	4
		Physical Education Electives	1 4
Third Year	S.H.	Fourth Year	S.H.
Accounting 210A	3	Advanced Nutrition 416	3
Advanced Foods 311	3	Consumer Buying 439 or Econ. of Consumption 223	3
Amer. Gov't. 334 or St. and Loc. Gov't. 230B	3	Experimental Foods 419	2
Economics 220A	3	Housing 421	2
Family Clothing 305	2	Mar. and Fam. Relations 325	2
Food Demonstration 318	2	Quantity Foods 312	2
General Psychology 200	3	Radio	3
Home Management 322	2	Tailoring 404	3
Home Management Prac. 324	3	Electives	2
Physical Education	2		
Electives	5		

INDUSTRIAL SUPERVISION

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	S.H.	Fourth Year	S.H.
General Psych. 200	3	Personnel Admin. 436	3
Psych. of Personality 207	3	Labor Problems 421A, B	4
Man & Society 100A, B	8	Indus. Cost Acctg. 316A, B	4
Fund. of Ind. Super. 353	2	Quality Control 354	3
Bus. Corres. 232	3	Production Control 356	3
Indus. Soc. 346	2	Intro. to Indus. Psych. 300	2
Plant Main. & Safety 355	2	Indus. Organ. Mgmt. 343	3
Physical Ed.	2		
Electives	7		

LIBRARIANSHIP

A.B. or B.S. Degree with Major in Librarianship

Public, County and Regional Library Service

First Year	S.H.	Second Year	S.H.
College Writing 106 or Communication 104	6 8	Gen. Psych. 200	3
Phy. Sci. Survey 100 or Bio. Sci. & Hum. Geog. 102	8 8	Sociology 241	3
Western Civil. 100	8	Economics 220	3
Modern Lang.	8	Journalism 201	3
Electives	2	Lit. for Children 203	3
Phy. Ed.	2	Read. Interests of Child. 202	3
		Mich. History 313	3
		Electives	9
		Phy. Ed.	2
Third Year	S.H.	Fourth Year	S.H.
Amer. Gov't. 334	3	Read. Interests of Young Adults 402	2
Human Growth & Devel. 251	3	Selection of Read. Matl. 403	3
Modern Soc. Prob. 342	3	Intro. to Class. & Cat. 470	4
Organ. of Lib. Matl. 360	2	*Field Assign. & Lab. 380	3
Reference Serv. 411	3	Lib. in the Modern Com. 362	2
Read. Interests of Adults 304	2	Audio Vis. Ed. 438	2
Rural & Urban Lib. Admin. 363	3	Eng. Electives	6
Storytelling 406	2	Electives	8
Electives	9		

*Includes three weeks of field work in a county, or small public library selected in consultation with departmental advisor.

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	S.H.	Second Year	S.H.
Military Science 101, 102	4	Military Science 201, 202	4
Third Year	S.H.	Fourth Year	S.H.
Military Science 301, 302	8	Military Science 401, 402	8

Attendance at six-week ROTC Summer Camp at end of third year is a part of the required course.

MUSIC

The B.M. Degree without the teaching certificate is offered with the following majors: composition, instrumental music, voice. For complete curricular details, ask for Music Supplement Catalog.

OCCUPATIONAL THERAPY

B.S. Degree and/or Diploma

First Year	S.H.	Second Year	S.H.
Communication 104A, B or College Writing 106A, B and General Speech 106	8	Literature for Children 203	3
Man and Society 101A, B or Western Civil. 100A, B	8	Intro. to Speech Corr. 230 or Prin. of Speech Corr. 231	3
Biological Science 102	4	Anatomy 211A	4
Outdoor Science 231A or B	4	Physiology 211B	4
O.T. Art Structure 106	3	General Psychology 200	3
O.T. Printing 144	3	Elementary Design 215	3
Physical Education	1	Minor Crafts 225	3
	———	O. T. General Shop 167	3
	30-32	Clothing 203	2
		Needlecraft 223	3
		Physical Education	1
Third Year	S.H.	Fourth Year	S.H.
Neurology 331	2	Rehabilitation 411	1
Lit. or Foreign Language	3	Theory of O.T. 410A	2
Abnormal Psych. 308	3	Hospital Case Studies 352	3
Kinesiology 216A	2	Clinical Practice 311	5
Applied Kinesiology 216B	2	Ceramics 425A	
Medical Lectures 410B	2	& Jewelry 425B	3
Psychiatric Lectures 330	3	Weaving 428	4
Theory of O.T. 210 A, B	4	Therapeutic Activities 324	2
Political Science 334	3	Electives	11-12
Minor Crafts 225	3		———
O.T. Spec. Woodshop 308	3		30-32
Recreational Therapy 222	2		
Electives	2		
	———		
	30-32		

PAPER TECHNOLOGY

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 three 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 I

(Preparation for Technical and Manufacturing Areas in the Paper Industry)

First Year			
First Semester	S.H.	Second Semester	S.H.
Communication 104A	4	Communication 104B	4
Trig. and College Algebra 103A ..	5	College Algebra and Analytic Geometry 103B	5
or		or	
College Algebra 104A	4	Analytic Geometry 104B	4
Gen. Chemistry 100A or 101A ...	4	Gen. Chemistry 100B or 101B ...	4
Mech. Drawing 121 or 221	2-3	Orientation to Paper Tech. 130B ..	1
Orientation to Pulp Tech. 130A ..	1	Physical Education	1
Physical Education	1	Electives**	3
Electives**	1		
	-----		-----
	17-19		17-18

Summer

Mill Practice 131 2 Hours

Second Year

First Semester	S.H.	Second Semester	S.H.
Economics 220A	3	Economics 220B	3
Calculus 205A	4	Calculus 205B	4
Mechanics, Sound and Heat 103A ..	5	Electricity and Light 103B	5
Qualitative Analysis 201	4	Quantitative Analysis 202	4
Pulp Manufacture 230A	2	Paper Manufacture 230B	2
Physical Education	1	Physical Education	1
	-----		-----
	19		19

Summer

Mill Practice 231 2 Hours

Third Year

First Semester	S.H.	Second Semester	S.H.
Man and Society 101A.....	4	Man and Society 101B.....	4
*Language and Literature	3-4	*Language and Literature	3-4
Organic Chemistry 306A	4	Organic Chemistry 306B.....	4
Pulp Testing 332A	2	Paper Testing 332B	2
Fiber Microscopy 333	1	Elements of Indus. Chem. 334B..	2
Elements of Indus. Chem. 334A..	2	Wood Chemistry 335	2
	—	Coloring and Filling of Paper 336.	1
	16-17		—
			18-19

Summer

Mill Practice 331	2 Hours
Mill Inspection Trip 337.....	1 Hour

Fourth Year

First Semester	S.H.	Second Semester	S.H.
*Language and Literature	3-4	*Language and Literature	3-4
Physical Chemistry 303A	5	Physical Chemistry 403B	5
Bleaching, Pulp Purification, De-inking 432	2	Converting of Paper 435	1
Auxiliary Equipment for Pulp and Paper Mills 433.....	1	Research Problems in Pulp and Paper 436B	2
Research Problems in Pulp and Paper 436A	2	Electives**	3
Chem. and Tech. of Plastics 434..	2		—
Electives**	3		14-15
	—		
	18-19		

*Recommended courses: Third year, German; Fourth year, Scientific German.

**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 Measurements 362; Statistical Methods for Industry 373.

OPTION II

(Preparation for Sales and Management Areas in the Paper Industry)

First Year			
First Semester	S.H.	Second Semester	S.H.
Communication 104A	4	Communication 104B	4
Trig. and College Algebra 103A ..	5	College Algebra and Analytic Geometry 103B	5
or		or	
College Algebra 104A	4	Analytic Geometry 104B	4
Gen. Chemistry 100A or 101A....	4	Gen. Chemistry 100B or 101B....	4
Mech. Drawing 121 or 221.....	2-3	Orientation to Paper Tech. 130B ..	1
Orientation to Pulp Tech. 130A....	1	Physical Education	1
Physical Education	1	Electives**	3
Electives**	1		
	-----		-----
	17-19		17-18

Summer

Mill Practice 131 2 Hours

Second Year

First Semester	S.H.	Second Semester	S.H.
Man and Society 101A	4	Man and Society 101B.....	4
Business Studies*	3	Business Studies*	3
General Physics 102A	4	General Physics 102B	4
Qualitative Analysis 201	4	Quantitative Analysis 202	4
Pulp Manufacture 230A	2	Paper Manufacture 230B	2
Physical Education	1	Physical Education	1
	-----		-----
	18		18

Summer

Mill Practice 231 2 Hours

Third Year

First Semester	S.H.	Second Semester	S.H.
Language and Literature	3-4	Language and Literature	3-4
Organic Chemistry 306A	4	Organic Chemistry 306B	4
Pulp Testing 332A	2	Paper Testing 332B	2
Fiber Microscopy 333	1	Coloring and Filling of Paper....	1
Elements of Indus. Chem. 334A ...	2	Elements of Indus. Chem. 335B...	2
Business Studies*	3	Business Studies*	3
Electives**	2	Electives**	2
	-----		-----
	17-18		17-18

Summer

Mill Practice 331	2 Hours
Mill Inspection Trip 337	1 Hour

Fourth Year

First Semester	S.H.	Second Semester	S.H.
Language and Literature	3-4	Language and Literature	3-4
Auxiliary Equipment for Pulp and Paper Mills 433	1	Convert. of Paper and Paperboard 1	
Chem. and Tech. of Plastics 434 ..	2	Economics 220B	3
Economics 220A	3	Business Studies*	5
Business Studies*	5	Electives**	5
Electives**	3		17-18
	17-18		

*Suggested Courses in Business Studies: Accounting 210; Inter. Accounting 310; Advanced Accounting 410; Industrial Cost Accounting 316; Cost Accounting 411; Bus. Correspondence 232; Bus. Report Writing 433; Bus. Statistics 235; Office Organization 239; Bus. Law 320; Insurance Principles 322; Personnel Admin. 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; Intro. to Indus. Psych. 300; Foremanship Training 353; Time Study and Job Analysis 354; Production Control 356; Intro. to Electronics 361; Electrical Measurements 362; Elem. Statistical Practice 209; Intro. to Statistical Theory 473.

SOCIAL WORK

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

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.

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	S.H.	Second Year	S.H.
Communication 104A, B	8	General Psych. 200	3
Biological Sci. 102, or equiv.	4	Psych. of Personality 207 or	3
West. Civil. 100A, B (recom- mended) or Man & Soc. 101A, B	8	Intro. to Mental Hygiene 235 or	3
or equiv.	8	Human Growth 251	3
Physical Ed.	2	Economics of Consumption 223 or	
Electives	10	Prin. of Economics 220A	3
		Principles of Sociology 241	3
		Modern Social Problems 242	3
		Social Psych. 243	3
		Fields of Social Work 255	2
		Physical Ed.	2
		Electives	8

Third and Fourth Years

	S.H.		S.H.
Community Hygiene 212 or Genetics 305	3-2	Family & Child Adjust. 351	3
American Nat'l Gov't. 230A	3	Intro. to Public Welfare 353 or	3
State & Local Gov't. 230B	3	Community Welfare Organ. 357	2
A minimum of 8 hours of adv. sociology in addition to the courses listed below, selected with the advice and approval of the departmental advisor	8	Prin. of Social Case Wk. 355 or	2
Intro. to Social Research 348A	3	Prin. of Social Group Wk. 356	2
Social Research Projects 348B	2	Orientation to Field Wk. 358A	2
		Supervised Field Wk. 358B	3
		Electives	29-33

The required courses in this curricula provide for a social science major of 34 or 37 hours and a minor in social work of 17 or 18 hours. Some 50 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 302, Clinical Psychology 309 and Labor Problems 421A, B.

IV. PRE-PROFESSIONAL CURRICULA

Every professional school has prescribed the nature and amount of the college work to be completed as a prerequisite to the professional training for a particular vocation. Four years of college work is generally required by most professional schools for entrance. Western Michigan College is able to offer its students courses of study that meet the requirements for this pre-professional training. It should be noted, however, that the courses outlined are only suggested plans to illustrate in general the kinds of programs that pre-professional students should follow. **IN EVERY CASE THE STUDENT SHOULD PLAN HIS COURSE AT WESTERN MICHIGAN COLLEGE ACCORDING TO THE REQUIREMENTS OF THE SCHOOL TO WHICH HE PLANS TO TRANSFER FOR HIS PROFESSIONAL TRAINING.** It cannot be emphasized too strongly that the student should exercise care to see to it that the specific requirements of a particular school will have been met.

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	S.H.	Second Year	S.H.
Communication 104A, B	8	Chemistry 100A, B or 101 A, B	8
General Biology 100A, B	8	Agronomy 200A, B	8
Animal Industry 107A, B	8	Phy. Sci. 100A, B,	8
Man & Society 101A, B	8	U. S. Hist. 201A, B	6
Phy. Ed. as required		Phy Ed. as required	

Recommended Courses for a Third Year	S.H.
Bacteriology 312A, B	8
Mathematics 100A, C	6
Surveying 210	3
Prin. of Econ. 220A	3
Amer. Gov't. 334	3
Lang., Speech or Psych. suggested as optional student electives.	

DENTISTRY

Although the Dental Aptitude Test is required of all applicants to any dental school, the amount and kind of college work needed for admission varies. Therefore, a student planning to do his pre-dental work at Western Michigan College should have a catalog from the dental school of his choice and plan his work at Western to meet the requirements of that particular school.

The following program will in most instances satisfy dental school requirements.

First Year	S.H.	Second Year	S.H.
College Writing 106A, B	6	Physics 102A, B	8
Biology 100A, B	8	Organic Chem. 306A, B	8
Chem. 100A, B or 101A, B	8	Phys. Ed. 203A, B or R.O.T.C.	2-4
Man & Society 101A, B or Western Civil. 100A, B	8	Language, Lit. or Speech	6-8
Phys. Ed. 103A, B or R.O.T.C.	2-4	Electives	6-8
Trig. (If none in high school)	3		
Third Year	S.H.		
Zoology	8		
Psychology	6		
Electives (complete minors)			

ENGINEERING

First Year	S.H.	Chemical and Metallurgical Second Year	S.H.
College Writing 106A, B	6	Calculus 205A, B	8
Trig. & College Alg. 103A, College Alg. & Anal. Geom. 103B	10	Mech., Heat & Sound 103A, Elect. & Light 103B	10
or		Eng. Materials 210	3
College Alg. & Anal. Geom. 104A, B	8	Qual. Anal. 201, Quant. Anal. 202	8
Gen. Chem. 100A, B or 101A, B	8	Metal Processing 311	2
Mech. & Mach. Drwg. 221	3	Phy. Ed.	1
Descriptive Geom. 222	3		
Physical Ed.	1		
Electives	3-4		
Chemical and Metallurgical Third Year	S.H.	Aeronautical, Civil, Electrical, Marine and Mechanical Second Year	S.H.
Prin. of Econ. 220A, B	6	Calculus 205A, B	8
Organic Chem. 306A, B or Language (German preferred)	8	Mech., Heat & Sound 103A, Elect. & Light 103B	10
Statics 320	3	Eng. Materials 210	3
Fund. of Speech 105A	3	Metal Processing 311	2
Social Sci. electives	6	Fund. of Speech 105A	3
Electives	6-8	Physical Ed.	1
		Electives from Group I	6-8
Aeronautical, Civil, Electrical, Marine and Mechanical Third Year	S.H.		
Prin. of Econ. 220A, B	6		
Foreign Language or Electives from Group III	8		
Differential Equations 321 or Elective	3		
Statics 320 or Elective	3		
Theoretical Mech. 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 hours in Group III (Social Science), including three hours of political science.

3. Electives: Differential Equations 321 is required in Aero. Engineering. Elect. Engineering and Engineering Mech. Geology 230 should be elected in the third year of the Civil Engineering curriculum.

4. Civil Eng. requires Surveying.

FORESTRY

The following is a two-year program approved by Michigan State College:

First Year	S.H.	Second Year	S.H.
College Writing 106A, B	6	Chemistry 101A, B	8
Physical Sci. 100A	4	Soils 200	3
Western Civil. 100A, B	8	Botany 221A, B	8
Math.	6, 8, or 10	Man & Society 101A, B	8
Biological Sci. 102	4	Comparative Arts 215	4
Phy. Ed. or R.O.T.C.	2 or 4	Phy. Ed. or R.O.T.C.	2 or 4
Speech 106 should be taken if a 3-hour math. course is taken.			

Students planning to transfer to the University of Michigan for work in forestry 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	S.H.	Second Year	S.H.
College Writing 106A, B or Communication 104A, B	6 8	Geology 230A	4
General Chem. 100A, B	8	Physics 103A	5
West. Civil. 100A, B or Man & Society 101A, B	8 8	Soils 200	3
Gen. Biology 100A	8	Economics 220A, B	6
Trig. 100C	3	Surveying 210	3
		Botany 221B	4
		Botany 223	2

JOURNALISM

Most schools of journalism have very definite requirements for admission. A student wishing to do his pre-journalism work at Western Michigan College should plan his course of study according to the requirements for the particular school of his choice. The following is only a suggested program. Many schools require work in a foreign language in addition.

First Year	S.H.	Second Year	S.H.
College Writing 106A, B	6	Journalism 201A, B	6
Speech 106	3	U. S. Hist. 201A, B	6
Phy. Sci. 100A	4	Man & Society 101A, B	8
Western Civil. 100A, B	8	Comparative Arts 215	4
Biol. Sci. 102	4	Phy. Ed.	1-1/3 or 2
Phy. Ed.	1-1/3 or 2	Electives	3 or 4
Electives	3 or 4		

LAW

An increasing number of law schools are requiring a college degree before admission. Many of these schools also require applicants to take the Law School Admission Test. A student planning to go to a law school should plan his course at Western Michigan College with his counselor according to the requirements of the school of his choice.

Below is a suggested program covering three years of work.

First Year	S.H.	Second Year	S.H.
College Writing 106A, B	6	English Lit.	6
Math. or Lab. Sci.	8-10	History 201A, B	6
Western Civil. 100A, B	8	Prin. of Econ. 220A, B	6
Foreign Lang.	8	Acctg. 210A, B	6
Phy. Ed.	1	Gen. Psych. 200	3
		Phy. Ed.	1
	Third Year	S.H.	
	Amer. Nat'l & St. Govt. 230A, B	6	
	Prin. of Soc. 241	3	
	Modern Social Prob. 242	3	
	Public Finance 420	3	
	Elective (to be selected from Speech 105A, B; Money & Credit 321A, B; Language or Lit. or Lab. Sci.)	1-5	

MEDICINE

Many medical schools accept students with three years of college work. Others require that the student finish four years before entering. The Medical College Admission Test is required of all applicants to medical schools.

A student planning to do his pre-medical work at Western Michigan College should obtain catalogs from three medical schools of his choice and should plan his college work to meet their requirements. A special counselor for those enrolled in pre-medical work will assist the student in planning his course of study.

First Year	S.H.	Second Year	S.H.
College Writing 106A, B	6	Qual. & Quant. 201-202	8
Biology 100A, B	8	Physics 102A, B	8
Chem. 100A, B or 101A, B	8	Lang. (not required)	8
Lang.	8	Man & Society 101A, B	8
Phy. Ed. or R.O.T.C.		Phy. Ed. or R.O.T.C.	
Third Year	S.H.	Summer	
Zoology 242A, B	8	Emb. 342 or Histology 341	
Organic Chemistry 306A, B	8	Fourth Year	
Group III	6	(If four-year pre-med is taken then omit summer session above.)	
Group I or V	6	Complete major and minor requirements and other degree requirements. Take electives in Art, Music, Literature, Speech and Social Sciences.	
Electives	4		

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 hours. The major is "Medical Technology", 335, thirty 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	S.H.	Second Year	S.H.
Biology 100A, B	8	Qual. & Quant. 201-202	8
College Writing 106A, B	6	Bacteriology 312A	4
Chemistry 100A, B or 101A, B	8	Physiology 211B	4
Math. or Man & Society	6-10	Man & Society 101A, B or Govt.	8
Phy. Ed.	1-1/3	Group I	6-8
		Phy. Ed.	2/3
Third Year	S.H.	Fourth Year	S.H.
Physics 102A, B	4	Medical Tech. 335	30
Zoology 242B	4		
Organic Chem. 306A	4		
Biochem. 350-351	4		
Electives Group I, II, III	15		

To total at least 92 Semester Hours.

MORTUARY SCIENCE

The first two years of a three-year program in Mortuary Science are called the pre-professional part of the program. To complete the requirements for this, a student must earn 60 hours of credit. It is strongly recommended that his course work include the following: English (6 hours), General Chemistry (8 hours), Organic Chemistry (3 hours), Social Sciences, including geography, history, government, economics, sociology and philosophy, (8 hours), Zoology or Biology (4 hours), Psychology (2 or 3 hours), Mathematics or Accounting (4 hours).

The Michigan Board of Examiners of Mortuary Science requires completion of certain group requirements which the student should check thoroughly.

Suggested First Year	S.H.
College Writing 106A, B	6
Chem. 100A, B or 101A, B	8
Man & Society 101A, B or West. Civ. 100A, B	8
Biology 100A	4
Small Bus. Mgmt. 237	3
Phy. Ed.	2

NURSING

Pre-professional preparation for transfer to a college of nursing may be taken at Western Michigan College for one or two academic years.

Universities offering a four-year correlated-program leading to a B.S. degree and R.N. accept transfer students from an accredited institution upon the satisfactory completion of one year meeting specified requirements.

Bronson Methodist Hospital School of Nursing students receive pre-clinical instruction at Western Michigan College. Credit toward a baccalaureate degree may be offered at the discretion of the college after evaluation of the Nursing School record of the individual graduate nurse.

A typical one-year pre-professional required program:	S.H.	A typical two-year pre-professional required program:	S.H.
College Writing 106A, B or Communication 104A, B	6-8	College Writing 106A, B or Communication 104A, B	6-8
Chemistry 101A, B or 100A, B	8	Chem. 101A, B or 100A, B	8
Biology 100A, B	4-8	Biology 100A, B	8
Psych. 200	3	Zoology 242A, B	4-8
Social Sci.	8	Psych. 200	3
Phy. Ed.	Each Sem.	Social Studies	14-18
Electives (to bring total to at least 30)		Phy. Ed.	Each Sem.
		Electives (to bring total to at least 60).	

Certain other colleges of nursing admit candidates at the end of two years from an accredited institution meeting specified requirements.

In co-operation with the nursing counselor, students should plan with care to meet the admission requirements of the school they wish to attend.

PHARMACY

A student transferring to a college of pharmacy is required to be in residence at that school for a minimum of six semesters regardless of how much previous college training he may have had. Therefore, the pre-pharmacy course of study at Western Michigan College consists of one year's work.

	First Year	S.H.
Chemistry 100A, B or 101A, B		8
College Writing 106A, B		6
Biology 100A		8
Math. (if Trig. was not taken in high school)		3 or 4
Electives (Speech 106 recommended)		3
Phy. Ed. or R.O.T.C.		2 or 4

THEOLOGY

A student who wishes to do his pre-theological studies at Western should have a catalog of the theological school of his choice to help him in planning his college work. The following is suggested as a first-year program.

	First Year	S.H.
College Writing 106A, B		6
General Lit. 124A, B		6
Physical Sci. 100A		4
West. Civ. 100A, B		8
Biological Sci. 102		4
Phy. Ed.		2

V. TWO-YEAR CURRICULA**BUSINESS (TECHNICAL)**

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.

A. Cooperative Program in Secretarial Training

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.

SECRETARIAL CURRICULUM

First Year	S.H.	Second Year	S.H.
College Writing 106A, B or Communication 104A, B	6-8	Secretarial Accounting 211A, B Office Machines 230A, B	6 4
Ind. and Bus. World 135A, B	4	Records Management 103	2
Bus. Mathematics 120A	2	Coord. Bus. Exp. 200A, B	4
*Secretarial Science 130A, B	10	Physical Education	1
Personal and Social Prob. 120	1	**Electives	13
Man and Society 101A, B	8		
Physical Education	1		

B. Cooperative Program in Retailing

Advisor: Rice

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 have not had shorthand or typewriting in high school should register for Shorthand 100A and Typewriting 101A.

**Students should consult their faculty advisor before making their selections.

COOPERATIVE RETAILING CURRICULUM

First Year	S.H.	Second Year	S.H.
Retail Salesmanship 150	3	Retail Adver. 240	3
Mdse. Information 151A, B	4	Store Mgmt. 251	2
Retail Mdse. Math. 111	3	Retail Personnel Mgmt. 252	2
Bus. Corres. 232	3	Retail Credit and Col. 241	3
Coord. Bus. Exp. 100	2	Coord. Bus. Exp. 200A, B	4
College Writing 106A	3	Physical Education	2/3
Physical Education Electives	1-1/3	Electives	

Retail Electives	S.H.	Non-Retail Electives	S.H.
Selling Fashion Mdse. 141	2	I. Speech, College Writing 106B	3
Selling Home Furn. 242	2	II. Phy. Sci. Sur. 100A, B or	
Interior and Window Display 224	3	Biol. Sci.	8
Retail Buying Tech. 243	2	III. Man and Society 101A, B	8
Color and Design in Retail. 142	3	Found. of West. Civ. 100A, B	8

Diploma in Retailing

Students who successfully complete the four-semester program (62 hours) will receive a diploma in Retailing. Twenty-six hours are required in retailing courses, 3 hours in College Writing 106A, 3 hours in Business Correspondence, and 2 hours in Physical Education. The remaining 28 hours may be elective.

For students who find it possible to take only one year of training at this time, the first portion of this program offers a well-rounded consideration of the basic principles for immediate store work. The second year is more advanced, more detailed and gives more of the background necessary for better positions in the future.

C. Regular (non-cooperative) Technical Business Curriculum Advisor: Healey

First Year	S.H.	Second Year	S.H.
Communication 104A, B or College Writing 106A, B	8 6	Man and Society 101A, B or Prin. of Economics 220A, B	8 6
Ind. and Bus. World 135A, B	4	Bus. Statistics 235	3
Bus. Math. 120A, B	4	Insurance Prin. 322	3
Prin. of Acctg. 210A, B	6	Small Bus. Mgmt. 237 or Mgmt. Elective	3 3
Bus. Corres. 232	3	Business Law 320A	3
Physical Education	1	Physical Education	1
Electives	5-7	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; Records Management 103; Office Organization 239; General Psychology 200.

4. Salesmanship: Salesmanship 340; Advertising 342; Small Bus. Management 237; Sales Management 341; Credit Management 345.

5. General Clerical: Office Machines 230A, B; Typewriting 101A, B; Records Management 103; Office Organization 239; Industrial Cost Accounting 316A, B; Pay Roll and Social Security Accounting 215.

6. Small Business Management: Accounting 210A, B; Small Bus. Management 237; Advertising 342; Salesmanship 340; Credit Management 345; Real Estate Fundamentals 350.

HOMEMAKING CURRICULUM

For students who do not plan to get a degree.
A diploma is issued at the completion of this course.

First Year	S.H.	Second Year	S.H.
Biol. Sci. 102 or Healthful Living 112A	2 or 4	Am. Nat'l. Gov't. 230A or St. and Loc. Gov't. 230B	3
Communication 104A, B	8	Clothing 205	3
Effective Living 145	2	Costume Design 209	2
Elementary Design 105	2 or 3	Everyday Nutrition 222	2
Family Foods 118	2	Home Furnishings 221	2
Textiles 103	3	Home Nursing 223	2
Physical Ed.	1	Human Growth and Dev. 251	3
Electives	9 or 10	Physical Ed.	1
To be selected from history, business education, speech, English, science, and home economics.		Electives	13
		To be selected from sociology, busi- ness education, speech, English, and home economics.	

INDUSTRIAL TECHNOLOGY**AIRCRAFT MAINTENANCE TECHNOLOGY**

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 Building. All repair work on airplane engines and aircraft structures is supervised by licensed mechanic instructors. A major part of the instruction is given on aircraft to be re-licensed after repairs and the overhaul are completed. Facilities leased at the Municipal Airport provide inspection and service of licensed aircraft used in daily flight operations.

A student who is recommended may write the government-sponsored examinations for the airplane mechanic's or the airplane-engine mechanic's license.

First Year	S.H.	Second Year	S.H.
Communication 104A, B	8	Power Plants 206	4
Elementary Aviation 110	3	Test. of Materials 178	3
Airframes 103	4	Tech. Physics 273	3
Applied Math. 112	3	Prin. of Indus. Elect. 272	2
Welding 274A	2	Thermodynamics 371	2
Drawing 170A or 170B	2	Personnel Relations 279	3
Power Plants 106	4	Airframes 203	4
Electricity 174	2	Welding 274B	2
Inter. Algebra 100A	3	Basic Metallurgy 231	3
Phy. Ed.	2	Applied Physics 173	3
		Machine Shop 176	2
		Trigonometry 100C	3
Summer Session (One Summer Session Required) S.H.			
Aircraft Servicing 300	4		
Pilot Trg. 214A, B, C, or D	2		

AUTOMOTIVE TECHNOLOGY

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	S.H.	Second Year	S.H.
Auto. Engines & Access. 155A	4	Auto. Analysis 255A	4
Applied Math. 112	3	Sheetmetal 275	2
Communication 104A, B	8	Machine Shop 176	2
Elect. 174	2	Basic Metallurgy 231	3
Drawing 170A or 170B	2	Tech. Physics 273	3
Auto. Running Gear 155B	4	Trigonometry 100C	3
Inter. Algebra 100A	3	Auto. Engine Overhaul 255B	4
Welding 274A	2	Personnel Relations 279	3
Applied Physics 173	3	Strength of Materials 370	3
Phy. Ed.	2	Testing of Materials 178	3
		Thermodynamics 371	2
		Prin. of Indust. Elect. 371	2

DRAFTING—DESIGN TECHNOLOGY

A two-year curriculum offered to students wishing to enter the specialized fields of drafting and design.

First Year	S.H.	Second Year	S.H.
Indus. Drftg. 124A	4	Geometry of Drftg. 224A	4
Basic Metal Wk. 175 or Mach. Shop 176	2	Tech. Physics 273	3
Applied Math. 112	3	Trigonometry 100C	3
Communication 104A, B	8	Basic Metallurgy 231	3
Electricity 174	2	Welding 274A	2
Machine Drwg. & Design 124B	4	Prin. of Indus. Elect. 272	2
Sheetmetal 275	2	Drftg. for Production 224B	4
Inter. Algebra 100A	3	Personnel Relations 279	3
Applied Physics 173	3	Thermodynamics 371	2
Phy. Ed.	2	Test. of Materials 178	3
		Office Mach. 230A	2
		Strength of Materials 370	3

ELECTRICAL AND ELECTRONICS TECHNOLOGY

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	S.H.	Second Year	S.H.
Applied Math. 112	3	Trigonometry 100C	3
Communication 104A, B	8	Tech. Physics 273	3
Drawing 170A or 170B	2	Welding 274A	2
Fund. of Elect. 145	4	Alternating Current Elect. 245	4
Basic Metal Work 175 or Machine Shop 176	2	Testing of Materials 178	3
Inter. Algebra 100A	3	Basic Metallurgy 231	3
Applied Physics 173	3	Personnel Relations 279	3
Sheetmetal 275	2	Indust. Elect. 246	4
Direct Current Elect. 146	4	Strength of Materials 370	3
Phy. Ed.	2	Thermodynamics 371	2

MACHINE TOOL TECHNOLOGY

This two-year curriculum is offered to students who wish to enter the field of industrial machine tool specialization.

First Year	S.H.	Second Year	S.H.
Indus. Machine Shop 130A, B	8	Tool Fabrication 230	4
Applied Math. 112	3	Tech. Physics 273	3
Drawing 170A, or 170B	2	Trig. 100C	3
Communication 104A, B	8	Tool and Die Designing 270	2
Electricity 174	2	Basic Metallurgy 231	3
Inter. Algebra 100A	3	Prin. of Indust. Elect. 272	2
Welding 274A	2	Die Making 260 or	
Applied Physics 173	3	Prod. Tooling 261	4
Physical Ed.	2	Strength of Materials 370	3
		Test. of Materials 178	3
		Personnel Relations 279	3
		Sheetmetal 275	2
		Thermodynamics 371	2

RADIO AND TELEVISION TECHNOLOGY

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.

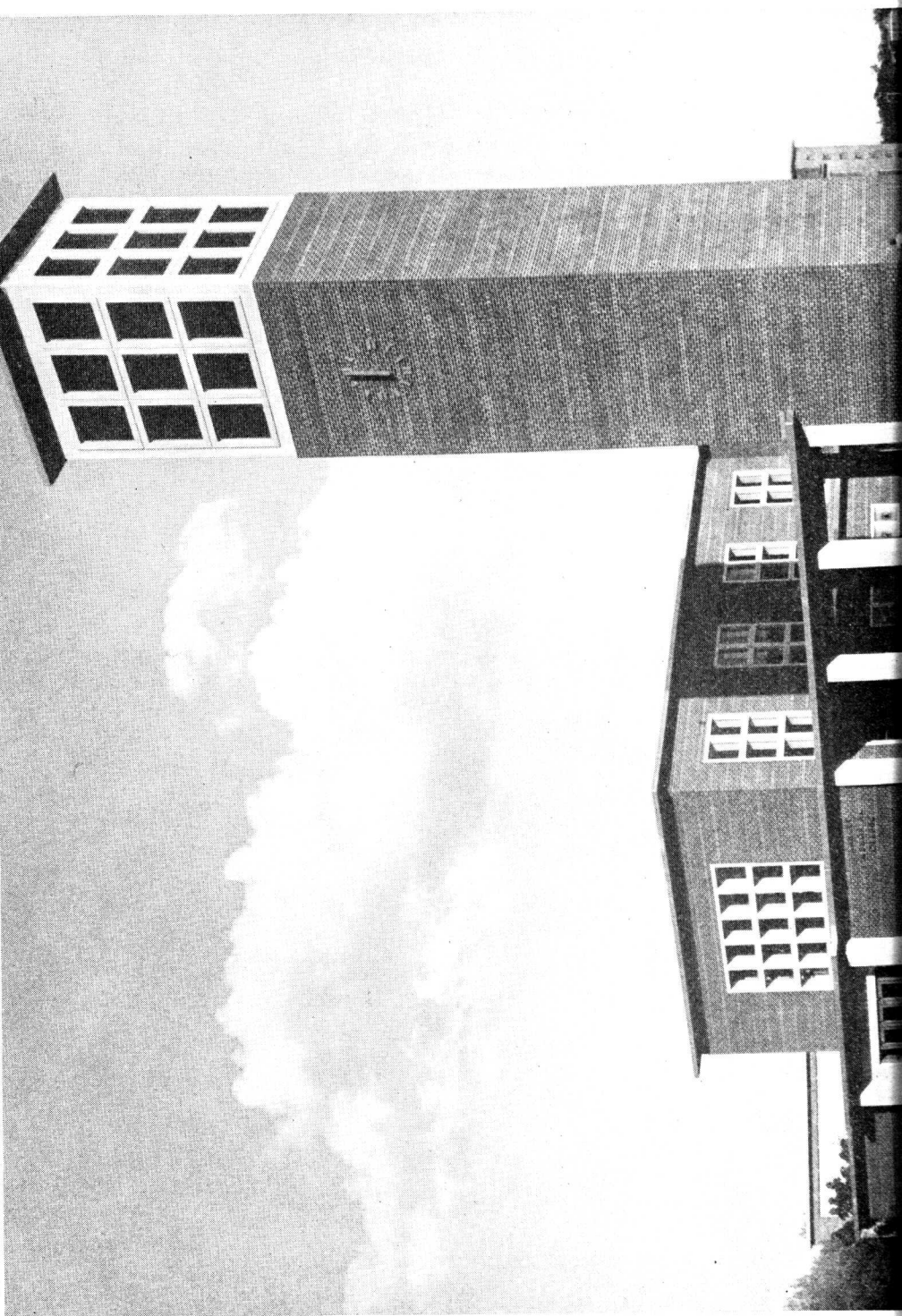
First Year	S.H.	Second Year	S.H.
Intro. Radio 135A	4	Television Service and Color TV	
Electricity 174	2	235A, B	8
Applied Math. 112	3	Trigonometry 100C	3
Communication 104A, B	8	Tech. Physics 273	3
Drawing 170A or 170B	2	Machine Shop 176	2
Intro. Television 135B	4	Prin. of Indust. Elect. 272	2
Applied Physics 173	3	Basic Metallurgy 231	3
Inter. Algebra 100A	3	Personnel Relations 279	3
Sheetmetal 275	2	Welding 274A	2
Physical Ed.	2	Testing of Materials 178	3
		Strength of Materials 370	3
		Thermodynamics 371	2

REFRIGERATION, AIR CONDITIONING, HEATING TECHNOLOGY

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	S.H.	Second Year	S.H.
Domestic and Commercial		Air Cond. and Heat. 215A, B	8
Refrig. 115A, B	8	Tech. Physics 273	3
Applied Mathematics 112	3	Trigonometry 100C	3
Drawing 170A	2	Basic Metallurgy 231	3
Communication 104A, B	8	Basic Metal Work 175	2
Electricity 174	2	Welding 274A	2
Applied Physics 173	3	Prin. of Indust. Elect. 272	2
Sheetmetal 275	2	Personnel Relations 279	3
Inter. Algebra 100A	3	Strength of Materials 370	3
Phy. Ed.	2	Test. of Materials 178	3
		Thermodynamics 371	2



PART III—*Courses of Study*

DESCRIPTION OF UNDERGRADUATE COURSES

	Pages
DIVISION OF BASIC STUDIES	108-110
DIVISION OF FINE ARTS	111-124
Art	111-114
Music	114-122
Occupational Therapy	122-124
DIVISION OF LANGUAGES AND LITERATURE	125-144
English	125-131
Languages	131-139
Speech	139-144
DIVISION OF MILITARY SCIENCE AND TACTICS	145-146
DIVISION OF PHYSICAL EDUCATION, HEALTH AND RECREATION	147-154
Physical Education for Men	147-151
Physical Education for Women	151-154
DIVISION OF RURAL LIFE AND EDUCATION	155-159
Agriculture	155-157
Rural Life and Education	157-159
DIVISION OF SCIENCE AND MATHEMATICS	160-188
Biology	161-167
Chemistry	167-170
Geography and Geology	171-175
Mathematics	175-181
Paper Technology	181-183
Physics	183-185
Psychology	186-188
DIVISION OF SOCIAL SCIENCES	189-207
Economics	190-193
History	193-197
Philosophy	197-199
Political Science	199-202
Sociology	203-207
DIVISION OF TEACHER EDUCATION	208-218
Education	208-216
Librarianship	216-218
DIVISION OF VOCATIONAL AND PRACTICAL ARTS EDUCATION	219-247
Business Studies	219-227
Home Economics	227-231
Industrial Arts	231-238
Vocational Distributive Education	238
Vocational-Industrial & Technical Education	239-247

◀ Unique in design, the Kanley Memorial chapel is becoming increasingly popular as a center for student activities.

DIVISION OF BASIC STUDIES

Elsworth P. Woods, Head

The Division of Basic Studies is responsible for coordinating and administering the basic courses in the General Education program.

Every student should take Communication or its equivalent, College Writing, in the freshman year.

In Science the student must have a total of 8 hours. The usual combination is Biological Science (102) and Human Geography 105A, or Physical Science (100A and 100B). The choice should depend upon the individual's background and intended field of specialization. If a student plans to major and has considerable background in one area, he should choose the one in which his background is less adequate.

In the Social Science area a student must take either Foundations of Western Civilization or Man and Society. These are recommended for the freshmen year.

The two Humanities sequences (Humanities 201 A & B, 202A & B) are elective. They are recommended for the sophomore or junior year.

COMMUNICATION:

104A Communication 4 hrs. Fall, Spring

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, readings, tape-recordings, films and other devices are used to motivate group discussion, informal talks, and written exercises. Skills of primary and secondary research are emphasized; one research paper is required. May be taken as the equivalent of College Writing 106A.

104B Communication 4 hrs. Spring, Fall

A continuation of 104A. May be taken as the equivalent of College Writing 106B.

SCIENCES:

102 Biological Science 4 hrs. Fall, Spring

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 and it may also be used as a basis for a biology minor. It may be counted toward a major with consent of the department and in connection with 221A, B and 242A, B.

105A Human Geography 4 hrs. Fall, Spring

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.

100A Physical Science 4 hrs. Fall, Spring

This course is part of the Basic Studies program in general education. The course is designed for students who are not planning to specialize in any of the physical sciences. Topics are chosen to stress basic facts, major concepts and important generalizations of the physical sciences.

100B Physical Science 4 hrs. Spring, Fall

A continuation of 100A.

SOCIAL SCIENCE:**100A Foundations of Western Civilization 4 hrs. Fall, Spring**

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.

100B Foundations of Western Civilization 4 hrs. Spring, Fall

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: 100A.

101A Man and Society 4 hrs. Fall, Spring

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.

101B Man and Society 4 hrs. Spring, Fall

A continuation of 101A.

HUMANITIES:**Humanities 201A 3 hrs. Fall**

A study of the creative life of man through an examination of the climactic periods during the Greco-Roman and medieval times. The course is organized in terms of the expressions of the purpose of life and values of men through the art, literature, philosophy and theology of those periods. (This course is recommended for students who have taken the course "Man and Society". No specific skills necessary for this course.)

Humanities 201B 3 hrs. Spring

This course is a continuation of 201A and is concerned with the Renaissance, the age of enlightenment and the contemporary period.

Humanities 202A 3 hrs. Fall

The fine arts, music and literature are studied as expressions of various ideas and attitudes that have been held at various times in Western Europe and America. The materials of the course are organized about selected religious, ethical and aesthetic ideas. (Recommended for students who have previously taken "Foundation of Western Civilization". No specific skills necessary for this course.)

Humanities 202B 3 hrs. Spring

Continuation of Humanities 202A.

DIVISION OF FINE ARTS

Lydia Siedschlag, Chairman

The Division includes the Departments of Art, Music, and Occupational Therapy. 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
Stanley K. S. Phillips
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 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 2 or 3 hrs. Fall, Spring

A fundamental course in art developing design and color theory through problems of various media.

106 Art Structure 3 hrs. Fall, Spring

A course giving drawing experience, lettering, figure, color, and design.

107 Illustrative Handwork 3 hrs. Fall, Spring

An elementary craft course with manual problems related to interests in the primary grades.

108 Lettering and Poster Making 2 hrs. Spring

Emphasis is on lettering and poster making for school and commercial use.

110 Industrial Art 3 hrs. Fall, Spring

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

112 Learning Through Art 3 hrs. Fall, Spring

A course designed for the grade teacher. Art problems are related to the curricula. Posters, programs, bulletins, decoration for special days are handled seasonally. No prerequisites.

113A Art Appreciation 1 hr. Fall

This course aims to develop aesthetic judgment. A brief survey of the history of painting, with special attention to modern painting, is given.

113B Art Appreciation 1 hr. Spring

A brief survey of the history of sculpture, architecture, and minor arts is given. Prerequisite: Art Appreciation 113A.

205 Figure Drawing 3 hrs. Spring

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, planning and contour drawing to finished drawings. Prerequisite: Art Structure 106 or consent of instructor.

208 Art Composition 3 hrs. Spring

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. Prerequisite: Art Structure 106, Elementary Design 105.

211 Modeling 3 hrs. Fall

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.

212 Handicraft 3 hrs.

Includes problems in metal, wood, and other materials. Emphasis on technique. Prerequisite: Art Structure 106, Industrial Art 110, or consent of instructor. A fee of two dollars will be charged for materials.

213A History of Art 3 hrs. Fall

Study of primitive, Egyptian, Chaldean, Greek, and Roman architecture, sculpture, and painting.

213B History of Art 3 hrs. Spring

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.

214 Commercial Art 3 hrs. Fall

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.

215 Comparative Arts 4 hrs. Fall, Spring

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. Two hours of credit may be applied on a major or minor in any two of the three arts—Literature, Music or Art.

220 Stage Design 2 hrs. Fall

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

221 Home Furnishing 2 hrs. Fall, Spring

A study of interior design and color, furniture past and present, experience in practical problems.

224 Interior and Window Display 3 hrs.

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.

305 Advanced Figure Drawing 2 hrs.

A continuation of Figure Drawing 205, developing greater technical skill. Prerequisite: Figure Drawing 205.

306 Demonstration Drawing 2 hrs. Spring

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.

308 Advanced Art Composition 2 hrs. Spring

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.

309 Advanced Design 3 hrs. Fall

Continuation of Elementary Design 105. Applied Art Problems. Prerequisite: Art Structure 106, Elementary Design 105, Art Composition 208.

410 Painting 2 hrs. Fall

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.

414 Advanced Commercial Art 3 hrs. Spring

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.

441 Art Supervision 3 hrs. Spring

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.

MUSIC

Elwyn F. Carter	Angelo LaMariana	Margaret F. Belooof
Sam B. Adams	Holon Matthews	Owen L. Berger
Elmer R. Belooof	Leonard V. Meretta	Russell W. Brown
Ethel M. Green	Peggy Ramstad	Marcella Faustman
H. Glenn Henderson	Dorothea S. Snyder	Jack Frey
Daniel A. Kyser	Alexander Schuster	Tom Fulton
		Julius Stulberg

The Department of Music offers courses leading to the Bachelor of Music and Bachelor of Arts degrees. The Bachelor of Arts degree is defined on page 35 as to both purposes and requirements. The Bachelor of Music degree is different in that it is 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 procured 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 hours of Applied Music (through level 6 in their major performance field); Theory 106A, B; Theory 206A, B; Music History 357A, B; Style and Structure 310A; and one semester of an advanced theory or music literature course.

Minors in music must complete Theory 106A, B eight hours; a Methods and Materials course of three hours; Piano class 117A, B two hours; Conducting, either 311A or 311B one hour, plus an elective of one hour.

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. No credit hours exceeding the number granted for parallel work at Western Michigan College will be accepted for transfer from another institution.

Western Michigan College 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.

MUSIC COURSES

100A Music for Classroom Teachers 3 hrs. Fall

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.

100B Music for Classroom Teachers 3 hrs. Spring

A continuation of 100A.

106A Freshman Theory 4 hrs. Fall

This course is a closely integrated study of the construction and function of the language of music . . . through music reading; ear training and dictation; keyboard and written harmony; and composition, arrangement and analysis of musical material. The materials are drawn from vocal and instrumental music literature suitable for study. Topics of study include diatonic chords, modulation, non-harmonic tones, musical form and harmonization. References are made in this study to teaching techniques as regards both the student of music and the prospective teacher of music.

106B Freshman Theory 4 hrs. Spring

A continuation of 106A.

107A Music Appreciation 2 hrs. Fall

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.

Two hours for a campus course; three hours by extension.

107B Music Appreciation 2 hrs. Spring

A continuation of 107A.

109 Rural School Music Methods and Materials 3 hrs. Fall

This course consists of sight reading of unison songs, introduction of part singing, organization of music work in the school and the community.

The importance and value of music in the life of school and community are emphasized; materials for the school music program, community singing, and recreation are considered.

110 Elementary Acoustics 2 hrs. Fall, Spring

Designed for music majors to acquaint them with the science of sound. No science prerequisite.

116A Voice Class 1 hr. Fall

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 basic achievement examinations.

116B Voice Class 1 hr. Spring

A continuation of 116A.

117A Piano Class 1 hr. Fall

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.

117B Piano Class 1 hr. Spring

A continuation of 117A.

118A String Class 1 hr. Fall

The study of a stringed instrument to the extent that the student can demonstrate a knowledge of the basic fundamentals on that instrument. The study of a limited repertoire for that instrument.

118B String Class 1 hr. Spring

A continuation of 118A.

122 English Diction and Song Literature No credit. Fall

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.

206A Sophomore Theory 4 hrs. Fall

A continuation on an advanced level with chromatic chords, modulations, non-harmonic tones, styles of composition as used in choral and instrumental music literature being studied. Material is drawn from the standard vocal and instrumental repertoire.

206B Sophomore Theory 4 hrs. Spring

A continuation of 206A.

207A Music Literature 3 hrs. Fall

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.

207B Music Literature 3 hrs. Spring

A continuation of 207A.

208A Elementary School Methods and Materials 3 hrs. Fall

The purposes, problems, and procedures of the first six grades, development of independent sight-singing (syllables and words), two- and three-part singing, introduction of tonal and rhythmic problems found in music designed for these grades, introduction of notation, creative music for children, the child voice, and directed listening.

208B Elementary School Methods and Materials 3 hrs. Spring

A continuation of 208A.

209A Instrumental Methods and Materials 3 hrs. Fall

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.

209B Instrumental Methods and Materials 3 hrs. Spring

A continuation of 209A.

216A Advanced Voice Class 1 hr. Fall

A continuation of 116A, B. Further application of the principles of singing through more difficult song literature. Recommended to candidates for certification as general supervisors to prepare for basic achievements examinations. Prerequisite: Voice Class 116A, B.

216B Advanced Voice Class 1 hr. Spring

A continuation of 216A.

217A Advanced Piano Class 1 hr. Fall

A continuation of 117A, B. Recommended to elementary education majors. Prerequisite: Piano Class 117A, B.

217B Advanced Piano Class 1 hr. Spring

A continuation of 217A.

219A Woodwind Class 1 hr. Fall

The study of four woodwind instruments—flute, oboe, clarinet, and bassoon—to the extent that the student can play all scales on all four instruments. The study of a limited repertoire for these instruments.

219B Woodwind Class. 1 hr. Spring

A continuation of 219A.

222 Italian Diction and Song Literature No credit. Fall

Required of all students whose field of concentration is voice. Italian diction and song literature are studied as a class, and opportunity is provided for solo performance.

301A Junior High School Methods and Materials 3 hrs. Fall

This course involves a study of the place of music in the education of adolescent youth, the changing voice, voice testing and classification, singing

and instrumental ensembles, the place of music in all types of integrating courses for secondary schools, and class instruction in voice and the various instruments.

301B Senior High School Methods and Materials 3 hrs. Spring

A continuation of 301A on the senior-high-school level.

305A Counterpoint 3 hrs. Fall

Modal and harmonic counterpoint as exemplified by the composers of the fifteenth, sixteenth, seventeenth, and early eighteenth centuries. Modern counterpoint. Practical application through the writing of strict counterpoint in the five species—double counterpoint, obligatos, descants, canons and fugues. Prerequisite: Advanced Harmony 206A, B.

305B Counterpoint 3 hrs. Spring

A continuation of 305A.

306A Composition 3 hrs. Fall

Original work in composition, starting with the smaller forms in both the vocal and instrumental fields. Prerequisite: Sophomore Theory 206A, B.

306B Composition 3 hrs. Spring

A continuation of 306A.

309S Instrumental Organization and Administration in Public Schools 2 hrs.

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.

310A Style and Structure 3 hrs. Fall

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: Sophomore Theory 206A, B.

310B Contemporary Music Literature 3 hrs. Spring

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.

311A Choral Conducting 1 hr. Fall

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.

311B Instrumental Conducting 1 hr. Spring

A continuation of 311A. Application is made by use of easy literature for instrumental ensembles.

312 Accompanying 1 hr. Fall, Spring

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.)

320A Brass Class 1 hr. Fall

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.

320B Brass Class 1 hr. Spring

A continuation of 320A.

321 Percussion Class 1 hr. Fall, Spring

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.

322 French Diction and Song Literature No credit. Spring

Required of all students whose field of concentration is voice. French diction and song literature are studied as a class, and opportunity is provided for solo performance.

323 Major Performance Literature 1 hr. Fall, Spring

Required of applied music (except voice) majors for last two years. Literature for the major performance instrument is studied as a class, and opportunity is provided for solo performance. (This course may be repeated for credit not to exceed a total of four semester hours.)

324 German Diction and Song Literature No credit. Spring

Required of all students whose field of concentration is voice. German diction and song literature are studied as a class, and opportunity is provided for solo performance.

357A History of Music 3 hrs. Fall

Early development of rhythm, scale and keynote; beginning of harmony, growth of notation; development of instruments and instrumental music; growth of opera and oratorio; crystallizing of schools of composition and the place of various composers in this process; use of nationalism in music and its transition into the music of the twentieth century.

357B History of Music 3 hrs. Spring

A continuation of 357A.

401 Philosophy and History of Music Education 2 hrs. Spring

A course designed to acquaint the student with the history of the development of music education in the United States and how this development is the reflection of a growing philosophy of music education.

403 Psychology of Music Education 2 hrs. Fall

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.

407 Music of Wagner and Beethoven 2 hrs. Fall, Spring

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.

451 Advanced Instrumental Conducting 1 hr. Fall

Supervised experience in conducting instrumental groups. The student may be called upon to prepare an ensemble for public performance. Prerequisite: Instrumental Conducting 311B, Choral Conducting 311A.

452 Advanced Choral Conducting 1 hr. Spring

Supervised experience in conducting vocal groups. The student may be called upon to prepare an ensemble for public performance. Prerequisite: Choral Conducting 311A, Instrumental Conducting 311B.

455A Orchestration 3 hrs. Fall

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: Theory 206A, B.

455B Orchestration 3 hrs. Spring

A continuation of 455A.

456A Advanced Composition 3 hrs. Fall

Further original work in composition dealing with the larger forms in both vocal and instrumental fields. Prerequisite: Composition 306 A, B.

456B Advanced Composition 3 hrs. Spring

A continuation of 456A.

460 Workshop in Special Problems 1-3 hrs. Fall and Summer

Designed for students interest 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.

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 five through eight grant three semester hours of credit per semester.

11A through 18B Harp

21A through 28B Piano

35A through 38B Organ

41A through 48B Voice

51A through 58B Stringed instruments

Violin, Viola, Cello, Bass Viol

61A through 68B Brass Instruments

Cornet or Trumpet, Trombone, French Horn, Tuba, Baritone

71A through 78B Woodwind Instruments

Flute, Oboe, Bassoon, Clarinet, Saxophone

81A through 88B Percussion

MUSIC ENSEMBLES

All music majors are required to participate in some large music ensemble, e.g., orchestra, choir, band, 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 hour of credit for each semester of participation. Not more than eight hours credit will be granted for participation in any one ensemble. Not more than twelve 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 musical life of the campus.

132 Orchestra Mr. Stulberg

The orchestra is open to all students who have had a reasonable amount of orchestra 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 the students.

133 Band Mr. Meretta

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

134 Auxiliary Choir Mrs. Snyder

The Auxiliary Choir is open to all students (men and women) who wish to obtain a knowledge of choral music. The choir participates in the annual Southwestern Michigan Messiah Festival at Christmastime and in the Southwestern Michigan College and High School Festival in May.

135 College Choir Dr. Carter

The College Choir has a limited membership. The organization aims to develop and perpetuate a high standard of choral-ensemble singing. Each year the choir makes a number of appearances on the campus and before high schools and other organizations.

136 Special Music Ensemble The Staff

Special instrumental or vocal ensembles may be formed with the permission of the head of the Department of Music. Where a sufficient number of hours of rehearsal per week warrant it, one hour of credit will be granted.

OCCUPATIONAL THERAPY

Marion R. Spear
Lois Hamlin

Alice Jantzen
Rosalia Kiss

The following courses may be taken in any one of the following curricula: B.S. degree, with or without a Teacher's Certificate; a diploma in Occupational Therapy, and 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. For students with special interests, a minor in music or recreation may be arranged. The student is admitted to departmental standing when he has earned 30 hours of college credit. Applications must be approved by the Coordinating Committee.

106 Art Structure 3 hrs. Fall, Spring

A course giving drawing experience in lettering, figure, color, and design.

210A Theory of Occupational Therapy 2 hrs. Fall, Spring

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.

210B Theory of Occupational Therapy 2 hrs. Fall, Spring

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.

215 Design 3 hrs. Fall, Spring

A course to develop creativeness in color and design through a variety of media and techniques. Prerequisite: Art Structure 106.

216A Kinesiology 2 hrs. Fall, Spring

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 terminology and kinesiology. Prerequisite: Anatomy 211A and Physiology 211B.

216B Applied Kinesiology 2 hrs. Fall, Spring

Review of normal muscle function and study of motor disabilities related to neurologic and orthopedic conditions. Methods of physical evaluation, measurement of joint motion, muscle testing and re-education. Prerequisite: Kinesiology 216A.

222 Recreational Therapy 2 hrs. Fall, Spring

Course covers planning of recreational activities for patients in hospitals, including musical therapy, dramatic programs, and games.

223 Needlecraft 3 hrs. Fall, Spring

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.

225 Minor Crafts 3 hrs. Fall, spring

A course giving the techniques and equipment used in basketry, book-binding, leatherwork, and rug making. Special emphasis will be placed on the use of these crafts in occupational therapy treatment.

311 Clinical Practice 5 hrs.

Each student is required by the American Medical Association to complete a minimum of nine months of clinical practice. The centers in which the student practices are psychiatric, tuberculosis, general, pediatric, and physical disabilities.

324 Therapeutic Activities 2 hrs. Fall, Spring

Occupational therapy relating to physical medicine and rehabilitation. Activities of daily living, splinting and adaptation of equipment, construction and use of self-help devices and pre-vocational exploration. Prerequisite: Kinesiology 216A.

330 Psychiatric Lectures 2 hrs. Fall, Spring

Consists of the history and clinical demonstration of mental diseases; their causes and methods of patient readjustment. Study of the application of work to individual needs given during practical experience.

331 Neurology Lectures 2 hrs. Spring

A study of the anatomy and physiology of the central, sympathetic, and peripheral nervous systems. Treatment of diseases of the brain and spinal cord. Prerequisite: Kinesiology 216A.

352 Hospital Case Studies 3 or 4 hrs. Fall, Spring

Comprehensive case studies of typical patients observed in occupational therapy departments. Students must submit 12 or more case studies.

410A Theory of Occupational Therapy 2 hrs. Fall, Spring

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.

410B Theory of Occupational Therapy (Medical Lectures) 3 hrs. Fall

A series of lectures on medical and orthopedic conditions. These will be correlated with occupational therapy treatment.

411 Rehabilitation 1 hr. Fall, Spring

A study and review of the rehabilitation programs in specific disability areas including effective laws and industrial practices; lectures and field trips. Prerequisite: Theory 210 A, B.

425A Ceramics 2 hrs. Fall

A course in the design of functional plastic form in clay. Emphasis is placed on ceramic processes, glazing and kiln management. Prerequisite: Art Structure 106 and Design 216.

425B Jewelry 2 hrs. Spring

A studio course in the design and technical essentials in jewelry, ceramics, copper, and sterling silver. Stone setting and enameling are included.

428 Weaving 3 hrs. Fall, Spring

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.

DIVISION OF LANGUAGES AND LITERATURE

Mathilde Steckelberg, *Chairman*

The Division includes the Departments of English, Languages, and Speech. 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.

ENGLISH

William R. Brown	Robert M. Limpus	Dorothy Osborn
Thelma E. Anton	M. Dezena Loutzenhiser	Frederick J. Rogers
Georgiann Burge	Joseph H. McKee	Helen G. Sellers
Bernadine P. Carlson	Jean Malmstrom	Charles A. Smith
John R. Freund	Helen E. Master	Joseph C. Torok
Lorena M. Gary	Ralph N. Miller	Ruth G. Van Horn
Frank C. Householder	Arnold Nelson	Louise J. Walker
	Lucille A. Nobbs	

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 Comparative Arts 215 and Mythology 402. 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 College Writing may take Introduction to Literature 107A and B or General Literature 124A and B.

Students who intend to have a major or minor in English in any curriculum should confer with the adviser of the department by the third semester. The following general suggestions may assist in planning programs of study:

Students who intend to minor in English in the Elementary curriculum should plan to include in their 15 hours Literature for Children 203; Introduction to Literature 107A and B or General Literature or Literary Interpretation 210, and 3 hours in American Literature. Students in the Elementary curriculum who intend to major in English should add to the above, 3 hours in fiction and 3 hours in drama.

Students who major or minor in English in the Secondary curriculum should have a reading knowledge of some modern language, preferably French or German. Minors must include in their 15 hours 3 hours in Shakespeare, 3 hours in American Literature, 3 hours in fiction; 3 to 6 hours in period courses; and General Literature or Literary Interpretation. Majors in addition to the work required for minors must have Chaucer and two period courses. The student who is now planning a major or 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 either College Writing 106A and B, or Communication 104A 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

104A and B Communication (See Division of Basic Studies)

106A College Writing 3 hrs. Fall, Spring

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.

106B College Writing 3 hrs. Fall, Spring

A continuation of 106A. Research techniques are given special emphasis.

206A and B Writing Laboratory

201A Journalism 3 hrs. Fall

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

201B Journalism 3 hrs. Spring

A continuation of 201A. Editorials, opinion columns, critical writing, cartoons, advertising copy and lay-out, typography, and page lay-outs are studied. Prerequisite: English 201A.

325 History of the English Language 2 hrs. Fall, Spring

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.

326 Expository Writing 2 hrs.

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

327 Writing by Types 2 hrs.

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.

328 Creative Writing 3 hrs.

Original writing in the field of the student's choice. Open only to juniors and seniors who have gained permission.

329 Modern English Usage 2 hrs.

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.

410 Literary Criticism 2 hrs Fall

An examination of major theories of literary criticism, which are used for the evaluation of specific instances and types of literature through lectures, discussions, and papers. The course is intended to assist the secondary school teacher in forming literary judgments.

425 Modern English Grammar 2 hrs. Spring

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.

TEACHING**401 Teaching of Secondary English 2 hrs. Spring**

A course in the selection and methods of presentation of literature in high-school.

LITERATURE**107A Introduction to Literature 3 hrs. Fall, Spring**

A study of expository writing in the social sciences, natural sciences and philosophy. Limited to freshmen. Prerequisite to 107B.

107B Introduction to Literature 3 hrs. Fall, Spring

In the second semester the emphasis is on belles lettres; autobiography, the short story, the novel, and poetry.

124A General Literature 3 hrs. Fall

A careful reading of representative pieces of European literature in translation. First semester, reading in the epic and drama.

124B General Literature 3 hrs. Spring

A continuation of 124A. Readings in prose fiction and the lyric.

203 Literature for Children 3 hrs. Fall, Spring

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.

207A Great English Writers 3 hrs. Fall

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.

207B Great English Writers 3 hrs. Spring

Emphasis is placed on the study of Woodsworth, Eliot's *Adam Bede*, Browning's shorter poems, Newman, and Huxley. Open only to sophomores.

210 Literary Interpretation 3 hrs. Fall, Spring

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.

212 The Familiar Essay (Omitted 1955-56)**214A Shakespeare 3 hrs. Fall**

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.

214B Shakespeare 3 hrs. Spring

In this course the remaining plays and the poems of Shakespeare are read and considered in their historical order.

216A Contemporary Literature 2 hrs. Fall

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.

216B Contemporary Literature 2 hrs. Spring

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.

218A The English Bible—The Old Testament 2 hrs. Fall

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.

218B The English Bible 2 hrs. Spring

A continuation of 218A. The New Testament.

219 Short Story 2 hrs. Fall, Spring

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.

221A American Literature 3 hrs. Fall

A survey of American literature from the beginning to the Civil War with special reference to the development of literary movements and types.

221B American Literature 3 hrs. Spring

This course is a continuation of American Literature 221A from the Civil War to the present.

223A English Literature 1660-1730 3 hrs.

Literature of the classical period exclusive of Milton.

223B English Literature 1730-1798 3 hrs.**225 The Ballad (Omitted 1955-56)****227A English Literature of the Renaissance 3 hrs. Fall**

A study of the non-dramatic poetry and prose of the sixteenth century—Sidney, Spenser, Bacon, and others.

227B English Literature of the Renaissance 3 hrs. Spring

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.

228 Milton 3 hrs. Fall

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.

305A English Literature (1832-62) 3 hrs.

The poetry and prose of the Regency and Early Victorian Periods. For juniors and seniors. Sophomores may enroll with the permission of the instructor.

305B English Literature (1862-92) 3 hrs.

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).

306 Carlyle (Omitted 1955-56)**307A History of English Literature 3 hrs. Fall**

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.

307B History of English Literature 3 hrs. Spring

A continuation of 307A. A study of representative English dramas, essays, and novels.

308A English Drama 2 hrs.

The chief aim of the course is to acquaint the students with both interesting and significant plays of Elizabethan and Jacobean playwrights.

308B English Drama 2 hrs.

A continuation of 308A. Restoration and eighteenth-century plays by Dryden, Wycherley, Steele, Addison, Gay, Garrick, Sheridan, and others are studied.

312 Wordsworth 3 hrs. Spring

A study of Wordsworth's poetry and critical theory against the background of the Romantic movement.

313 English Novel 3 hrs. Fall, Spring

A study of the technique of the novel and its development in England from Defoe to Hardy.

314 Contemporary Novel 2 hrs. Fall, Spring

A study of the tendencies in English and American prose fiction since 1898, together with wide reading from the chief novelists of the period.

315 The European Novel 3 hrs. Fall

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.

Note.—This course cannot be counted for credit by students who elect General Literature 124B.

322 American Literature 3 hrs. Fall, Spring

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.)

337 European Drama to 1890 (Omitted 1955-56)**338 Modern Drama 2 hrs. Spring**

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.

391 Chaucer 3 hrs. Spring

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.

TEACHING**300 Teaching of English 2 hrs. Fall**

This course aims to give the prospective teacher in the junior and senior high school the best available information relative to the content and teaching of English. This course is strongly recommended for secondary English majors.

403 Source Material for Literature in Elementary Grades 2 hrs.

The course aims to acquaint the student with information about books and materials for children's literature as well as critical and historical literature of the subject, children's magazines, records of the literature of childhood and similar materials. Prerequisite: Literature for Children 203.

408 Elizabethan Tragedy 2 hrs.

A study of the rise of English tragedy, its theories and variations, together with a detailed study of plays by Kyd, Marlowe, and Webster, as well as Shakespeare's *Othello*.

409A English Literature of the Romantic Period 3 hrs. Fall

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.

409B English Literature of the Romantic Period 3 hrs. Spring

A continuation of 409A, emphasizing Byron, Shelley, Keats, Hazlitt, Lamb, and DeQuincey.

413 The Modern Novel 2 hrs. Spring

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.

414 Shakespeare's Tragedies 3 hrs.

Elective course for graduates and for seniors who wish one term of Shakespeare. Prerequisite: 10 hours of College English Literature.

415 Shakespeare's Comedies 3 hrs.

Elective course for graduates and for seniors who wish one term of Shakespeare. Prerequisite: 10 hours of College English Literature.

416 English Literature from the Restoration to 1730 3 hrs.

The works of leading literary figures of the period, with emphasis on satire.

417 English Literature from 1730-1798 3 hrs.**421 American Literature 2 hrs. Spring**

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.

422 American Literature 2 hrs. Fall

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.

490 Anglo Saxon (Omitted 1955-56)**LANGUAGES**

Mathilde Steckelberg	Eunice E. Kraft	Marion Tamin
Elizabeth Giedeman	Frances E. Noble	Myrtle Windsor
Herb B. Jones	Hermann E. Rothfuss	

Twenty-four hours are required for a major 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 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.

FRENCH

100A Elementary French 4 hrs. Fall

This course is designed to give the basic foundation needed to read a simple text in French. It aims also, to give training in understanding spoken French and an elementary knowledge of pronunciation with the help of records and recorder.

100B Elementary French 4 hrs. Spring

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.

102A Intermediate French 4 hrs. Fall

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.

102B Intermediate French 4 hrs. Spring

This is a continuation of 102A. In this semester 300 pages of reading are completed.

201A Conversation and Free Composition 2 hrs. Fall

This course is intended to develop ease and accuracy in the use of everyday French. Prerequisite: two years of high school French or equivalent.

201B Conversation and Free Composition 2 hrs. Spring

This is a continuation of 201A.

203A Nineteenth Century French Literature 3 hrs. Fall

This course is a study of romanticism and the development of realism, with readings from Chateaubriand, Victor Hugo, Alfred de Vigny, Musset. Prerequisite: 100A, B, 102A, B, or equivalent.

203B Nineteenth Century French Literature 3 hrs. Spring

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.

207A France and the French 1 hr. Fall

This course is required of those specializing in French, but is conducted in English and is open to those not in the Department of French. A study is made of geography, art, historical monuments and contemporary problems of French life.

207B France and the French 1 hr. Spring

This is a continuation of 207A.

305 Phonetics 3 hrs. Fall

This course is intended to give a corrective description of the difficulties encountered by students of French with Anglo-American habits of pronunciation. Required of all students majoring or minoring in French. Prerequisite: two years of college French or equivalent.

306 Advanced Composition and Grammar Review 3 hrs. Spring

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.

307A Contemporary French Literature 2 hrs.

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. Offered in 1956-1957

307B Contemporary French Literature 2 hrs.

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. Offered in 1956-1957

310A Seventeenth Century French Literature 3 hrs.

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. Offered in 1957-1958

310B Seventeenth Century French Literature 3 hrs.

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. Offered in 1956-1957.

313A Survey of French Literature 2 hrs. Fall

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.

313B Survey of French Literature 2 hrs. Spring

This is a continuation of 313A with emphasis on the eighteenth century philosophers and their influence on the political reformers in America.

408A Contemporary French Literature 2 hrs.

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-Exupery, Georges Bernanos, François Mauriac, Andre 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. Offered upon sufficient demand.

408B Contemporary French Literature 2 hrs.

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 Romain, Jean Giraudoux, Jean-Jacques Bernard, Henri de Montherlant, Jean-Paul Sartre, Jean Anouilh. Offered upon sufficient demand.

437 Studies in Contemporary France 2 hrs. Summer

This course investigates more deeply some phases of French economic, political, social and educational life which were only mentioned in 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.

GERMAN**100A Elementary German 4 hrs. Fall**

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.

100B Elementary German 4 hrs. Spring

This is a continuation of 100A. Approximately 100 pages of prose are read, and grammar, oral work, and composition are correlated. No credit is given for 100A unless 100B is completed.

102A Intermediate German 4 hrs. Fall

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 with related oral and written composition completes the semester's work. Prerequisite: one year of college German or two years of high school German.

102B Intermediate German 4 hrs. Spring

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.

103A Scientific German 4 hrs. Fall

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.

103B Scientific German 4 hrs. Spring

This is a continuation of the extensive reading of scientific material. Unedited material from encyclopedias of science and from current science magazines is introduced.

201A German Conversation and Composition 2 hrs.

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.

201B German Conversation and Composition 2 hrs.

This is a continuation of 201A.

305A German Literature to 1825 4 hrs. Fall

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.

305B German Literature to 1825 4 hrs. Spring

This is a study of the classical period, and a continuation of 305A. The life and works of Goethe, Schiller, and other poets of the period are studied. Selected dramas, lyrics, and the prose of Goethe and Schiller are read.

306A German Literature from 1825 to the Present 4 hrs. Fall

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. Offered in 1956-1957.

306B German Literature from 1825 to the Present 4 hrs. Spring

This course is a continuation of 306A. The work covers German literature from Grillparzer to the present. A study is made of the dramatic, epic, and lyric poetry of the period, with readings from Grillparzer, Hauptmann, Sudermann, Hugo von Hofmannstahl, and other poets. Offered in 1956-1957.

407 The Central European Area 2 hrs.

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.

442 Modern Language Instruction 2 hrs.

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.

427 Germany Through the Centuries 2 hrs.

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. Offered in 1956-1957.

417 Evolution of German Thought 2 hrs. Summer

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.

LATIN**100A Elementary and Second-Year Latin 4 hrs. Fall**

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.

100B Elementary and Second-Year Latin 4 hrs. Spring

A continuation of 100A.

Note.—A student may present one unit of high school Latin and enter the course in the second semester.

102A Cicero and Ovid 4 hrs.

Orations and letters of Cicero are read. One day each week is devoted to Latin composition. Prerequisite: two units of high school Latin or Latin 100A, B. Offered in 1956-1957.

102B Cicero and Ovid 4 hrs.

This is a continuation of 102A. Selections from Cicero and from Ovid's "Metamorphoses" are read. Offered in 1956-1957.

103A Virgil 4 hrs. Fall

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.

103B Virgil 4 hrs. Spring

This is a continuation of 103A. Intensive study of the first six books is continued, and the survey of the whole is completed.

104A Latin Literature 4 hrs.

A survey of Roman literature with reading of representative Latin authors is the aim of this course. Selections from Livy are read. Prerequisite: four units of Latin.

104B Latin Literature 4 hrs.

This is a continuation of 104A. Selections from Cicero's philosophical works, Pliny's Letters, and the Latin poets are studied.

202 Mythology 3 hrs. Spring

This is a survey of the principal myths and legends of Greece and Rome. It is accompanied by a study of their representations in painting and sculpture, and by appropriate readings in English literature. Credit from this course may be applied on Group I or on an English major and minor.

204A Horace 4 hrs.

The *Odes*, *Epodes*, and *Satires* are read. A study of the philosophy of Horace accompanies the reading.

204B Horace and Latin Comedy 4 hrs.

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 3 hrs.

Practice is given in the fundamental principles of correct expression in Latin. Required of all students majoring in Latin.

306 Roman Life 3 hrs.

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.

SPANISH**100A Elementary Spanish 4 hrs. Fall**

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.

100B Elementary Spanish 4 hrs. Spring

This is a continuation of 100A.

102A Intermediate Spanish 4 hrs. Fall

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, 100A, B.

102B Intermediate Spanish 4 hrs. Spring

This is a continuation of 102A.

201A Spanish Conversation and Composition 2 hrs. Spring

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.

201B Spanish Conversation and Composition 2 hrs.

This is a continuation of 201A.

203A Advanced Spanish 4 hrs. Fall

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: 100B, and 102A, B.

203B Advanced Spanish 4 hrs. Spring

This is a continuation of 203A.

207A Latin-American Life and Culture 2 hrs. Fall

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. Offered in 1956-1957.

208A Spanish Life and Culture 2 hrs. Fall

This survey course is designed to provide an introduction to the literature, arts, history, and life in Spain. There is no prerequisite and the course is given in English.

305A Spanish-American Literature 2 hrs.

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: 203A, B or its equivalent. Offered in 1956-1957.

305B Spanish-American Literature 2 hrs.

This is a continuation of 305A, bringing the survey to the contemporary writers of Latin-America. Offered in 1956-1957.

306A Spanish Literature 2 hrs. Fall

Readings from Spanish literature from the sixteenth century to the end of the Golden Age are selected for this course. Prerequisite: 203A, B, or consent of the instructor. Offered in 1957-1958.

306A Spanish Literature 2 hrs. Spring

This is a continuation of 306A and includes the literature from the eighteenth century to the present. Prerequisite: 203A, B or its equivalent. Offered in 1957-1958.

307A The Spanish Novel 2 hrs. Fall

The development of the Spanish novel during the past hundred years is studied through readings from the works of Fernán Caballero, Juan Valera, José Mariá Pereda, and Palacio Valdes. Prerequisite: 203A or the permission of the instructor.

307B The Spanish Novel 2 hrs. Spring

The study of the novel is continued through reading works of Perez Galdos, Blasco Ibanez and others.

SPEECH

Zack L. York	Elizabeth L. Caughran	Deldee M. Herman
Albert B. Becker	George O. Eglund	Anna E. Lindblom
Charles T. Brown	Wallace L. Garneau	Jack W. Murphy
Clara N. Bush	Twyla Gay	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, B; Speech Courses 105, 106, 108. 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.) I. Requirements for a teaching major in speech: 106, 110, 126, 215, 225, 250 or 251, 320, 399, and electives to make a total of 27 semester hours. II. Requirements for a non-teaching major are courses in the field totaling 27 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: Courses 110, 215,

*Exceptions may be made upon the recommendation of an instructor and the approval of the chairman of the department.

- 320, 399, and 126 or another course in an area other than dramatics and interpretation.
- II Teaching minor in forensics: 126, 225, 408, 399, 110 or another course in an area other than forensics.
- III Teaching minor in general speech: 110, 126, 399, and electives to make a total of 15 hours.
- IV Non-teaching minor in radio: 140, 240, 241, 342, 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 speech major and minor shall be assigned a faculty sponsor from the Speech Department and 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 No Credit Each Sem.

This course is designed to meet the needs of the students with speech difficulties. Emphasis is placed upon the solution of the individual speech problem through individual and group therapy.

104A, B Communication 4 Hrs. Each Sem.

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 3 Hrs. Each Sem.

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.

106 General Speech 3 Hrs. Each Sem.

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.

108 Business and Professional Speech 3 Hrs. Each Sem.

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.

110 Interpretive Reading 1 3 Hrs. Each Sem.

Analysis and oral interpretation of the more simple types of prose and poetry.

126 Public Speaking 1 3 Hrs. Each Sem.

Introductory study of 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.

140 Radio Speaking 3 Hrs. Each Sem.

A study of radio technique, giving practice in various types of announcing, and adapting interpretive reading and acting to the microphone.

201 Parliamentary Usage 3 Hrs. Each Sem.

Designed for upperclassmen who desire some knowledge of how to organize meetings and conduct business according to parliamentary procedure.

202 Discussion 3 Hrs. Each Sem.

A study of discussion technique and application of it in various situations. 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.

215 Acting 3 Hrs. Spring

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: 110 or consent of instructor.

219 Stagecraft 2 Hrs. Fall

A practical course in the planning and construction of stage scenery and properties. Includes classroom and laboratory work on campus dramatic productions. No prerequisites.

220 Stage Design 2 Hrs. Spring

A beginning course for all students interested in theatre or who expect to participate in planning and executing stage settings. Class makes practical application in staging campus dramatic productions. No prerequisites. Note: This course may be counted for credit in either art or speech.

221 Stage Make-up 1 Hr. Each Sem.

A practical study and application of the principles and techniques of stage make-up.

225 Argumentation and Debate 3 Hrs. Fall

A study of the principles of argumentation and practice in debating current public questions. Attention given to problems of coaching and judging debates.

226 Intercollegiate Debating 1 Hr. Each Sem.

Application of argumentative principles to actual platform debate. The basis of this forensic practice is intensive study of the questions used for intercollegiate debate. Maximum of six hours allowed during college course.

232 Problems of the Deaf and Hard of Hearing 3 Hrs. Fall

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.

240 Radio Acting 3 Hrs. Spring

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.

241 Radio Production 3 Hrs. Spring

Study and practical application of production techniques employed in radio and recording.

250 Introduction to Speech Correction 3 Hrs. Fall

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, and the nature of the speech disorders and their treatment.

251 Principles of Speech Correction 3 Hrs. Spring

A course intended especially for students in speech correction, special education, and elementary education. The course is designed to acquaint the student with the methods used in speech correction for the various speech disorders.

307 Voice and Diction 3 Hrs. Each Sem.

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 self-improvement. No prerequisites.

310 Interpretive Reading 11 2 Hrs. Offered as needed

Advanced work in the oral interpretation of literature, with special emphasis on character delineation. Prerequisite: 110, 215 or consent of instructor.

318 Phonetics 3 Hrs. Spring

This course is designed to acquaint the student with the phonetic alphabet of sound formation and phonetic transcription, and with the application of these to foreign language, dialect, interpretive reading, dramatics and speech correction.

320 Play Production 3 Hrs. Spring

Includes theory and practical application of basic principles of directing and staging plays.

342 Radio Script Writing 2 Hrs. Fall

Analysis of radio scripts—commercial, sustaining, and educational. The class studies techniques of radio presenting special problems to the radio script-writer. Emphasis placed on preparing scripts in various subject-matter fields. Prerequisite: junior standing and consent of instructor.

399 Teaching of Speech 3 Hrs. Each Sem.

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.

404 Speech for Elementary Grades 3 Hrs. Each Sem.

Deals with principles, materials and techniques of creative dramatics and other speech activities. Class meets daily, two days being devoted to laboratory observation in campus elementary school.

405 Speech for the Classroom Teacher 2 Hrs. Each Sem.

A course designed for seniors and teachers in service who find that they need more work in speech. Uses workshop approach and deals with speech needs and problems encountered by class members, their training or teaching. Involves individual research and laboratory practice in class. 3 Hrs. Extension.

406 Public Speaking II 2 Hrs. Spring

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: 126, or consent of instructor.

408 Direction of Forensic Activities 2 Hrs. Spring

For students who expect to direct forensic activities in connection with other teaching duties. Includes principles of teaching debate and other forms of public speaking. Opportunities given for directing local speaking activities. Prerequisite: a major or minor in speech or consent of instructor.

409 Persuasion 3 Hrs. Fall

Speech skills are developed by the presentation of studies in persuasion, by participation in discussion and by criticism of both. Content of course is the psychological theories and experimentation in motives and theories in persuasion ethics. Recommended for teachers, pre-ministerial, pre-law, and business students.

415 Acting Not offered 1955-56 2 Hrs.

Continuation of Acting 215, with more intensive work in the techniques of creative acting. Each student creates at least one role in a play. Prerequisite: 110, 215, or consent of instructor.

416 Oral Interpretation of the Drama 2 Hrs. Spring

This course is for students majoring in speech or speech-correction. Topics considered include: anatomy and physiology of hearing; speech and hearing; anatomy and physiology of articulation and phonation; the neurological organization of the speech function; the physics and physiology of quality, pitch, and intensity; and the psychology of speech. Prerequisite: 105A, B.

452 Stuttering and Allied Disorders 3 Hrs. Spring

This course is designed to provide the student with more detailed knowledge of nature, causes, development, and treatment of the more serious speech disorders. The literature of stuttering, cleft palate, deaf and aphasic individuals will be surveyed, and the various methods of treating these disorders will be described in detail. Case studies and presentation will be provided. Prerequisite: 251.

453 Applied Speech Correction 3 Hrs. Each Sem.

This course is for students interested in the actual practice of speech correction. The course will involve training in the remedial treatment of both adult and child speech defectives in the college clinic and schools associated with the college and the study of the principles of clinical practice. Prerequisite: 251, and consent of instructor.

456 Speech Therapy 2 Hrs. Spring

This course includes a historical survey of the speech therapy field, the philosophy of speech correction, professional problems, the administration of private, hospital, public school and speech clinic therapy centers, and the basic principles of psychotherapy.

DIVISION OF MILITARY SCIENCE AND TACTICS

Lt. Col. Comet Gibson
Maj. Robert E. Crowe
Maj. Murrell B. McNeil
Capt. Eugene S. Bierer
Capt. LaDeitrich O. Coggin
Capt. Rufus R. Summarell
Capt. George N. Edwards
M/Sgt. Kenneth E. McClure

M/Sgt. Clarence A. Rodden
M/Sgt. William H. Sullivan
M/Sgt. John Alger
M/Sgt. Robert V. Wilson
M/Sgt. Kazie T. Killebrew
SFC Robert F. Smith
SFC John W. Baker

The Division of Military Science and Tactics includes basic and advanced courses. Upon completion of the two courses, together with summer camp training, and a college degree, students may apply for commissions as Second Lieutenants in the United States Army Reserve. Distinguished Military Students are eligible, upon completion of the prescribed courses, and a degree, to apply for appointment as Second Lieutenants in the Regular Army. Students in R.O.T.C. who maintain the established academic standards may apply for deferment from military service for the purpose of completing college.

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 hours credit—Includes instruction in Organization of the Army and ROTC; Individual Weapons and Marksmanship; School of the Soldier and Exercise of Command.

MS 102 MILITARY SCIENCE—Two hours credit—Includes American Military History, School of the Soldier and Exercise of Command.

MS 201 MILITARY SCIENCE—Two hours credit—Includes instruction in Map and Aerial Photograph reading; School of the Soldier and Exercise of Command.

MS 202 MILITARY SCIENCE—Two hours credit—Crew Served Weapons and Gunnery and School of the Soldier and Exercise of Command.

ADVANCED COURSE

This course is designed to furnish the General Military Science student with a background necessary to help him carry out the duties of a Second Lieutenant in one of the branches of the Army of the United States. For admittance to the advanced course, a student must have completed the basic course, be selected by the Professor of Military Science and Tactics 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 each month in lieu of subsistence issue.

MS 301 MILITARY SCIENCE—Four hours credit—Instruction in Leadership, Organization, Function, and Mission of the Arms and Services; Military Teaching Methods; First Aid and Military Sanitation; Rifle Marksman-ship; School of the Soldier and Exercise of Command.

MS 302 MILITARY SCIENCE—Four hours credit—Instruction in Small Unit Tactics; Communication and School of the Soldier 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 various phases of military activities to include field training.

MS 401 MILITARY SCIENCE—Four hours credit—Instruction in Operations, Command and Staff, Estimate of the Situation, and Combat Orders; Military Intelligence, the Military Team, Training Management; Logistics—Troop Movements; School of the Soldier and Exercise of Command.

MS 402 MILITARY SCIENCE—Four hours credit—Instruction in Logistics—Supply and Evacuation, and Motor Transportation; Military Administration and Personnel Management; Military Justice; Service Orientation to include the Role of the United States in World Affairs, Leadership, Officer Indoctrination, and School of the Soldier 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. 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
Donald E. Boven
George Dales
Edward A. Gabel

John W. Gill
Joseph T. Hoy
Charles H. Maher
Ernest J. Petoskey

Thomas C. Slaughter
Raymond F. Sorensen
Roy J. Wietz

All men students must participate in general physical education beginning with the first semester of residence, until a minimum of four hours is completed, except that only three hours of general physical education credit will be required of those men students who are enrolled before or during the college years 1954-55 and 1955-56. The four-hour requirement will be resumed effective at the beginning of the college year 1956-57. 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* in September 1951, and thereafter will be subject to the same requirement as non-veterans. Veterans who enrolled as veterans before September, 1951 are exempt from the general physical education requirement.

Majors or minors specializing in physical education are not required to complete the general physical education requirement.

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 the requirement is completed. 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 requirement in general 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.

Participation in Band may be substituted for physical education credit except that 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 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 a general physical education course meeting 3 hours weekly during all semesters that remain until graduation or until he has completed the minimum requirement in general 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.

Students in Occupational Therapy and in Medical Technology will complete 2 hours credit in Physical Education classes during their stay on campus and 2 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 hour per semester until the requirement 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 Registrar.

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, 312.

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

Education 343 is required of those who plan to do directed teaching in physical education, whether they be majors or minors.

THE GENERAL PHYSICAL EDUCATION REQUIREMENT

Activities in the General Physical Education courses are especially designed to meet the physical needs of the men who are not specializing in Physical Education. Emphasis is on fundamentals of the sports of the seasons, calisthenics, gymnastics, tumbling, and marching. Courses are arranged in progression. 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. The 300 courses are organized to give additional participation in activities covered in the 100 group with opportunities for the students to spend special time in activities of major interest. "A" courses are offered only during the first semester. "B" courses are offered only during the second semester.

102A General Physical Education $\frac{2}{3}$ hr.

102B General Physical Education $\frac{2}{3}$ hr.

103A General Physical Education 1 hr.

103B General Physical Education 1 hr.

202A General Physical Education $\frac{2}{3}$ hr.

202B General Physical Education $\frac{2}{3}$ hr.

203A General Physical Education 1 hr.

203B General Physical Education 1 hr.

302A General Physical Education $\frac{2}{3}$ hr.

302B General Physical Education $\frac{2}{3}$ hr.

303A General Physical Education 1 hr.

303B General Physical Education 1 hr.

COURSES FOR SPECIALIZING STUDENTS

105A General Athletics and Elementary Gymnastics 1 hr. Fall

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.

105B Elementary Gymnastics and Outdoor Games 1 hr. Spring

A continuation of 105A with the addition of wrestling, softball, and touch football.

205A Advanced Athletics and Gymnastics 1 hr. Fall

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.

205B Advanced Gymnastics and Outdoor Games 1 hr. Spring

This continues 205A, but in the spring playground games and activities are covered and a track pentathlon suitable for playground uses.

206 History and Principles of Physical Education 3 hrs. Each Sem.

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.

207 Camping and Scouting 3 hrs. Spring

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.

208 Fundamentals and Technique of Football 2 hrs. Each Sem.

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.

209 Fundamentals and Technique of Basketball 2 hrs. Each Sem.

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.

210 Fundamentals and Technique of Baseball 2 hrs. Each Sem.

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.

211 Fundamentals and Technique of Track and Field 2 hrs. Each Sem.

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.

305 Principles and Technique of Gymnastic Teaching 2 hrs. Fall

The materials and skills covered in the 105 and 205 courses are now presented from the angle of the prospective teacher. Notebook. Leadership emphasized.

306 First Aid and Athletic Training 3 hrs. Each Sem.

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.

309 Tests and Measurements in Physical Education 3 hrs. Spring

A study of the historical development of measurement in physical education with consideration of the tests currently used. Prerequisites: Anatomy 211A, Physiology 211B.

310 Swimming 1 hr. Each Sem.

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.

312 Psychology of Coaching 2 hrs. Each Sem.

Considers principles of psychology and their application to athletics and athletic coaching. Phases considered are: preparation for coaching; prac-

tice sessions; presenting material effectively; planning the season's campaign; personality and will power.

320 Playground and Community Recreation 3 hrs. Each Sem.

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.

PHYSICAL EDUCATION FOR WOMEN

Crystal Worner
Mary Bottje
Helen Brown

Isabel Crane
Eleanor N. Douglass
Joette Hains

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, 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 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.

Students in Occupational Therapy and in Medical Technology will complete 2 hours credit in Physical Education classes during their stay on campus and 2 hours credit will be given them for activities in the affiliated program off-campus.

THE GENERAL PHYSICAL EDUCATION REQUIREMENT

99 Posture Counseling

The student is given a posture examination and counselled regarding her body mechanics before she may enroll in any physical education class. Rechecks are given at intervals determined by student needs. No hours of credit are given, but this course must be satisfactorily completed in order to fulfill the physical education requirement.

100 Physical Education $\frac{2}{3}$ hr. Each Sem.

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.

101 Square Dance $\frac{2}{3}$ hr. Each Sem.

105 Physical Education $\frac{2}{3}$ hr. Fall

Prerequisite: Physical Education 100.

Volleyball, folk dancing, basketball, softball, and other seasonal sports.

108 Restricted Exercise $\frac{2}{3}$ hr.

Sports and recreational activities for students with physical limitations.

Not offered in 1955-1956.

109 Individual Gymnastics $\frac{2}{3}$ hr. Each Sem.

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.

110 Swimming $\frac{2}{3}$ hr. Each Sem.

Swimming, diving, and life-saving. Prerequisite: Physical Education 100.

113 Tennis $\frac{2}{3}$ hr. Spring

Prerequisite: Physical Education 100.

114 Golf $\frac{2}{3}$ hr. Spring

Practice of form for the various shots, with some work on the course.

Prerequisite: Physical Education 100.

115 Folk Dance $\frac{2}{3}$ hr. Fall

Prerequisite: Physical Education 100.

116 Advanced Swimming $\frac{2}{3}$ hr. Fall

A course in swimming and life-saving; open to students who have passed the beginners' swimming test. Prerequisite: Physical Education 100.

118 Archery $\frac{2}{3}$ hr. Each Sem.

Prerequisite: Physical Education 100.

119 Tap Dancing $\frac{2}{3}$ hr. Spring

Prerequisite: Physical Education 100.

120 Badminton $\frac{1}{3}$ or $\frac{2}{3}$ hr. Fall

Prerequisite: Physical Education 100.

121 Modern Dance $\frac{2}{3}$ hr. Fall

Individual and group study of expression through rhythmical movement. Prerequisite: Physical Education 100.

122 Social Dancing $\frac{1}{3}$ hr. Each Sem.

233 Rural School Physical Education $\frac{2}{3}$ hr. Spring

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.

330 Elementary School Physical Education $\frac{2}{3}$ hr. Each Sem.

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.

332 Secondary School Physical Education $\frac{2}{3}$ hr. Each Sem.

A course giving in theory and practice physical education activities suitable for high-school students. Prerequisite: Physical Education 100.

COURSES FOR SPECIALIZING STUDENTS*

151A Physical Education Theory and Practice 2 hrs. Fall

Body mechanics, swimming, folk dance, modern dance, field hockey, volleyball and basketball.

151B Physical Education Theory and Practice 2 hrs. Spring

Tennis, swimming, folk dance, modern dance, basketball and softball.

171 First Aid 2 hrs. Fall

The standard course in first-aid techniques leading to the Red Cross certificate.

240 Camping Education 4 hrs. Spring, Summer

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.

251A Physical Education Theory and Practice 2 hrs. Fall

Square dance, modern dance, basketball, volleyball, soccer and swimming.

251B Physical Education Theory and Practice 2 hrs. Spring

Social dance, modern dance, basketball, tennis, softball and swimming.

270A Elementary School Physical Education 2 hrs.

Concerned with the play interests, needs, and characteristics of children at the elementary-school level. An analysis of activities in terms of these needs.

270B Elementary School Physical Education 2 hrs.

Practice in physical education activities suitable for the elementary grades with opportunities for members of the group to teach the activities.

273 Applied Anatomy 2 hrs. Fall

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.

*Students who are neither majoring nor minoring in Physical Education may elect courses from this group with consent of the departmental adviser. These courses may not be used to fulfill the general Physical Education requirement.

274A Secondary School Physical Education 2 hrs. Fall

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 1 hr. Spring

A study of the rules and methods of coaching individual sports of secondary level, such as tennis, archery, and badminton.

275 History and Principles of Physical Education 3 hrs. Fall

A brief historical survey of physical education. In addition, a study is made of the principles of physical education and of the types of programs that develop through their application.

276 Community Recreation, Scouting, and Camp Fire 2 hrs. Fall

The study of the organization and administration of community play.

285 Health Education Each Sem.

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.

351A Physical Education Theory and Practice 2 hrs. Fall

Individual and team sports, dancing and advanced swimming.

351B Physical Education Theory and Practice 2 hrs. Spring

Continuation of the activities of 351A with opportunities to teach dance and to officiate in sports.

361 Physical Education Theory and Practice 2 hrs. Fall

Archery and golf. Advanced work in sports and dance with opportunities for teaching and officiating.

473 Individual Gymnastics 3 hrs. Spring

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.

DIVISION OF RURAL LIFE AND EDUCATION

Wm. McKinley Robinson, Chairman

The Division includes the Departments of Agriculture and Rural Life and 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 a group major or minor is possible and advisable, the chairman of the Division should be consulted.

AGRICULTURE

Howard D. Corbus

Lee O. Baker

All courses are combined with actual experience in connection with the College Farm. Courses are recommended for the following opportunities:

- I. Teaching agriculture, science and shop in rural community and other schools in the state.

First Year: 107A, B; Biology 100A, B; Communication 104A, B; Man and Society 101A, B; Physical Education or R.O.T.C.

Second Year: 200A, B; Chemistry 100 or 101A, B; Physical Science 100A, B; plus necessary courses in Social Science. Agricultural Shop courses 264A, B are available.

The above-mentioned courses will meet the Basic Studies requirements and in case a degree in Agriculture is desired, credit for the first two years can be transferred to the Michigan State College. Majors and minors in Agriculture are also available.

Third and Fourth Years: First choice—courses 264A, B, 306, 301, 300; second choice—303, 305, 302, 304, 310, 410.

- II. Rural Services Opportunities such as soil conservation, farm commodity services and cooperatives.

Courses in mathematics, economics and business practices are strongly recommended.

- III. Rural School Elementary Teaching:

Course 105 is strongly recommended.

- IV. Course 106 is recommended for those desiring to make a study of agriculture in the economy of the nation.

105 Rural School Agriculture 3 hrs. Fall

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.

106 Introduction to Agriculture 2 hrs. Fall

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.

107A Agriculture—Animal Industry 4 hrs. Fall

A study of Animal Husbandry, Dairying and Poultry Husbandry. The genetic developments of breeds, positions in farm organization, disease and management problems.

107B Agriculture—Animal Industry 4 hrs. Spring

A continuation of 107A.

200A Agriculture—Agronomy 4 hrs. Fall

This course includes subject materials common for all farm-grown products, their relations to soil conditions, climate and other problems in connection with successful and profitable production.

200B Agriculture—Agronomy 4 hrs. Spring

A continuation of 200A.

264A Agriculture—Agricultural Shop 2 or 3 hrs. Fall

This course is planned to familiarize students who expect to teach agriculture with basic tool operations while actually performing common jobs on farms and home grounds.

See Industrial Arts 264A, B.

264B Agricultural Shop 2 or 3 hrs. Spring

A continuation of 264A. A study of electrical and gas power uses on a farm; also, work in plumbing and machine operation and repair.

300 Farm Management 3 hrs. Spring

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.

301 Land Use and Soil Conservation 3 hrs. Fall

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.

302 Agriculture—Soils and Fertilizers 3 hrs. Spring

It is planned to provide basic information in the field of soil origin, composition, classification, fertility requirements and production management, including testing for soil deficiencies and recommended correction practices.

303 Agriculture—Farm Markets and Financing 3 hrs. Fall

This course will deal with more specific organized marketing facilities for farm products, using the existing facilities in Southwest Michigan, covering grains, fruits, livestock and vegetable markets. How farming enterprises are financed and their relations to local sources of credit is included.

304 Agriculture—Landscape Gardening 3 hrs. Spring

The great increase in home building in both rural and urban areas has made it advisable to offer more specific information in home grounds planting objectives and systems of home site beautification. Opportunity to become acquainted with nursery offerings in trees, shrubs and perennials is included.

305 Agriculture—Feeding and Animal Nutrition 3 hrs. Fall

Recent advances in feeding discoveries, new systems and economy practices will be studied. This material will be more extensive and detailed study than is possible in the previous courses in animal feeding.

306 Agriculture—Farm Operations 1 hr. Fall, Spring

This course provides actual farm operation experiences for students to learn the every-day operations of a farm, which are required of typical farm operators. The College Farm provides these facilities. Special schedules will be arranged to meet each student's particular situation.

310 Organization in Agriculture 1 hr. Spring

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.

410 Agriculture in Michigan 2 hrs. Spring

This course includes a survey of Michigan agriculture 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.

RURAL LIFE AND EDUCATION

Wm. McKinley Robinson

James O. Ansel

Either elementary or secondary education degrees may be earned in Rural Life and Education. The Rural Elementary Curriculum (two-year) leading to the State Limited Certificate is the first two years of Rural Elementary Degree Curriculum, and may be applied without loss of credit on the Rural Secondary or other Education Degree Curricula.

Students who major (24 hours) or minor (15 hours) in Rural Life and Education are required to have Curriculum 140 and Rural School Administration 340. Under the guidance of the departmental advisor the remaining courses are selected to meet the needs of the individual student 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 Special Education 231, Introduction to Mental Hygiene 235, Introduction to Speech Correction 250, Education Therapy in Reading 430, Audio-Visual Education 438, Introduction to Guidance Services 480; and one or more courses in Vocational Education such as Rural Practical Arts 104, Food for the Family 118, Clothing

203, Home Furnishings 211, Everyday Nutrition 222, Marriage and Family Relations 325, Teaching of Family Living in Elementary School 400, Housing and House Planning 421, Consumer Buying 439.

Rural Education Courses count in Group IV; Rural Social Science Courses count in Group III.

RURAL EDUCATION COURSES

140 Curriculum 3 hrs. Fall, Spring

A study of the objectives of education as related to rural children and rural needs, and teaching practices leading toward these objectives. Students have a wide range of experience in observation and in the examination and development of materials suitable for rural schools.

240 Introduction to Directed Teaching 3 hrs. Fall, Spring

A 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.

241 Directed Teaching 4 or 5 hrs. Fall, Spring

Directed teaching is done in the Hurd two-teacher school and other designated rural schools of various types in the counties of the service area of the college. Selected students may meet requirements in six-week periods of directed off-campus community participation and teaching.

340 Rural School Administration 3 hrs. Spring

The community school; school district reorganization; support and control of education; the functions of the board of education, county superintendent, and state department of public instruction; school buildings, equipment and supplies; professional ethics; professional organizations; the PTA, public relations and interpretation; school law; and similar topics are studied in the course.

345 Rural School Supervision (Seminar) 2 hrs. Fall

Planned for supervisors, principals and superintendents. Discussion and individual reports on curriculum, teaching, in-service education, orienting the new teacher, and other problems of supervision for any type of rural school are included. Prerequisite: consent of instructor.

346 Rural School Supervision (Seminar) 2 hrs. Spring

Continuation of 345. Study of individual and group problems pertaining to supervisory and related administrative demands in rural schools. Field work is encouraged. Prerequisite: consent of instructor.

348 Special Problems of Community Schools (Seminar) 2 hrs. Spring

Planned for teachers, principals and superintendents, supplementing Rural School Administration 340. Topics considered are the aims and functions of the school as related to the rural community, surveys, location and planning of buildings, finance, transportation, selection of teachers, salary and tenure, extra-curricular activities, the PTA, adult education, etc. Field work is encouraged. Prerequisite: consent of instructor.

RURAL SOCIAL SCIENCE COURSES**220 Rural Sociology 3 hrs. Fall, Spring**

Study of life in the rural environment—local, regional and worldwide, including cultural factors; population trends; impact of industrialization; family, village, community; social institutions, agencies and organizations; educational, recreational, cultural, religious, health and governmental facilities. Current magazines and pamphlets supplement the textbooks.

230 Rural Economics 3 hrs. Fall

Fundamental economic principles are considered in terms of rural conditions—local, national and international. Economic interpretation is given topics found in the elementary and secondary school curricula—conservation, insurance, consumer education, cooperatives, agricultural extension services, etc.

320 Rural Life (Seminar) 2 hrs. Fall

Critical study of recent books in rural social life, with emphasis upon training for leadership. Supplementary references include research studies. Special problems are selected for study by each student. Prerequisite: consent of instructor.

321 Rural Life (Seminar) 2 hrs. Spring

Consideration is given individual problems related to social aspects of school and community life, members of the class devising forms and schedules for a study, and analyzing research studies and techniques involving planning for various services and agencies. Field work is encouraged. Prerequisite: consent of instructor.

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.

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 the Chairman will advise students relative to such majors or minors. In such cases the following rules will be observed:

For a science major:

1. Thirty or more hours are required in the division.
2. The subjects selected must be taken from no more than two departments.
3. Fifteen hours must be in subjects above the freshman level."

For a science minor:

1. Twenty or more hours are required in the division.
2. The subjects selected must be taken from no more than two departments.
3. At least eight hours of the work must be in courses above the freshman level."

The courses to be counted toward a science major or minor may be chosen in any two fields of science—biology, chemistry, geography and geology, physics, psychology. Mathematics is never combined with any other departmental offerings. Combinations of any courses with the exception of those in methods of teaching which satisfy the above requirements are acceptable.

The following division courses are offered:

100A Physical Science* 4 hrs. Each Sem.

This course is part of the Basic Studies program in general education. The course is designed for students who are not planning to specialize in any of the physical sciences. Topics are chosen to stress basic facts, major concepts and important generalizations of the physical sciences.

100B Physical Science* 4 hrs. Each Sem.

A continuation of 100A.

102 Biological Science 4 hrs. Each Sem.

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 combina-

*Students who later become science majors get one hour each semester. It may be applied towards a physics or chemistry major or minor.

tion 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.

105A Human Geography 4 hrs. Each Sem.

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.

203 Teaching of Elementary Science 3 hrs. Spring

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.

300 Teaching of Physical Science 2 hrs. Spring

Prerequisite: a major or minor in physics or chemistry.

BIOLOGY

W. C. Van Deventer	A. Verne Fuller	Myrtle M. Powers
Lee Baker	Frank J. Hinds	Edward E. Reynolds
Bette E. Barnes	Roy E. Joyce	Edwin B. Steen
Harriette V. Bartoo	George G. Mallinson	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. Those students who are not planning to specialize in biology, generally take course 102.

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; 220, 222 and 242A, B. If possible, 223, 243, and 320 should be elected. The recommended minor for physical education students consists of 100A, B; 211A, B; and 112. Course 304 and a course in field biology must be elected if the person intends to teach biology in high school. The recommended minor for occupational therapy students consists of 102, 231A or B and 211A, B.

A major or minor 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 biology minor for elementary teachers consists of 102, 231A, 231B, and three or more elective hours of work beyond the 100 level. A recommended minor or major for secondary teachers must include 304. It should be noted that those majoring in biology are required to take their general education science work in the physical science area.

100A General Biology 4 hrs. Fall

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.

100B General Biology 4 hrs. Spring

A continuation of 100A, covering the higher animal groups, the plant groups, genetics, evolution, ecology, and conservation.

101A General Biology 3 hrs.

An abridgment of 100A, designed especially for teachers in service. (Offered by extension only.)

101B General Biology 3 hrs.

An abridgment of 100B, designed as a sequel to 101A. (Offered by extension only.)

102 Biological Science 4 hrs. Each Sem.

A course designed to present basic biological principles and to give the student an understanding of the operation of the world of life. This course fulfills the general education requirement for biological science, and it may also be used as a basis for a biology minor. It may be counted toward a major only with consent of the department and in connection with 220, 222 and 242A, B.

102S Biological Science for Teachers 4 hrs.

This course has the same general content as 102, but the presentation of subject matter is oriented especially for teachers in service. Offered only in summers and by extension.

201 General Ecology 2 hrs. Spring

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, or consent of instructor.

231A Outdoor Science 4 hrs. Fall

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.

231B Outdoor Science 4 hrs. Spring

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.

231S Nature Study for Teachers 4 hrs.

An abridgment of 231A and 231B, designed especially for teachers in service. Offered only in summers and by extension.

301 The Teacher and the Living Environment 2 hrs.

A study of interrelationships among plants and animals, with special emphasis on those classroom and field experiences which will be helpful to teachers in service. Offered only in summers and by extension.

304 Methods and Materials in Biology 2 hrs. Each Sem.

This consists of class discussion, laboratory practice, and field work, illustrating the selection or collection, 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.

305 Genetics 2 hrs. Fall

A comprehensive study of the laws of heredity including their application to plant and animal breeding and to man. Prerequisites: 100A, B, or equivalent.

306 Evolution 2 hrs. Either Sem.

A consideration of the evidence for and principles involved in the evolution of plants and animals, including man. Prerequisites: 100A, B, or equivalent.

400 Recent Advances in Biology 2 hrs. Fall and Summer

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 with permission of instructor. Prerequisite: Eight hours of biological science.

408 The Nature of Science 2 hrs. Spring

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 scientific research. Prerequisite: Eight hours of college biology.

430 Conservation in the Schools 2 hrs. Spring and Summer

This course is designed to meet the needs of students who are preparing to teach and teachers in service, who wish to become acquainted with available materials and experiences in the field of conservation, as well as to gain an understanding of the basic principles which underlie sound conservation practices. Prerequisite: 8 hours of biology or geography.

ANATOMY, PHYSIOLOGY AND HYGIENE**112 Healthful Living 2 hrs. Each Sem. and Summer**

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.

113 Advanced Healthful Living 2 hrs. Spring

A continuation and expansion of 112, for students wishing to continue the study of health for an additional semester at the freshman level. Prerequisite: 112, or permission of instructor.

211A Anatomy 4 hrs. Fall

A study of the gross and microscopic structures of the vertebrates with special reference to man. In the laboratory the cat is dissected. Prerequisite: 100A, B, or equivalent.

211B Physiology 4 hrs. Spring

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.

211S Anatomy and Physiology for Teachers 4 hrs. Summer

An abridgment of 211A and 211B, designed especially for teachers in service.

212 Community Hygiene 3 hrs. Each Sem. and Summer

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.

213 Anatomy and Physiology for Nurses 4 hrs. Fall

An abridged combination of 211A and 211B, especially adapted to meet the needs of the students in the Bronson Methodist Hospital School of Nursing.

214 Bacteriology for Nurses 3 hrs. Spring

An abbreviated course in microorganisms, adapted to the needs of students in the Bronson Methodist Hospital School of Nursing.

311 Health Education 3 hrs.

This course is designed specifically for teachers in the field. Class meetings will be devoted to broadening the students' concept of health and awareness of healthful living. Basic health information will be given where necessary. The principal emphasis will be in developing better school health programs by encouraging the students to study their own teaching situations and work toward improvement. Offered by extension only.

312A Bacteriology 4 hrs. Fall

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.

312B Bacteriology 4 hrs. Spring

Continuation of 312A with special attention given to pathogenic micro-organisms. Prerequisite: 100A, B, or equivalent, a course in chemistry and 312A.

413 Health Problems 2 hrs. Spring

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.

414 Materials for School Health Education 2 hrs. Fall, Summer

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.

415 Problems of Alcohol Education 2 hrs. Each Sem.

A course designed primarily for teachers in service and other qualified adults. A series of lectures and discussions along with supplementary readings, arranged to explore objectively the problems associated with the drinking of alcoholic beverages. Each student will prepare a project concerned with alcohol instruction or with some other aspect of the alcohol problem.

BOTANY

220 Botany of Seed Plants 4 hrs. Fall

A course designed to acquaint the student with the seed plants, their fundamental gross and microscopic structure, physiology, classification and development. The college greenhouse is used in experiments involving living plants and their propagation. Prerequisite: Eight hours of biological science or consent of the instructor.

222 The Plant Kingdom 4 hrs. Spring

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 second half of the semester field studies occupy the major portion of the class time. The second (field) half of this course may be taken separately, without the first half, under the title of 224. **Local Flora (See below).** Prerequisite: Eight hours of biological science, or consent of the instructor.

223 Trees and Shrubs 2 hrs. Either Sem.

A field course in the identification of trees and shrubs occurring in south-western Michigan. Attention is given to their geographic and physiographic distribution, and their uses in ornamental and economic planting, and for industrial purposes. Prerequisite: Eight hours of biological science, or consent of the instructor.

224 Local Flora 2 hrs. Spring

An elementary field course in the identification of flowering plants. This course is especially designed for those students or teachers who find a need for acquaintance with the common wild flora occurring in this region. This course corresponds to the last half of 222. **The Plant Kingdom**, listed above. Students taking 222, therefore, cover the material of this course, and cannot then obtain additional credit for 224. Those wishing additional work in this area should take 420. Prerequisite: Eight hours of biological science, or consent of the instructor.

320 Economic Botany 3 hrs. Fall

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. Field trips are planned to important places in Kalamazoo or the neighboring areas where plant products are grown, manufactured, exhibited, or sold. Open to sophomore students by permission. Especially desirable for students in business, economic, or industrial education. Prerequisite: Permission of the instructor.

420 Flowering Plants 2 hrs. Summer

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.

ZOOLOGY**242A Invertebrate Zoology 4 hrs. Fall**

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.

242B Vertebrate Zoology (Comparative Anatomy) 4 hrs. Spring

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 Chicago Museum of Natural History. Prerequisite: 100A, B, or equivalent.

243 Bird Study 3 hrs. Spring and Summer

A study of the plumage, song, flight, migration, and nesting habits of birds, their relation to their environment, and their importance to man. The student learns to identify a minimum of 100 species in the laboratory and 50 in the field.

341 Histology 4 hrs. Spring

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. Alternate years.

342 Vertebrate Embryology 4 hrs. Spring

The study of the development of the individual from the origin of the germ cells to adulthood. The frog, chick, and pig are used in the laboratory. Prerequisite: 100A, B, and eight additional hours of biology. Alternate years.

421 Parasitology 2 hrs. Fall

A study of animal parasites, internal and external, their classification, life histories and ecological relationships. Emphasis is given to parasites of man. Prerequisite: 100A, B, or equivalent.

422 Insect Study 2 hrs. Fall, Summer

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.

440 Mammalogy 2 hrs. Spring

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.

441 Advanced Ornithology 3 hrs. Spring, Summer

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. 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.

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 any of the following:

Conservation 312f	1 hour
Botany of Flowering Plants 223f	1 hour
Game Bird Ornithology 236f	1 hour
Zoology (Mammalogy) 243f	1 hour

For particulars consult the Division of Extension and Adult Education.

CHEMISTRY

Gerald Osborn	Robert J. Eldridge	Lillian H. Meyer
James W. Boynton	Lawrence G. Knowlton	Lauri E. Osterberg

A major in chemistry consists of one year of general chemistry (8 hours) and 16 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 are required to take an additional ten hours of chemistry. Students majoring in chemistry should have a minor in physics.

All chemistry majors are required to take chemistry seminar during junior and senior years.

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 4 hrs. Fall

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.

100B General Chemistry 4 hrs. Spring

A continuation of General Chemistry 100A. Prerequisite: General Chemistry 100A.

101A General Chemistry 4 hrs. Each Sem.

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.

101B General Chemistry 4 hrs. Each Sem.

A continuation of course 101A. Prerequisite: General Chemistry 101A.

105A General Chemistry 4 hrs. Fall

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.

105B General Chemistry 4 hrs. Spring

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: 105A.

106 Chemistry (for Nurses) 4 hrs. Fall

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.

201 Qualitative Analysis 4 hrs. Each Sem.

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.

202 Quantitative Analysis 4 hrs. Spring

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.

205 Everyday Chemistry 2 hrs. Summer

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.

210 Engineering Materials 3 hrs. Fall

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: 100A, B or 101A, B.

305 Advanced Qualitative Analysis 1-2 hrs.

This course consists of laboratory work, readings, and quizzes. Emphasis is placed on the analysis of alloys and mixed solids. Given on request.

306A Organic Chemistry 4 hrs. Fall

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: 100A, B or 101A, B. Open to qualified sophomores.

306B Organic Chemistry 4 hrs. Spring

A continuation of course 306A. Prerequisite: 306A.

307 Advanced Quantitative Analysis 1-2 hrs.

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: 202. Given on request.

341 Food Chemistry 2 hrs. Fall

This is 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: 306A or 105B.

350 Elementary Biochemistry 2 hrs. Spring

Elementary study of the chemistry of the body; digestion, metabolism, excretion, the endocrines, and vitamins. Prerequisite: 306A. Open only to Juniors and Seniors.

351 Biochemistry Laboratory 1-2 hrs. Spring

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: 202 or 341; and 306A.

398 Inorganic Preparations 1-2 hrs.

Consult instructor before enrolling. Laboratory work only. Given on request.

399 Organic Analysis. 2 hrs.

Determination of carbon, hydrogen, and nitrogen by combustion methods. Laboratory work only. Consult instructor before enrolling. Given on request.

403A Physical Chemistry 3 or 5 hrs. Fall

The course includes studies in kinetic theories of gases, liquids, solids, solutions, thermodynamics, physical basis for molecular structure, thermochemistry, homogeneous equilibria, heterogeneous equilibria, etc. Prerequisite: 202, Physics, 203A, B; College Algebra and Analytic Geometry 104A, B or equivalent; and Calculus 205A, B. (Five hours includes laboratory)

403B Physical Chemistry 3 or 5 hrs. Spring

A continuation of course 403A. The course includes radioactivity, quantum theory, atomic structure, conductance of solutions, polepotentials, oxidation potentials, polarization, chemical thermodynamics, colloids, etc. Prerequisite: 403A. (Five hours includes laboratory)

408 History of Chemical Theory 2 hrs. Spring

This course is taught from the point of view of the history of chemical theory in which the evidence for the theories is critically presented. Prerequisite: two years of college chemistry.

496A Organic Preparations 2 hrs. Fall

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.

496B Organic Preparations 2 hrs. Spring

Methods of preparing the aromatic organic compounds. Classroom, one hour a week; laboratory, ten hours a week. Consult instructor before enrolling.

497A Special Problems in Chemistry 2 hrs.

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: 202, 306B, and 403A. Given on request.

497B Special Problems in Chemistry 2 hrs.

A continuation of special problem work started under 497A. Given on request.

GEOGRAPHY AND GEOLOGY

William J. Berry

Marguerite Logan

Cyril L. Stout

Geography, either 105A or 305, must precede all other undergraduate geography courses except 312, 218, and 225. There is no required sequence in the courses in regional geography.

Successful completion of 303 is prerequisite to receiving departmental recommendation for directed teaching or for a teaching position in geography.

MAJOR (24 Hours)**Required Courses**

Human Geography 105A	4 hrs.
Regional Geography of the World 105B	4 hrs.
Dynamic Geology 230A	4 hrs.
Field Geography 340	3 hrs.
or	
Geographic Techniques 303	3 hrs.
Meteorology 225	2 hrs.

Elective Courses

Nine hours, chosen largely from the following:	
Regional Courses (catalog)	
Cartography and Graphics 350	2 hrs.
Conservation of Natural Resources 312	3 hrs.

MINOR (15-17 Hours)**Required Courses**

Human Geography 105A	4 hrs.
and	
Regional Geography of the World 105B	4 hrs.
or	
Introductory World Geography 305	3 hrs.
Field Geography 340	3 hrs.
or	
Geography Techniques 303	3 hrs.

Elective Courses

Six hours chosen mostly from the following:	
Regional Courses (catalog)	
Conservation of Natural Resources 312	3 hrs.
Dynamic Geology 230A	4 hrs.
Meteorology 225	2 hrs.

Any other course offered by the department is acceptable on either a major or a minor in Geography. A combination of Geography and Geology may constitute a major (24 hours) or a minor (15 hours) in Earth Science.

A combination major (30 hours) may be earned by combining Geography or Geology with the work given in not more than one other department in the Physical Science Division. Similarly a combined minor of 20 hours may be earned provided not more than one other department is involved

FOUNDATIONAL COURSES**105A Human Geography 4 hrs. Each Semester**

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.

105B Regional Geography of the World 4 hrs. Each Semester

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.

105S Human Geography 3 hrs. Summer and Extension

Designed to build understanding of major human activities and developments throughout the world in relation to factors of the environment. Consideration is given to the effects of climate, soils, minerals, topography and biotic environment on cultural developments. This is one of the Basic Studies courses.

305 Introductory World Geography 3 hrs.

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 105A or 105B. Not offered in 1955-1956.

SURVEY REGIONAL COURSES**206 United States and Canada 3 hrs. Each Semester**

Study of areal differentiation in Anglo-American and of present-day problems, with emphasis upon occupational crises in selected regions. Prerequisite: 105A or 305.

207 Europe 3 hrs Spring

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: 105A or 305.

208 South America 3 hrs. Fall

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: 105A or 305.

209 Mexico and the Caribbean Lands 2 hrs. Spring

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: 105A or 305.

307 Asia 3 hrs. Fall

Interpretation of the major geographic regions of Asia. Special emphasis is given to the organization of materials into geographic units. Prerequisite: 105A or 305.

308 Africa 3 hrs.

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: 105A or 305. Not offered in 1955-1956.

309 Islands of the Pacific 3 hrs.

Study of populations and natural resources of Pacific Islands with emphasis upon economic and political problems which have arisen. Prerequisite: 105A or 305. Not offered in 1955-1956.

INTENSIVE REGIONAL COURSES**304 The British Isles 2 hrs.**

Geographical analysis of their present and potential development. Prerequisite: 105A or 305, and Europe 207. Not offered in 1955-1956.

311 The South 2 hrs.

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: 105A or 305. Not offered in 1955-1956.

320 Japan 2 hrs.

Detailed study of the geography of Japan, with attention focused on present developments and future potentialities. Prerequisite: 105A or 305. Not offered in 1955-1956.

323 Union of Soviet Socialist Republics 3 hrs.

Analysis of the geography of the whole of the Soviet realm. Prerequisite: 105A or 305. Not given in 1955-1956.

FUNCTIONAL COURSES**218 Economic Geography 3 hrs. Each**

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.

225 Meteorology 2 hrs. Fall

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.

303 Geographic Techniques 3 hrs. Each

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: 105A or 305.

312 Conservation of Natural Resources 3 hrs. Each

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.

325 Climatology 2 hrs.

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: 105A, or 305 or 225, or consent of instructor. Not offered in 1955-1956.

350 Cartography and Graphics 2 hrs. Spring

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: 105A or 305.

FIELD GEOGRAPHY**340 Field Geography 3 hrs. Spring**

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: 105A or 305.

341 Advanced Field Geography 1, 2, 3 hrs. Each Sem.

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. Extension only. Residence credit is given. Prerequisite: 340 or an approved equivalent and consent of the instructor.

406 Geography of Michigan 2 hrs. Spring

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: 105A, B or 305, or equivalent, or consent of instructor.

410 Studies in Geographic Education 2 hrs.

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 303. Not given in 1955-1956.

411 Historical Geography of North America 2 hrs.

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. Not given in 1955-1956.

416 Political Geography 2 hrs. Fall

Study of the resources, people, and geographic-political problems of the various nations and empires of the world from the point of view of the reciprocal relations involved.

419 Survey of Latin American Geography 2 hrs.

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 1955-1956.

GEOLOGY

230A Dynamic Geology 4 hrs. Fall

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.

230B Historical Geology 4 hrs. Spring

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.

332 Physiography of United States 2 hrs.

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 1955-56.

335 Mineralogy 2 hrs. Spring

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.

350 Field Geology—Summer Trip 4 hrs.

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 given. Required of students with minor in geology. Prerequisite: Geology 230B or the equivalent. Post-summer session.

MATHEMATICS

Charles H. Butler

Pearl L. Ford

Jack R. Meagher

Fred A. Beeler

Lester W. Gunter

Joseph K. Peterson

William H. Cain

Herbert H. Hannon

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 offers a group of subjects consisting of the following courses: Mathematics of Finance (227A), (227B), Elem. Statistical Practice (209), and Intro. to Statistical Theory (473).

The attention of students who plan to become teachers of mathematics is directed to the following courses: Arith. for Teachers (101), and The Teaching of Secondary Math. (401). It is strongly recommended that course 101 be taken by all who expect to teach in the grades, and that course 401 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 103B or 104B, 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

Subjects and number of units presented for entrance	First Year		Second Year	
	First Semester	Second Semester	First Semester	Second Semester
Algebra, 1½ or 2 units Geometry, 1 or 1½ units Trigonometry, ½ unit	104A	104B	205A	205B
Algebra, 1½ or 2 units Geometry, 1 or 1½ units	103A	103B	205A	205B
Algebra, 1 unit only Geometry, 1 or 1½ units	100A	100C	104A	104B

**For students who plan to take Mathematics of Finance
and Statistics in their second year*.**

Algebra, 1 unit only Geometry, 1 or 1½ units	105A*	105B*	227A, 227B, and 209
---	-------	-------	------------------------

100 Basic Mathematics 4 hrs.

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. Credit for this course may be counted toward satisfying the general requirements of Group II. Not offered in 1955-1956.

100A Intermediate Algebra 3 hrs. Each sem.

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 covers the work usually given in the third semester of high school algebra. Prerequisite: Plane geometry and one year algebra.

100B Solid Geometry 2 hrs. Spring

An elementary course in solid geometry with emphasis on mensuration. Students who plan to study engineering or to teach mathematics should elect this course unless they have taken it in high school. Prerequisite: Plane geometry and 1½ years of algebra.

100C Plane Trigonometry 3 hrs. Each sem.

A study of trigonometric functions, identities, and equations, inverse functions, logarithms, radian measure, and the solution of triangles. Prerequisite: Plane geometry and 1½ years of algebra.

100D Spherical Trigonometry 1 hr.

The trigonometry of spherical triangles, including the development of formulas and numerical solutions, with applications to astronomy and navigation. Prerequisite: Plane trigonometry. Not offered in 1955-1956.

101 Arithmetic for Teachers 3 hrs. Each sem.

This course is designed for students who expect to teach arithmetic in grades 1 to 6. It deals with the history, philosophy, objectives, and methods of teaching arithmetic, and includes a review of the subject matter of arithmetic.

*Courses 105A and 105B do not prepare students to take calculus. Students who are qualified to take courses 103A, B or 104 A, B in the freshman year should take these courses in preference to courses 105A, B.

103A Trigonometry and College Algebra 5 hrs. Fall

About three-fifths of this semester's work is spent in the study of plane trigonometry as described above (see 100C). 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. Plane geometry and $1\frac{1}{2}$ years of algebra.

103B College Algebra and Analytic Geometry 5 hrs. Spring

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.

104A College Algebra 4 hrs. Each sem.

A full semester's work in college algebra. Topics studied include fractions, exponents, functions, graphs, 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: Math. 100A and 100C or equivalent.

104B Analytic Geometry 4 hrs. Each sem.

The analytic geometry 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. 100C and 104A.

105A Introduction to College Mathematics 3 hrs. Fall

Elementary algebra through quadratic equations. This course, together with 105B, is intended to provide sufficient mathematical background for the subsequent study of Mathematics of Finance and Business Statistics. Prerequisite: Plane geometry and 1 year of algebra.

105B Introduction to College Mathematics 3 hrs. Spring

A continuation of Math. 105A. Topics studied include the binomial theorem, logarithms, progressions, the straight line, and elements of curve fitting and of probability. Prerequisite: Math. 105A.

112 Applied Mathematics 3 hrs. Each sem.

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 and shop work.

120A Business Mathematics 2 hrs. Each sem.

Diagnostic and remedial work in the fundamental operations of arithmetic, and a study of elementary business forms and problems. Intended primarily for students in the Department of Business Studies.

120B Business Mathematics 2 hrs. Each sem.

The study, and the application to business problems, of simple algebraic operations, evaluation of formulas, ratio and proportion, use of logarithms, and simple problems in probability. Prerequisite: Math. 120A or equivalent.

205A Calculus 4 hrs. Each sem.

This first half of a year's work in calculus 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 or 104B.

205B Calculus 4 hrs. Each sem.

A continuation of the work begun in 205A. Among the 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.

209 Elementary Statistical Practice 3 hrs. Fall

A study of averages, dispersions, sampling, correlation, and tests of significance for small and large samples. Prerequisite: Math. 103B or 104B.

210 Surveying 3 hrs. Spring

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.

227A Mathematics of Finance 2 hrs. Fall

The first semester of a year's work in the mathematics of finance. It includes the study of compound interest, simple annuities certain, and the application of such annuities to problems in the amortization of debts, sinking funds, valuation of bonds, depreciation, and perpetuities. Prerequisite: Math. 103B, 104B, or 105B.

227B Mathematics of Finance 2 hrs. Spring

A continuation of the work begun in 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.

301 Teaching of Junior High School Mathematics 3 hrs.

A critical restudy of the mathematics commonly taught in grades 7, 8, and 9, with discussion of associated problems of learning and teaching. Students may not earn credit in both this course and 401. Prerequisite: Math. 104B or consent of the instructor. Offered on request.

305 Vector Analysis 3 hrs. Fall

The formal processes of vector analysis, with application to geometry and mechanics. Prerequisite: Math. 205B.

321 Differential Equations 3 hrs. Fall

An elementary course in ordinary differential equations. Prerequisite: Math. 205B.

322 Theory of Equations 3 hrs. Fall

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.

323 Solid Analytic Geometry 2 hrs. Spring

A study of lines, planes, space curves, and surface; transformations, using matrices. Prerequisite: Math. 205B.

325 Theoretical Mechanics 2 hrs. Spring

A vectorial treatment of the kinematics and dynamics of particles and of rigid bodies, with emphasis on problem solving. Prerequisite: Math. 305.

331 Advanced Calculus 3 hrs. Spring

Review of fundamentals of calculus, with more critical examination of concepts. Power series, partial differentiation, implicit functions, definite integrals; line, surface, and space integrals; Green's and Stokes' theorems. Prerequisite: Math. 205B.

373A Statistical Methods for Industry 3 hrs.

Statistical methods of quality control; the normal, binomial, and Poisson distributions; the Shewhart control chart; sampling methods for scientific acceptance inspection. Math. 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: Math. 205B. Not offered in 1955-1956.

373B Statistical Methods for Industry 3 hrs.

Significance tests; tests valid for small samples; introduction to linear correlation; elementary design of experiments. Prerequisite: Math. 373A. Not offered in 1955-1956.

401 Teaching of Secondary Mathematics 3 hrs. Fall

In this course some consideration is given to curriculum problems and trends in secondary school mathematics, but the main emphasis is upon specific problems of teaching mathematics effectively to secondary school students. Prerequisite: Math. 104B.

411 History of Mathematics 2 hrs.

This course treats of the history of arithmetic and algebra from earliest times to the present. Prerequisite: Math. 104B. Offered on request.

412 History of Mathematics 2 hrs.

This course treats of the history of arithmetic and algebra from earliest times to the present. Prerequisite: Math. 104B. Offered on request.

423 Introduction to Higher Geometry 3 hrs. Spring

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. 104B.

473 Introduction to Statistical Analysis 3 hrs.

The study of statistics as the science of experimentation: averages, dispersions, sampling, correlation, and statistical tests valid for small and large samples. Prerequisite: Math. 104B. Not offered in 1955-1956.

PAPER TECHNOLOGY

Alfred H. Nadelman

Robert T. Elias

R. N. Zabe

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 1 hr. Each sem.

The course stresses the basic processes used in the manufacture of pulp and prepares the student for summer mill practice.

130B Orientation to Paper Technology 1 hr. Spring

A continuation of course 130A. The fundamentals of paper making are studied. Prerequisite: 130A.

131 Summer Mill Practice 2 hrs.

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: 130A, B.

230A Pulp Manufacture 2 hrs. Fall

A detailed description of production equipment and chemistry of the processes used in the manufacture of pulp. Visits to various mills are coordinated with the lecture course. Prerequisite: 130A, B; General Chemistry 101A, B or 100A, B.

230B Paper Manufacture 2 hrs. Spring

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: 130A, B; General Chemistry 101A, B or 100A, B; Pulp Manufacture 230A.

231 Summer Mill Practice 2 hrs.

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: 230A, B.

331 Summer Mill Practice 2 hrs.

Course 331 is optional for students who receive credit for courses 131 and 231.

332A Pulp Testing 2 hrs. Fall

A lecture and laboratory course treating the evaluation of chemical and physical characteristics of pulp. Prerequisite: 230A, B; Quantitative Analysis 202.

332B Paper Testing 2 hrs. Spring

This course consists of laboratory work and a limited number of lectures pertaining to the evaluation of chemical and physical characteristics of paper. Prerequisite: 230A, B; Quantitative Analysis 202, Pulp Testing 332A.

333 Fiber Microscopy 1 hr. Fall

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: 230A, B, Electricity and Light 203B.

334A Elements of Industrial Chemistry 2 hrs. Fall

A study of the most important industrial chemical processes from the point of view, not only of the chemical reactions, but of the conditions and equipment necessary to carry on these reactions. Prerequisite: General Chemistry 101A, B, or 100A, B.

334B Elements of Industrial Chemistry 2 hrs. Spring

A continuation of course 334A. Prerequisite: Elements of Industrial Chemistry 334A, Organic Chemistry 306A.

335 Wood Chemistry 2 hrs. Spring

A lecture course which includes the chemistry of cellulose, hemicellulose, lignin and extractives. Prerequisite: 230A, B, Organic Chemistry 306A.

336 Coloring and Filling of Paper 1 hr. Spring

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: 230A, B.

337 Mill Inspection Trip 1 hr.

One week's inspection trip to representative pulp and paper mills.

432 Bleaching, Pulp Purification, and De-inking 2 hrs. Fall

A lecture and laboratory course treating the theory and technique of producing bleached pulp, dissolving pulp and de-inked secondary stock. Prerequisite: 336A.

433 Auxiliary Equipment for Pulp and Paper Mills 1 hr. Fall

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: 230A, B; Mechanics, Sound, and Heat 203A; Electricity and Light 203B.

434 Chemistry and Technology of Plastics 2 hrs. Spring

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.

435 Converting of Paper 1 hr. Spring

A through study of a variety of converting operations presented with the assistance of qualified members of the converting industry. Prerequisite: 230A, B.

436A Research Problems In Pulp and Paper 2 hrs.

Laboratory development work on a problem pertaining to pulp and paper technology preceded by a survey of available literature.

436B Research Problems In Pulp and Paper 2 hrs.

A continuation of course 436A.

PHYSICS

Paul Rood
Grover C. Baker

George Bradley
Edwin S. Fox

Haym Kruglak
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 hours; a minor 16 hours. Acceptable sequences of courses are arranged in consultation with the departmental adviser.

Students wishing to do directed teaching in physics must offer a major or minor in this field. It is advisable to defer directed teaching until the senior year after a considerable portion of the major or minor has been completed.

102A General Physics 4 hrs. Fall

A general college physics course in the principles and practical application of mechanics, sound, and heat. Required of all medical and dental students. Recommended for students desiring a four-hour course in physics.

102B General Physics 4 hrs. Spring

A general college physics course in the principles and practical application of magnetism, electricity and light. Prerequisite: 102A.

103A Mechanics, Sound, and Heat (General Physics) 5 hrs. Each sem.

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.

103B Electricity and Light (General Physics) 5 hrs. Each sem.

This course follows 103A and consists of studies in electricity, magnetism, and light. Prerequisite: 103A.

110 Elementary Acoustics 2 hrs. Each sem.

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.

210 Astronomy 3 hrs. Each sem.

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 8-ft. Spitz planetarium and a 4½" refracting telescope. Open to Freshmen.

220 Photography 3 hrs. Each sem.

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.

221 Statics 3 hrs.

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: 103B, Calculus 205A, B. Not offered in 1955-1956.

342 Heat and Elementary Thermodynamics 3 hrs. Spring

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: 103A, B, Calculus 205A, B. Offered 1955-1956.

350 Light 3 hrs. Each sem.

This is a course in physical optics. The main topics discussed are: light as a wave motion, interference, and diffraction. Prerequisite: 103B, Calculus 205A, B.

361 Introduction to Electronics 3 hrs. Each sem.

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: 103B, Calculus 205A, B.

365 Advanced Electronics 3 hrs. Spring

Applications of electronics in different types of radio frequency com-

munication 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: 361, Calculus 205A, B.

390 Laboratory Techniques 1 hr.

A course in various common laboratory operations such as glass blowing and the repair of physical equipment. Prerequisite: 103B. Not offered in 1955-1956.

399 Advanced Laboratory Physics 2 hrs. Each sem.

A course in laboratory experimentation more advanced than that in 103A, B. May be elected only on arrangement with the instructor. Prerequisite: 103B and a minor in physics. Open to qualified Juniors, Seniors, and Graduate students.

440 Atomic Physics 3 hrs.

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: 103B, Calculus 205A, B. Offered alternate years. Not offered 1955-1956.

441 Nuclear Physics 3 hrs.

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: 440. Offered alternate years. Not offered 1955-1956.

442 Foundations of Modern Physical Theory 2 hrs.

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 offered 1955-1956.

443 Theoretical Physics 3 hrs. Fall

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 field. Prerequisite: 103B, Calculus 205B. Offered alternate years.

462 Electrical Measurements 4 hrs. Each Sem.

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: 103B and Calculus 205A, B.

PSYCHOLOGY

Stanley Kuffel
Eston J. Asher

Homer L. J. Carter
Frank A. Fatzinger
George G. Mallinson

Dorothy J. McGinnis
Charlotte Sumney

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 hours of work in the department, including course 301. A minor consists of 15 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 1 hr. Fall, Spring

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.

102 General Psychology (for Nurses) 2 hrs. Fall

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".

200 General Psychology 3 hrs. Fall, Spring

A brief survey of the elementary principles of psychology. This course affords a general introduction to the field. Summer 1955.

204 Applied Psychology 2 hrs. Fall

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.

207 Psychology of Personality 3 hrs. Fall, Spring

Attention is given to individual differences, traits, content, and synthesis of personality; modification of behavior and varieties of adjustive behavior. Emphasis is placed upon constructive personal adjustment and the manner in which it is achieved in various interpersonal relations. Summer 1955.

210 Psychological Aspects of Business 3 hrs. Fall

This course deals with 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.

213 Psychology of Adolescence 3 hrs. Fall, Spring

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.

300 Introduction to Industrial Psychology 2 hrs. Spring

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.

301 Elementary Experimental Psychology 3 hrs. Spring

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.

302 Laboratory in Psychological Testing 3 hrs. Fall

The course will consider selecting, administration, and interpretation of educational, personality, and aptitude tests. A competency in interviewing techniques will be developed. Lecture and laboratory.

303 Comparative Psychology 2 hrs. Spring

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.

305 Abnormal Psychology 3 hrs. Fall, Spring

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.

307 Mental Testing 2 hrs. Spring

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.

308 Elementary Statistical Methods in Psychology 3 hrs. Fall

Computation and interpretation of statistical techniques useful in the production and understanding of psychological and educational research.

309A, B, C Clinical Psychology 2 - 4 hrs. Spring

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: 302, 305, and 307, or consent of instructor.

310A, B, C Special Projects in Psychology 1 - 2 hrs. Fall, Spring

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.

315 Emotion 2 hrs. Fall

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.

404 Occupational Analysis and Classification 2 hrs. Spring

Sources of occupational information; procedures and techniques of job analysis and job classification; applications in employment procedures, placement, and vocational counseling.

406 Vocational Psychology 2 hrs. Fall

The problems of vocational choice and of occupational group-differences. Lectures, reading, and an occasional laboratory period substituted for a class hour. Summer 1956.

410 Learning and Memory 2 hrs. Spring

A survey of the general principles of learning and memory and an introduction to learning theory. Summer, 1956.

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 131, Administration Building.

A. A group major must include:

1. Thirty or more hours in the Division.
2. A minimum of fifteen 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 hours in the Division.
2. A minimum of ten 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 certain non-teaching curricula:

1. Must include sixteen or more hours in the division and is open only to students in the following non-teaching curricula: preprofessional, non-teaching professional and combined curricula, vocational and practical arts education curricula and the general degree curriculum without a teaching certificate.
2. May be developed around any one of the following content patterns:

(a) Western Civilization 100A, B	8 hrs.
Man and Society 101A, B	8 hrs.
(b) Western Civilization 100A, B	8 hrs.
Political Science (minimum)	2 hrs.
Electives	6 hrs.
(c) Man and Society	8 hrs.
Electives	8 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 unit in history and the other 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 course Man and Society 101A, B, listed below. Credit for this sequence is allotted in either group—majors or minors—or departmental majors on the basis of two hours each to Economics, Political Science and Sociology.

Both Foundations of Western Civilization 100A, B and Man and Society 101A, B may 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 of 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 hours in one department for a major or the minimum of 10 hours in one department for a minor.

101A, B Man and Society 8 hrs.

For description of the course, see Division of Basic Studies.

400 Teaching of the Social Studies 2 hrs. Spring

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.

401 Workshop on Contemporary Britain and Anglo-American Relations 5 hrs.

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 1955-1956.

ECONOMICS

Floyd W. Moore
Howard F. Bigelow

Robert S. Bowers
Theodore L. Carlson

Sherwood B. Eck
Marguerite Patton

Courses in economics are designed (1) to contribute to general education by attempting to make students more familiar with the ways and means by which men make their living in modern times; (2) to fulfill the requirements for the training of teachers in certain professional groups, such as commerce and business administration; and (3) to furnish courses and

explore areas of economic thought which are prerequisite to graduate study and are recommended as pre-professional in business administration, engineering, journalism, law, medicine, and social work.

Principles 220A-B are prerequisite to all other courses offered in the department except 223.

A minor in Economics consists of a minimum of 15 hours in the department.

A major in Economics consists of a minimum of 24 hours in the department.

There are no set patterns for these minors and majors. The selection of specific courses depends a great deal upon the student's interest and the kind of work he plans to take up following graduation. For example, the selection of courses for the prospective graduate student might be quite different from those for the person planning to be an accountant; by the same reasoning, a good background of courses for a salesman might be quite different from those sought by a person planning to do personnel work.

The head of the department, or members of the Economics staff appointed by him, will assist students in selecting courses suited to their needs in fulfilling the minor and major requirements.

220A Principles of Economics 3 hrs. Fall, Spring

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".

220B Principles of Economics 3 hrs. Fall, Spring

A continuation of Principles of Economics 220A. Among the problems to which Principles are applied are those of national income, wages, interest, rents, profits, public utilities, monopolies, international economics, and fiscal policies, including taxes.

223 Economics of Consumption 3 hrs. Fall, Spring

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.

321A Money and Credit 2 hrs. Fall

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: 220A, B.

321B Money and Credit 2 hrs. Spring

A continuation of 321A with special emphasis on banking and other financial institutions. Prerequisite: 321A.

323 Marketing 3 hrs. Spring

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: 220A, B.

324 Transportation 3 hrs. Spring

An analysis of the various means of transportation, including the items of service, cost, revenues, and government regulation. Prerequisite: 220A, B.

327 Economics Statistics 2 hrs.

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 offered in 1955-1956.

330 Business Cycles 2 hrs. Spring

An historical and theoretical analysis of business cycles. Prerequisite: 220A and 220B.

420 Public Finance 3 hrs. Fall

A study of government expenditure, revenues, debts, and problems of fiscal administration. Prerequisite: 220A, B. Work in government may be substituted in special cases by permission of the instructor.

421A Labor Problems 2 hrs. Fall

An analysis of the nature and underlying causes of the problems facing the worker in modern economic society. Prerequisite: 220A, B.

421B Labor Problems 2 hrs. Spring

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: 325A.

422 Corporations 3 hrs. Spring

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: 220A, B.

423 Collective Bargaining 3 hrs. Fall

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: 421A, B, or the consent of the instructor.

424 International Economics 2 hrs. Spring

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: 220A and B.

425 Consumption and Standards of Living 2 hrs. Fall

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: 220A, B or consent of the instructor.

426 Business and Government 3 hrs. Fall

A study of the regulatory policies of government and their impact on private enterprise. The course seeks to explain the needs 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: 220A, B. Work in Political Science may be substituted in special cases by permission of the instructor.

427 History of Economic Thought 2 hrs.

The course aims to give the student the historical background for modern economic thinking. Beginning with the leaders of ancient economics 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 hours in Economics. Not offered in 1955-1956.

428 Comparative Economic Systems 2 hrs. Spring

The economic institutions and conditions of capitalism, socialism, communism, fascism, and the cooperative movement are critically examined as to ideology and actual operation. Prerequisite: 220A, B.

429 Business Administration 3 hrs. Fall

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: 220A, B.

HISTORY

James O. Knauss	Robert Friedmann	Robert R. Russel
Willis F. Dunbar	Margaret B. Macmillan	Russell H. Seibert
Edward O. Elsasser	A. Edythe Mange	Charles R. Starring
	Howard A. Mowen	

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 10 hours in courses numbered above the two hundreds and at least part of the higher number courses must be selected from those that deal intensively with a short period and, therefore, afford students a better opportunity to become acquainted with methods of advanced historical study: 403; 404A, B; 405A, B; 406A, B; 408; 409; 415; 416; 418; 426.

A minor in history should include at least one course numbered above the two 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 planning to do graduate work in history are urged to elect at least two years of French or German.

100A Foundations of Western Civilization 4 hrs. Fall, Spring

For description of course, see Division of Basic Studies.

100B Foundations of Western Civilization 4 hrs. Fall, Spring

For description of course, see Division of Basic Studies.

108A Modern Europe, 1500-1815 3 hrs.

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. Not offered in 1955-1956.

108B Modern Europe, 1815 to the Present Time 3 hrs.

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. Not offered in 1955-1956.

201A United States History to 1865 3 hrs. Fall, Spring

A general survey of American history from the beginning of the Thirteen Colonies to the end of the Civil War.

201B United States History, 1865 to the Present 3 hrs. Fall, Spring

A general survey of United States history for the period.

307A Colonial Latin American History 2 hrs. Fall

A study of the social, political, economic, and cultural aspects of Latin American history to end of the wars for independence.

307B History of the Latin American Republics 2 hrs. Spring

A study of the development of Latin America since the achievement of independence. Special stress will be placed on foreign relations.

311 Economic History of Europe 3 hrs.

A study of the evolution of the economic institutions of Europe with comparisons between Europe and the United States. Not offered in 1955-56.

312 Economic History of the United States 3 hrs. Fall

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.

313 History of Michigan 3 hrs. Fall, Spring

A course designed to show the development of the contemporary political, social, and economic status of Michigan. The relation of the history of the state to that of the nation is stressed.

314 History of the Far East 3 hrs. Spring

A comprehensive survey of the Far East from the earliest times down to the present. The internal development and cultures of China, Japan, India are considered and special emphasis is placed upon the foreign relations of these countries in the 19th and 20th centuries.

317 Constitutional History of the United States 3 hrs. Spring

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.

319 History of Russia 3 hrs. Fall

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.

320 Ancient Greece 3 hrs. Fall

Background: Near East and Aegean civilization; the Homeric Age; rise and fall of Athens; Alexander the Great; Hellenism; political achievements and cultural legacy of the Greeks.

321 Ancient Rome 3 hrs Spring

Its growth, expansion, civil wars, imperialism, and final decline. Constitutional history, Roman law. The rise of the Christian church until the sixth century.

322A Renaissance and Reformation 3 hrs.

Italian Renaissance, the awakening of the modern mind. Humanism. Lutheranism; Calvinism; Anglicanism; Anabaptism. The Catholic Reformation. Resulting European civilization. Not offered in 1955-56.

322B The Modern Near East 3 hrs. Spring

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.

323 Modern Nationalism in Europe and America 2 hrs. Fall

Factors promoting its rapid growth in early modern times. Its part in 18th- and 19th-century revolutions. Changes in 20th-century nationalism. Recent effects of nationalism on international relations.

324 The Westward Movement in American History 3 hrs. Fall

The significance 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.

403 American Foundations 2 hrs.

The English Colonies in America, 1607-1763. Mainland and island settlements; development of society and institutions; policy and administration. Not offered in 1955-56.

404A The Era of the American Revolution 1763-1787 2 hrs.

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. Not offered in 1955-56.

404B United States History 1787-1815 2 hrs.

The making of the Constitution and establishment of the early republic. This course is conducted in the same manner as 404A. Not offered in 1955-56.

405A United States History 1815-1848 2 hrs.

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. Not offered in 1955-56.

405B United States History 1848-1877 2 hrs.

This course deals principally with the great sectional struggle over slavery. It is conducted in the same manner as 405A. Not offered in 1955-56.

406A United States History, 1901-1933 2 hrs. Fall

An intensive study of a short period. The topics are the progressive movement, World War I, and the causes of the Great Depression. Prerequisite: six hours of history.

406B United States History, 1933 to the Present 2 hrs. Spring

A continuation of 406A. The big topics are the Great Depression, the New Deal, World War II, and our foreign relations since the war. Prerequisite: six hours of history.

408 Europe: 1900-1925 3 hrs. Fall

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.

409 Europe: 1925 to Present 3 hrs. Spring

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.

415 The Old Regime 2 hrs. Fall

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.

416 The French Revolution and Napoleonic Era, 1789-1815 2 hrs. Spring

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.

418 The Old South 2 hrs.

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 1955-56.

425A Intellectual History of Western Man, I (To 1550) 2 hrs. Fall

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.

425B Intellectual History of Western Man, II (1550-1955) 2 hrs. Spring

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.

426 Twentieth Century Britain 2 hrs.

A study of British political, social, and economic developments since 1900, and of the changing character of the Empire and Commonwealth. Not offered in 1955-56.

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 2 hrs.

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 1955-56.

291 Social Values 3 hrs. Spring

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.

390 Introduction to Philosophy 2 hrs. Fall

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.

391A History of Philosophy: Greek and Christian Philosophy 2 hrs

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 1955-56.

391B History of Philosophy: Modern and Recent Thinkers 2 hrs.

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 1955-56.

392 Philosophy of Science 2 hrs.

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 1955-56.

393 Philosophy of History 2 hrs. Spring

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.

394 Great Religions of the World 3 hrs. Fall

Analysis of religious experiences and of the types of religious phenomena. Primitive religions, Mythology. Religions of India, China and Japan. Persian religion. The religion of the Old and New Testament, Judaism and Christianity. Islam.

COURSES IN RELIGION

200A Introduction to Religion 2 hrs.

This course concerns three areas: (1) the nature, origin, practices and psychology of religion; (2) the problems of religious knowledge; (3) the philosophy of religion as related to origin of things, the end of things, intelligence, ethics and moral values, the concepts of the nature of God, the concepts of the problem of evil, immorality.

200B Introduction to Religion 2 hrs.

A continuation of 200A.

218A The English Bible—The Old Testament 2 hrs. Fall

For a description of course see English 218A.

218B The English Bible 2 hrs. Spring

For a description of course see English 218B.

302A The World of the Old Testament 2 hrs.

This course describes the history and culture of the Hebrews together with that of the neighboring peoples among whom the Hebrews lived during the Old Testament period. The Hebrew political, social and religious responses to situations arising in the ancient world as well as the cultural interdependence of the nations involved are discussed.

302B The World of the Old Testament 2 hrs.

A continuation of 302A.

322A Renaissance and Reformation (1350-1650) 3 hrs.

For description of course see History 322A.

POLITICAL SCIENCE

William V. Weber

Elsworth P. Woods

Jack C. Plano

Samuel I. Clark

Leo C. Stine

Courses in the Department of Political Science are designed to prepare students to become (1) a functioning citizen; (2) a teacher of government or civics; (3) a governmental employee or officer; (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 1954 passed a law requiring that all colleges receiving public money shall grant no degree or diploma after June 30, 1956, to any student unless such student **shall** have successfully completed a three semester hour course in Political Science, or in government and public administration, covering the form and functions of our federal and state governments, and of counties, cities and villages, and stressing the rights and responsibilities of citizenship. This requirement may be met by one of the following department courses: Nos. 230A or 230B or 334.

A major shall consist of 24 hours in the Department and a minor of 15 semester hours in the Department. Majors and minors in the Department are required to take Political Science 230A and/or 230B, 351, and 360. Students majoring or minoring in Political Science should consult the head of the Department to determine the appropriate advanced courses to be included in the student's program.

Political Science 230A and 230B overlap with 334. Therefore, credit in either 230A or 230B will preclude credit in 334.

230A American National Government 3 hrs. Each Sem.

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. Comparisons are made with our state and local governments. This course is intended for those who expect to major or minor in the department or to teach government or civics in the secondary schools.

230B State and Local Government 3 hrs. Each Sem.

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. Comparison is made with our National Government and its relationships to state and local governments. This course is intended for those who expect to major or minor in the department or to teach government or civics in the secondary schools.

300 Readings and Research in Political Science 1 to 3 hrs. Each Sem.

Is intended to give an opportunity to advanced students with good scholastic records to pursue independently the study of some subject having especial interest for them. Subjects are chosen and arrangements are made to suit the needs of each particular student. Approval of Head of Department and instructor required.

330 Legislative Process 3 hrs. Fall

This course deals with the organization, procedure, and practice of American, national and state legislative bodies. Emphasis will be placed on the relationship between the executive and legislative bodies in the determination of legislative policy.

334 American Government 3 hrs. Each Sem.

The structure and function of our federal, state, county and municipal governments. Emphasis is placed on the rights and responsibilities of citizenship. This course is intended primarily for those who do not have an opportunity to take more courses in Political Science.

340 Political Parties 2 hrs.

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. Not offered in 1955-56.

341 Public Opinion and Pressure Groups 2 hrs. Spring

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. Prerequisite: Junior standing.

351 Comparative Governments of Europe 3 hrs. Spring

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.

360 International Politics 3 hrs. Fall

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.

361 International Organization 3 hrs. Spring

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 360 but may be taken separately.) Prerequisite: Political Science 230A or a course in modern history or equivalent.

370 Public Administration 3 hrs. Fall

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.

381 Constitutional Law 3 hrs.

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. Not offered in 1955-56.

383 International Law 3 hrs. Spring

Relations of nations in war and in peace, and the accepted usages regarding the rights of neutrals and belligerents, contraband, blockade, visit and search, changes of sovereignty, extradition, expatriation, and similar subjects. Changes brought about by World War II. Prerequisite: A course in modern European history or international affairs.

390 History of Political Philosophy 3 hrs. Fall

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.

391 Political Philosophy 3 hrs.

This course does not consider political philosophy historically but rather examines certain areas of concern to the political philosopher. It considers among other such problems as the nature of man, the purposes of government, the meaning of liberty, and the extent of political authority. Prerequisite: Junior standing. Not offered in 1955-56.

437 Problems of American Government 2 hrs.

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 1955-56.

439 Municipal Government and Administration 2 hrs.

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. Not offered in 1955-56.

451 British Government and Politics 2 hrs.

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 1955-56.

452 Governments and Problems of the Far East 2 hrs.

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 1955-1956.

453 Government of the Soviet Union 2 hrs. Fall

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.

454 Governments and Problems of Central and South America 2 hrs.

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. Not offered in 1955-56.

465 American Foreign Relations 2 or 3 hrs. Fall

An analysis of the diplomatic relations of the United States with emphasis on present foreign problems. Consideration will be given to the formation and execution of American foreign policy. Prerequisite: Political Science 230A or a course in American History or equivalent.

471 Problems of Public Administration 2 hrs.

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 1955-56.

SOCIOLOGY

Leonard C. Kercher
Paul B. Horton

Nellie N. Reid

Chester L. Hunt
Jerome G. Manis

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 hours and a minor of 15 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 19-20 semester hours selected from courses 255, 348A, 348B, 351, 353, 355, 356, 358A, 358B and 359. Students intending to pursue this curriculum should seek counsel and guidance early from the instructor in social work.

SOCIOLOGY COURSES**241 Principles of Sociology 3 hrs. Each Sem.**

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.

242 Modern Social Problems 3 hrs. Each Sem.

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: 241.

243 Social Psychology 3 hrs. Each Sem.

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: 241.

244 Sociology (for Nurses) 2 hrs. Fall

An introductory course in sociology especially adapted to the needs of students of nursing. Not open to regular students.

245 Modern Marriage 2 hrs. Each Sem.

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 345.

247 The City 2 hrs.

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: 241. Not offered in 1955-56.

248 Cultural Anthropology 3 hrs. Spring

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.

342 Criminology 3 hrs. Spring

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: 241.

344 Cooperative Social Organization 2 hrs.

A study of cooperative enterprise and cooperative movements; covering principles, historical developments, forms and manifestations, problems of operation, and place in contemporary society. Prerequisite: 241, or Man and Society 101A, or 540. Not offered in 1955-56.

345 Marriage and the Family 3 hrs. Each Sem.

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 245. Prerequisite: 241.

346 Industrial Sociology 2 hrs. Fall

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.

347 Race Relations 2 hrs. Fall

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: 241.

348A Introduction to Social Research 3 hrs. Fall

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.

348B Social Research Projects 2 hrs. Spring

A concrete application of scientific methods to specific research projects developed in the introductory research course. Each student will participate in one or more field studies. Prerequisite: 348A Introduction to Social Research.

350 The Community and the School 3 hrs.

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: 241 or consent of instructor. Not offered in 1955-56.

442 Social Pathology and Personal Deviation 2 hrs. Fall

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: 241, or Man and Society 101A, or 540.

443 Population Problems 3 hrs. Fall

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.

444 History of Social Thought 2 hrs. Spring

A critical survey of the social thinking of outstanding students of society from Plato to those of modern social science. Prerequisite: 241 or Man and Society 101A, or 540.

446 Juvenile Delinquency and the Community 2 or 3 hrs. Spring

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: 241, or 540, or equivalent.

447 Community Agency Resources 2 hrs. Spring

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.

448 Comparative Culture Studies 2 hrs.

A comparative study of the structure and the functioning of selected aspects of culture in Britain and America. The courts, the educational sys-

tem, the welfare state, class stratification, correctional institutions, political organization, and the basic structure of government are considered. Prerequisite: 241, or 540. Not offered in 1955-56.

449 Contemporary Social Movements 3 hrs.

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: 241, or 540. Not offered in 1955-56.

SOCIAL WORK COURSES

255 The Field of Social Work 2 hrs. Fall

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.

351 Family and Child Adjustment 3 hrs. Fall

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.

353 Public Welfare 3 hrs. Spring

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.

355 Principles of Social Case Work 2 hrs. Fall

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.

356 Principles of Social Group Work 2 hrs. Spring

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.

357 Community Welfare Organization 2 hrs. Fall

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.

358A Orientation to Field Work 2 hrs. Fall

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: 355 or 356, and consent of the instructor.

358B Supervised Field Work 3 hrs. Spring

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: 358A, and consent of the instructor.

DIVISION OF TEACHER EDUCATION

James H. Griggs, Director

The Division includes the Departments of Education and Librarianship. 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	Orie I. Frederick	George G. Mallinson
Mary Bottje	Mitchell J. Gary	Arthur J. Manske
Roy C. Bryan	Joseph W. Giachino	Loy Norrix
John A. Buelke	Louis A. Govatos	Lois Robinson
Homer L. J. Carter	George E. Kehrman	Esther D. Schroeder
Clara R. Chiara	Eunice E. Kraft	Avis L. Sebaly
Carl R. Cooper	Dominic Leonardelli	M. Elizabeth Smutz
Isabel Crane	Lester R. Lindquist	Carl B. Snow
Manley M. Ellis	L. Morris McClure	Bess L. Stinson
William E. Engbretsen	Dorothy J. McGinnis	Sara R. Swickard
John L. Feirer		Alfred R. Thea

Courses in the department 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 hours of professional work in education; 24 hours for the elementary provisional certificate. The following courses, or their equivalent, are required: Human Growth and Development 251, three hours; Psychology of Reading 212, three hours for elementary teachers; Introduction to Directed Teaching 240 or 351, three hours; and Directed Teaching, Laboratory in Education, and General Educational Problems 370A, B, C, fifteen 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, twelve hours, during one semester, and General Educational Problems 370C, three 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.

100 Introduction to Education 2 hrs. Each Sem.

Experimental Freshman Course open to selected students.

This course is designed to provide an early introduction to the profession of teaching and to the educational services present in communities of the state and nation. Field trips, observations, audio-visual materials, resource persons, tests and personal inventories are used to acquaint students with the purposes and functions of education in American society, and to help students make intelligent choices of areas of specialization within the profession. Course meets three hours a week for two hours credit.

REQUIRED WORK IN EDUCATION

(For Provisional Certificate)

Sophomore or Junior Year**251 Human Growth and Development 3 hrs. Each Sem.**

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.

Junior Year**351 Introduction to Directed Teaching 3 hrs. Each Sem.**

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.

Senior Year**370A, B, C Integrated Professional Education 15 hrs. Each Sem.**

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: 251 and 351, or equivalent; and as many honor points as hours of credit.

370A Directed Teaching 8 hrs. Each Sem.

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.

370B Laboratory in Education 4 hrs. Each Sem.

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.

370C General Educational Problems 3 hrs. Each Sem.

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.

OPTIONAL COURSES IN DIRECTED TEACHING**371 Directed Teaching 4 hrs. Each Sem.**

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 hours of credit acquired.

372 Directed Teaching 4 hrs. Each Sem.

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.

373 Directed Teaching 4 hrs. Each Sem.

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: 372 or 370A.

374 Directed Teaching 5 hrs. Each Sem.

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.

ELEMENTARY EDUCATION**208 Stories for Childhood 2 hrs. Fall**

A study of stories and poems suitable to childhood. Classroom practice in story telling.

212 Psychology of Reading 3 hrs. Each Sem.

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.

302 Problems in Elementary Education 3 hrs.

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 1955-56.

305 Early Elementary Education 3 hrs.

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 1955-56.

309 Nursery-Kindergarten Education 2 hrs. Spring

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.

312 Later Elementary Education 3 hrs.

A study of the characteristics and needs of pupils in the later-elementary grades and of the materials and methods of instruction. Prerequisite: 251. Not offered in 1955-56.

402 Curriculum Workshop 2-4 hrs. Each Sem.

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.

410 Parent Education 2 hrs. Fall

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.

411A The Elementary Curriculum 2 or 3 hrs.

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. Not offered in 1955-56.

411B The Elementary Curriculum 2 or 3 hrs. Spring

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.

465 Adult Education 2 hrs.

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. Not offered in 1955-56.

SECONDARY EDUCATION**321 Secondary School Curriculum 2 hrs.**

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 1955-56.

402 Curriculum Workshop 2-4 hrs. Each Sem.

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.

SPECIAL EDUCATION**231 Introduction to Special Education 2 hrs.**

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: 251. Not offered in 1955-56.

235 Introduction to Mental Hygiene 3 hrs. Spring

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.

331 Clinical Problems in Reading 2 hrs. Each Sem.

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.

334 Basic Audiometry 2 hrs.

Theory and practice of hearing testing with emphasis on the development of audiometric techniques. Interpretation of audiograms with respect to clinical and educational recommendations.

336 Character Education 2 hrs. Each Sem.

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.

338 Introduction to Audio-Visual Education 3 hrs.

Survey of various types of Audio-Visual Aids; functions in the learning process; practice in selecting and evaluating materials; equipment instruc-

tion in laboratory periods with proficiency in operation required; and techniques of good utilization of Audio-Visual materials. Not offered in 1955-56.

430 Educational Therapy in Reading 2 or 3 hrs. Spring

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.

431 Education of Exceptional Children 2 hrs. Fall

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.

432 Education and Control of the Mentally Handicapped 3 hrs.

The course deals with the roles of the courts, institutions, schools and other agencies in control, education and custody of the mentally handicapped. Organizations and administration of special classes for mentally handicapped of all levels. Prerequisite: 251, or equivalent. Not offered in 1955-56.

433A Introduction to Lip Reading 3 hrs. Spring

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.

433B Speech for the Deaf 2 hrs.

Teaching methods used for the development of speech in congenitally deaf children. The formation of speech elements and their combination into words. Use of residual hearing for speech and voice improvement.

433C Language for the Deaf 2 hrs.

The development and application of the principles of the English language and presentation to the deaf children. Attention will be given to the Language Principle Method, the Barry Five Slate System, Straight Language for the Deaf, and Wings Symbols.

434 Mental Deficiency 3 hrs. Spring

A course in the psychology and pathology of mental deficiency including causation, diagnosis, classification, prognosis and therapy at all levels. Prerequisite: 251.

435 Anatomy and Pathology of the Aural Mechanism 2 hrs.

A survey of anatomical and physiological subject matter bearing on the speech field of hearing; functional tests of hearing; and discussion of the pathological conditions of the ear and labyrinth.

436 Mental Hygiene of Childhood and Adolescence 2 hrs. Fall

Deals with the problems of emotional adjustment and maladjustment in childhood and adolescence.

437 Methods of Teaching Mentally Handicapped Children 2 hrs.

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.

438 Audio-Visual Education 2 hrs. Each Sem.

Acquaints teachers and administrators with the principles and practical uses of multi-sensory aids to education, including field trips, machines, and creative materials.

439 Driver Training and Safety Education 2 hrs.

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, psycho-physical 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.

METHODS OF TEACHING**340 Art Observation 1 hr. Fall**

Observation of art activities in the training school and discussion and illustration of these problems.

341 Art Supervision 2 hrs. Spring

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.

342 Teaching of Latin 2 hrs. Spring

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.

346 Teaching of Business Subjects 2 hrs. Spring

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.

347 Plan and Organization of a School Shop 2 hrs. Each Sem.

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.

348 Teaching of Industrial Arts 3 hrs. Each Sem.

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.

443 Organization and Administration of Physical Education 3 hrs.
Each Sem.

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.

444 Methods in Physical Education 2 hrs. Fall

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.

445 Administration and Organization of Physical Education 2 hrs. Spring

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.

THEORIES AND PRINCIPLES OF EDUCATION**404 Workshop in Human Relations 2-4 hrs.**

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 1955-56.

451 Philosophy of Education 2 hrs.

For graduate students and teachers of experience. Analyzes and interprets the changes in education taking place in this and other countries. Not offered in 1955-56.

GUIDANCE**480 Introduction to Guidance Services 2 hrs. Fall**

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. Three hours in extension.

481 Techniques of Guidance 2 hrs. Spring

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 resource. Three hours in extension.

482 Occupational Information for Counselors and Teachers 2 hrs. Fall

Stresses knowledge of sources, use, evaluation and techniques of imparting occupational information. Recent trends in the major occupations are also discussed.

485 Guidance Workshop 2 hrs.

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. Not offered in 1955-56.

LIBRARIANSHIP

Alice Louise LeFevre

Gertrude Van Zee

Mate Graye Hunt

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 and two hours elected from 405 or 406 plus the field work which comprises a 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, 202, 302, 304, 403, 406, 411; Group III, 509, 562; Group IV, 561, 405, 361, 363; Group VI, 360, 470, 570 and 380.

202 Reading Interests of Children 3 hrs. Spring

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.

302A Books and Related Materials for School Libraries 3 hrs. Fall

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.

302B Books and Related Materials for School Libraries 3 hrs. Spring

A continuation of 302A which is a prerequisite.

304 Reading Interests of Adults* 2 hrs. Spring

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 adult reading needs.

360 Organization of Library Materials* 2 hrs. Fall

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.

361 Administration of School Libraries* 2 hrs. Spring

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.

362 The Library in the Modern Community* 2 hrs. Spring

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.

363 Rural and Urban Library Administration* 3 hrs. Spring

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.

380 Field Assignment and Laboratory* 3 hrs. Fall, Spring

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 ob-

*Starred courses open only to majors and minors in the Department of Librarianship.

serve methods of administration and to participate in all types of activities. A laboratory period for discussion is held throughout the following semester.

402 Reading Interests of Young Adults 2 hrs. Fall, Spring

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 equivalent.

403 Selection of Reading Materials* 2 hrs. Fall

Principles of selection and evaluation of books and non-book materials. Appraisal of printed aids, book reviewing media, and other sources of information used in building the library collection. Opportunity given for developing competence in writing annotations and book reviews and in extending the use of books through book talks and book discussions.

405 Curriculum Enrichment Materials 2 hrs. Fall, Spring

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.

406 Storytelling 2 hrs. Fall

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.

411 Reference Service* 2 hrs. Fall

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.)

470 Introduction to Classification and Cataloging* 4 hrs. Fall

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.

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.

Courses designated by numbers 400-499 inclusive which are described in the following pages may be taken by upperclassmen or graduate students.

The following divisional course is approved for vocational credit and available for graduate students and upperclassmen:

470 Principles of Practical Arts and Vocational Education 2 hrs. Fall

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.

BUSINESS STUDIES

Arnold E. Schneider	George Kirby	Glen C. Rice
Agnes E. Anderson	Lester Lindquist	Roseann Schneider
William L. Burdick	Ralph W. Matthews	Emil Sokolowski
George K. Cooper	Myrtle MacDonald	Robert B. Trader
Wendall Fidler	Thomas W. Null	Adrian Trimpe
John B. Healey	Marguerite Patton	Robert B. Wetnight
Edna Kirby	Russell Powell	

The Department of Business Studies offers three main programs:

1. Business Administration, Bachelor of Business Administration Degree.
2. Business Teacher Training, B.S. or B.A. Degree with a State Secondary Provisional Certificate.
3. Two-Year Curriculum leading to a certificate:
 - a. Cooperative program in secretarial training.
 - b. Cooperative program in retailing.
 - c. Technical business program with specialization in Clerical Accounting, General Business, Secretarial Training, Salesmanship, General Clerical, and Small Business Management.

ACCOUNTING**210A Accounting 3 hrs. Each Sem.**

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.

210B Accounting 3 hrs. Each Sem.

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: 210A.

211A Secretarial Accounting 3 hrs. Fall

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.

211B Secretarial Accounting 3 hrs. Spring

A continuation of course 211A in which practical applications will be applied in a large number of work situations. Prerequisite: 211A.

215 Pay Roll and Social Security Accounting 2 hrs. Spring

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.

310A Intermediate Accounting 3 hrs. Fall

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: 210A, B.

310B Intermediate Accounting 3 hrs. Spring

A continuation of Accounting 310A, including the following topics: partnerships, consignments, installment sales, mergers, holding companies, receiverships, estates, and trusts. Prerequisite: 310A.

313 Auditing 3 hrs. Fall

The theory and practice of making audits of business enterprises. Prerequisite: Senior standing, accounting major.

314 Accounting Theory and Problems 3 hrs. Spring

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.

316A Industrial Cost Accounting 2 hrs. Spring

Expressly designed for the training of industrial supervisors in Account-

ing Principles, Cost Accounting, and the managerial use of accounting data. Not for students who have completed 210A.

316B Industrial Cost Accounting 2 hrs. Spring

A continuation of 316A. Prerequisite: 316A.

410A Advanced Accounting 3 hrs. Fall

Designed specifically for the study of the balance sheet accounts.

410B Advanced Accounting 3 hrs. Spring

A study of accounts for special sales, consolidations, and miscellaneous accounting matters.

411 Cost Accounting 3 hrs. Spring

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: 310A or consent of instructor.

412 Income Tax Accounting 3 hrs. Fall

A study of the federal income tax laws, as they apply to individuals, partnerships, and corporations. Prerequisite: 310A, or consent of instructor.

GENERAL BUSINESS

135A Industrial and Business World 2 hrs. Fall, Spring

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.

135B Industrial and Business World 2 hrs. Fall, Spring

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: 135A.

230 Survey of Office Machines 2 hrs. Fall, Spring

A survey of operating principles and fundamentals and applied usages of the business machines commonly found in industry and business.

232 Business Correspondence 3 hrs. Fall, Spring

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.

235 Business Statistics 3 hrs. Fall, Spring

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.

320A Business Law 3 hrs. Fall, Spring

A study of basic principles applicable to business including legal rights and remedies, contracts, agency, and employer and employee relations.

320B Business Law 3 hrs. Fall, Spring

Continuation of Business Law 320A with emphasis on negotiable instruments, sales, and property.

350 Real Estate Fundamentals 3 hrs. Spring

A survey 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.

360 Current Business Trends 3 hrs. Fall

A study of sources and information which aid in the description, analysis, and prediction of current business trends.

INSURANCE**322 Insurance Principles 3 hrs. Fall, Spring**

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.

324 Property Insurance 3 hrs. Fall

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, ratemaking, regulation, carriers, and legal concepts. Prerequisite: 322.

325 Group, Industrial, and Social Insurance 3 hrs. Fall

Considers the economic, social and technical aspects of the fields of Group Life Insurance and other Group insurance contracts; Industrial Life Insurance; Old Age and Survivors Insurance; and Unemployment Compensation. Prerequisite: 322.

326 Casualty Insurance and Suretyship 3 hrs. Spring

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. Prerequisite: 322.

423 Life Insurance 3 hrs. Spring

Covers the economic, social, and more important technical aspects of life insurance. Important phases of Business Life Insurance are also considered. Prerequisite: 322.

MANAGEMENT**237 Small Business Management 3 hrs. Fall, Spring**

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.

239 Office Organization 3 hrs. Spring

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.

339 Management Problems 3 hrs. Fall, Spring

An opportunity to approach business from the case-study method by working solutions to actual management problems.

343 Industrial Organization and Management 3 hrs. Fall

Basic organization of industrial line and staff functions and their relation to each other in the production process.

344 Industrial Management Problems 3 hrs. Spring

Case studies of advanced industrial management problems. Industrial Management majors will take this in lieu of Management Problems 339 as offered.

348 Purchasing Principles and Practices 3 hrs. Spring

Organization and operation of the purchasing department, basic materials, substitutes, imitations, sources of supply, catalogs, terms, discounts, and relations with salesmen.

433 Business Report Writing 2 hrs. Fall, Spring

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.

436 Personnel Administration 3 hrs. Fall, Spring

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.

439 Office Management 3 hrs. Spring

Areas of office services from the managerial viewpoint. A brief overview of the problems of organizing, constructing, installing, and maintaining office systems.

SALES MANAGEMENT**340 Salesmanship 3 hrs. Fall**

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.

341 Sales Management 3 hrs. Spring

The development of sales staff. The promotion of local, state, and national sales programs. The development of various types of sales promotions and campaigns.

342 Advertising 3 hrs. Spring

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.

345 Credit Management 3 hrs. Fall

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.

347 Marketing and Market Analysis 3 hrs. Spring

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.

440 Advanced Salesmanship 3 hrs. Fall

Background of basic principles and analysis of selling techniques applied principally to specialty fields.

442 Advanced Advertising 3 hrs. Spring

Special concentration on media, copy and layout. Study and projects on radio, television, newspapers and magazines.

RETAILING**100 Coordinated Business Experience 2 hrs. Fall, Spring**

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.

111 Retail Merchandise Mathematics 3 hrs. Spring

An introduction to the mathematics of merchandising. Mark-up, mark-down, discounts, terms, turn-over, ratios, methods of inventory, and specific problems are studied.

140 Fundamentals of Retailing 3 hrs. Spring

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.

141 Selling Fashion Merchandise 3 hrs. Spring

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.

142 Color and Design in Retailing 3 hrs. Spring

Analysis and evaluation of color and design in merchandise. Research, psychology, theory, harmony, and selection of color are emphasized.

150 Retail Salesmanship 3 hrs. Fall

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.

151A Merchandise Information—Non-Textiles 2 hrs. Fall

An organized study of non-textile merchandise especially aimed at correlating retail experience with classroom work. Merchandise manuals are studied and developed.

151B Merchandise Information—Textiles 2 hrs. Spring

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.

200A Coordinated Business Experience 2 hrs. Fall

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.

200B Coordinated Business Experience 2 hrs. Spring

Continuation of 200A open to students currently enrolled in Retail Personnel Management 252.

240 Retail Advertising 2 hrs. Fall

Newspaper, radio, direct-mail advertising; display plans and techniques of sales promotion; the publicity calendar and budget.

241 Retail Credit and Collections 3 hrs. Spring

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.

242 Selling Home Furnishings 2 hrs. Spring

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.

243 Retail Buying Techniques 2 hrs. Spring

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.

251 Store Organization 2 hrs. Fall

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.

252 Retail Personnel Management 2 hrs. Spring

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.

SECRETARIAL**100A Shorthand 3 hrs. Fall, Spring**

A study of the theory and principles of Gregg shorthand. Typewriting 101A or its equivalent is a requirement for course credit.

100B Shorthand 3 hrs. Fall, Spring

A continuation of 100A. Dictation is given at various rates of speed. Typewriting 101B or its equivalent is a requirement for course credit. Prerequisite: 100A and 101A.

101A Elementary Typewriting 2 hrs. Fall, Spring

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.

101B Intermediate Typewriting 2 hrs. Fall, Spring

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: 101A or its high-school equivalent.

103 Records Management 2 hrs. Fall, Spring

A study of the indexing and filing rules and all types of filing methods and card systems.

130A Secretarial Science 5 hrs. Fall, Spring

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: 100B and 101B or its high-school equivalent.

130B Secretarial Science 5 hrs. Fall, Spring

A continuation of the development of speed and accuracy in shorthand, typewriting, and transcription. Prerequisite: 130A.

200A Coordinated Business Experience 2 hrs. Fall

This is a work-experience course limited to those students who are currently enrolled in the cooperative office-training program and are currently enrolled in 130A.

200B Coordinated Business Experience 2 hrs. Spring

A continuation of course 200A open to students currently enrolled in 130B.

230A Office Machines 2 hrs. Fall, Spring

This course provides the student with the operating knowledge of office machines that are commonly used in the modern business office.

230B Office Machines 2 hrs. Fall, Spring

A continuation of Office Machines 230A. This course is intended primarily for the student preparing for the various office occupations.

METHODS IN BUSINESS EDUCATION**346 Teaching of Business Subjects 2 hrs. Spring**

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.

HOME ECONOMICS

Lilyan K. Galbraith
Rachel Acree

Opal Stamm
Leila Presson

Betty Taylor
Reva Volle

Western Michigan College 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 for a major or a minor in home economics. Plans are also made for meeting the requirements for a vocational certificate in Michigan. Only persons holding this certificate can teach in the vocational home economics departments.

The major consists of 24 or more hours. To be eligible for the advanced foods courses, it will be necessary for the student to have had Foods 111 and Chemistry 105A, B. To be eligible for the advanced courses in clothing, it will be necessary for the student to have taken Clothing 205. 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. Required courses for a vocational certificate are listed under Home Economics Curriculum.

The minor consists of 15 or more hours. At least one course in foods, one course in clothing, and either 325, 145, or 142 are required. Students in elementary or rural education may want to take 400.

The department offers four-year programs for dietitians, homemakers, and business persons and a two-year program in Homemaking.

The following courses are open to students not majoring or minoring in home economics: Home Economics 103, 118, 120, 142, 145, 203, 209, 221, 222, 223, 224, 325, 400, 421, and 439. Students may enter other courses if pre-requisites are met.

CLOTHING AND TEXTILES**103 Textiles 3 hrs. Each Sem.**

A basic course. Textiles is taught from the consumer point of view. Some testing of fabrics is required.

105 Elementary Design 2 or 3 hrs. Each Sem.

A fundamental course on art developing design and color theory through problems of various media.

203 Clothing 2 hrs. Each Sem.

Gives experience in using commercial patterns and learning elementary construction techniques. Elective non-majors.

205 Clothing 3 hrs. Each Sem.

Consists of making garments to develop a knowledge of construction techniques. Includes problems in pattern alteration. Prerequisite: 103.

209 Costume Design 2 hrs. Fall

This course is intended to develop more discriminating judgment in the selection of appropriate clothes for individuals. Prerequisite: 105.

305 Family Clothing 2 hrs. Fall

Course is flexible in content to meet the needs of advanced students and those planning to teach. Includes study of clothing budgeting, alteration of garments and construction of a child's garment. Prerequisites: 205, 209.

306 Clothing 2 hrs. Fall

Master pattern is draped in muslin on a dress form padded to the size of the individual. Experience is given in drafting a sleeve and flat pattern making. Study is made of principles and techniques of fitting. Prerequisites: 205, 209.

403 Advanced Textiles 2 hrs.

The study of the composition, construction, finishing, and care of textiles. Prerequisite: One clothing course. Not offered in 1955-1956.

404 Tailoring 3 hrs. Spring

This course is planned to give experience in tailoring techniques, with emphasis on the making of coats and suits. Prerequisite: 205 or consent of instructor.

FOODS AND NUTRITION**111 Foods 3 hrs. Each Sem.**

Gives a knowledge of basic principles underlying preparation of food. Laboratory experience in the preparation of all classes of food. Prerequisite or concurrent: Chemistry 105A, B.

118 Family Foods 2 hrs. Each Sem.

Emphasis on foods purchasing, menu planning, preparation and service of meals for the family. An elementary course for non-majors.

211 Nutrition 3 hrs. Fall

A study of the essential nutrients and their function in the human body. Prerequisite: Chemistry 105A, B, Foods 111.

219 Nutrition 2 hrs. Fall

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.

222 Everyday Nutrition 2 hrs. Each Sem.

This course includes problems related to signs of good and poor nutrition, for growing children and adults. A course for non-majors.

311 Advanced Foods 3 hrs. Spring

Problems of marketing, costs, meal preparation, and table service for all occasions. Special emphasis on food preservation. Prerequisites: 111, 211.

312 Quantity Foods 2 or 3 hrs. Spring

Quantity food preparation in a college residence hall kitchen and the school lunchroom at the high school on the campus. Prerequisites: 111, 311.

317 Diet and Disease 2 hrs. Spring

Study of dietetic treatment of impaired digestive and metabolic condition. Planning of diets and reports of current research. Prerequisites: Organic Chemistry 306A, Physiology 211B.

318 Food Demonstration 2 hrs. Fall

Principles and techniques are acquired through observations and participation of students in food preparation. Especially helpful for students who plan to teach or enter the commercial field. Prerequisite: 311.

416 Advanced Nutrition 3 hrs. Fall

Study of recent developments in nutrition through readings and experiments. Prerequisite: 211.

419 Experimental Foods 2 hrs. Spring

Application of principles affecting food preparation. Development of experimental techniques. Prerequisite: Chemistry 105A, B, Foods 111, Advanced Foods 311.

HOME MANAGEMENT, CHILD DEVELOPMENT, AND FAMILY RELATIONSHIPS**120 Personal and Social Problems 1 hr. Each Sem.**

Social usage and personality development are considered. Elective non-majors.

142 Consumer Problems 3 hrs. Spring

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.

145 Effective Living 2 hrs. Each Sem.

An orientation course required of all freshmen in home economics. Personal problems in adjustment studied. Planning for marriage and the home of the future included. Freshmen in other departments welcome.

221 Home Furnishings 2 hrs. Each Sem.

Room arrangement, furniture, and furnishings are studied. Models of room arrangement are made. Prerequisite: An art course.

223 Home Nursing 2 hrs. Each Sem.

The health of the family and simple procedures for the care of patients in the home are stressed. Consideration is given to community resources for the protection and care of health problems relating to home and school.

224 Personality Development 3 hrs. Spring

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 3 hrs. Spring

This course involves study of the physical, social, emotional, and intellectual growth and development of children and adolescents.

322 Home Management 2 hrs. Fall

The study of the use of time, energy, money, and resources to achieve family goals. Prerequisite: A course in economics.

324 Home Management Practice 3 hrs. Each Sem.

Students live in family size groups. They learn to manage on two economic levels. Prerequisite: 322.

325 Marriage and Family Relationship 2 hrs. Each Sem.

A study of the contributions and problems of the family in modern society. Preparation for marriage, including consideration of marital and personality adjustments in family living. Prerequisite: Psychology 200 or Sociology 241.

421 Housing 2 hrs. Fall

A study of economic and social aspects of housing. Single, duplex, and multiple types of housing are considered. Prerequisite: 221 or consent of instructor.

423 Institutional Management 3 hrs. Spring

Study of institutional administration, job analysis, labor policies, personal problems, and cost control in different types of food-service institutions. Prerequisites: 311, 312.

439 Consumer Buying 2 hrs.

Study of marketing problems and consumer credit. Students work on individual problems which concern the techniques of buying a specific type of consumer goods. Prerequisite: Consent of instructor. Not offered in 1955-1956.

HOME ECONOMICS EDUCATION**300 Home Economics Education 3 hrs. Spring**

A study of vocational legislation and requirements, state and national associations, teaching tools, and special classes in homemaking. Prerequisite to Directed Teaching 371.

400 Family Living in Elementary Schools 2 hrs. Spring

Designed to help elementary teachers vitalize their offerings and home economics teachers better understand the elementary program in family living.

INDUSTRIAL ARTS

John L. Feirer

Fred S. Huff

Don O. Pullin

Lawrence J. Brink

Charles S. Nichols

Neil L. Schoenhals

Lindsay G. Farnan

John H. Plough

Elmer C. Weaver

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 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: 100, 205A, 120, 226, 130, 234A, 150, 350, plus the professional course Teaching of Industrial Arts. A student may also take a 15 hour minor in any course sequence such as woods, metals, drawing, or printing plus the professional course Teaching of Industrial Arts.

WOODWORK**100 Woods 2 hrs. Each Sem.**

A survey course in the field of woodwork. It provides experience 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.

104 Rural Practical Arts 2 hrs. Each Sem.

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.

106 Advanced Hand Woodworking 3 hrs. Fall

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.

305A Machine Woodwork 3 hrs. Fall

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.

305B General Woodwork 3 hrs. Spring

This course provides experience in several areas of woodwork: namely, wood turning, caning, upholstery, inlaying, wood carving, and pattern making. Prerequisite: Woods 100 and 205A.

307 Finishing 3 hrs. Spring

A course in the plans and methods in modern wood finishing. All types of finishing will be studied. Related information on color theory, mixing, and the application of finishes to various surfaces will be included.

308 O.T. Special Education Shop 3 hrs. Each Sem.

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.

405 Problems in Woodworking 2 - 4 hrs.

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.

407 Furniture Construction 3 hrs. Spring

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.

DRAWING

120 Drawing 2 hrs. Each Sem.

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.

121 Drawing 2 hrs. Each Sem.

A beginning course in the fundamentals of drafting for students in pre-professional and general degree courses.

221 Mechanical Drawing 3 hrs. Each Sem.

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.

222 Descriptive Geometry 3 hrs. Each Sem.

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.

226 Mechanical Drawing 3 hrs. Spring

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.

227 Mechanical Drawing 2 hrs. Each Sem.

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.

325A Architecture 2 hrs. Each Sem.

Architectural details, plans, elevations, rendering, tracing, and blue-printing, and estimating of simple one- and two- story buildings. Outside reading for architectural appreciation.

325B Architecture 2 hrs. Each Sem.

Plans, elevations, details, mechanical perspective, rendering, tracing, and prints of a modern house. Emphasis placed on styles of architecture and architectural appreciation.

420 Advanced Drafting Practices 2 - 4 hrs.

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. Not offered in 1955-56.

METAL WORK**130 Metals 3 hrs. Each Sem.**

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.

234A Machine Shop 3 hrs. Each Sem.

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.

234B Machine Shop 3 hrs. Each Sem.

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.

235 Sheetmetal 2 hrs. Fall

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.

236 Metal Fabrication 2 hrs. Spring

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.

338 Advanced Metals 3 hrs. Spring

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.

400 Problems in Metalworking 2 hrs. Spring

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.

PRINTING AND GRAPHIC ARTS**140A Survey of Graphic Arts 2 hrs. Each Sem.**

An introductory course in the field of graphic arts in which the student will have an opportunity to become familiar with the large area of graphic arts. Work is undertaken in hand composition, presswork, bindery, block cutting, mimeographing, silk screen, etc.

140B Graphic Arts 2 hrs. Spring

A continuation of 140A. Additional and more advanced work is offered in the graphic arts.

141 Presswork 2 hrs. Each Sem.

This is a beginning course in presswork, which includes simple lockup, make-ready, and feeding.

144 OT Printing 3 hrs. Each Sem.

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.

240A Typography I 3 hrs. Fall

Work in the arrangement and use of various type faces in typical printed jobs and in advertisements.

240B Typography II 3 hrs. Spring

A continuation of 240A with the emphasis on the more complicated kinds of composition.

241 Imposition and Lockup 2 hrs. Fall

The imposition and lockup of type forms for various kinds of presses and from the simple to large multiple page forms is studied in this course.

242 Estimating and Production Control 2 hrs.

A study of the methods used in estimating the price of printed matter and in the final pricing of that matter after production. Production control as applied to the printing business is the second phase of the course. Not offered in 1955-1956.

243 Layout and Design 3 hrs.

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 design. Principles of balance, art, color, copy-fitting, etc., as applied to such jobs will be studied. Not offered in 1955-1956.

245A Linotype Composition 3 hrs. Fall

This course deals primarily with the operation of the linotype keyboard. Straight composition is emphasized. Consult instructor before enrolling.

245B Linotype Composition 3 hrs. Spring

This course considers the problems of job, advertisement, and newspaper composition. Consult instructor before enrolling.

246A Printing Machinery Maintenance 2 hrs.

This course is designed to acquaint the student with the problems of care and maintenance of printing machinery including the linotype. Simple adjustments are made on the various machines. Not offered in 1955-1956.

246B Printing Machinery Maintenance 2 hrs.

This course gives the student practical experience in caring for machinery in actual operation. Not offered in 1955-1956.

341 Advanced Presswork 2 hrs. Fall

This course is a continuation of 241. Practical presswork and make-ready of various kinds of type forms for both cylinder and jobbers is undertaken.

345 Bindery Operations 2 hrs. Spring

Bindery and finishing operations are studied. Work in book-binding, folding machines, stitching, plastic binding, punching, perforating, etc. is taken up.

ELECTRICAL**150 Introductory Electricity 2 hrs. Each Sem.**

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.

350 Advanced Electricity 3 hrs. Each Sem.

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.

410 Problems in Electricity 2-4 hrs.

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.

GENERAL SHOP**160 Introduction to Industrial Arts 1 hr. Each Sem.**

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.

164 Industrial Arts for Elementary Teachers 3 hrs. Each Sem.

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. Special Education students may take this course for four semester hours of credit.

167 O.T. General Shop 3 hrs. Each Sem.

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.

261A Art Metal 2 hrs. Spring

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.

262B Jewelry 2 hrs. Spring

A beginning course dealing with the design and construction of items of jewelry and enameling.

263A Related Arts and Crafts 3 hrs. Each Sem.

A general course in arts and crafts including work in thin metals, plastics, leather, elementary wood, and other related craft activities. Extension only.

263B Related Arts and Crafts 3 hrs. (Extension only)

Advanced work in arts and crafts including advanced art metal, plastics, and other crafts not previously included.

264A Farm Shop 2 hrs. Fall

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.

264B Farm Shop 2 hrs. Spring

A continuation of 264A, with the addition of special problems related to farm mechanics and farm shop management.

265A Transportation 3 hrs. Fall

A survey course dealing with the design, use, and function of all types of power-driven equipment. The emphasis in this course will be placed on power mowers, outboard motors, and automobiles.

265B Transportation 3 hrs. Spring

Advanced work in automobile maintenance and servicing. Special emphasis will be given to the study of testing equipment used in auto mechanics.

266 Industrial Design 2 hrs. Each Sem.

A study of modern industrial design and its application to industrial arts projects. Development of suitable and well designed articles for school shop practice.

267 Leather, Plastics, and Archery 2 hrs. Spring

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.

370 General Shop 3 hrs. Fall

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.

415 Arts and Crafts Techniques 2-4 hrs.

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.

463 Arts and Crafts for Teachers 3 hrs.

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.

PROFESSIONAL COURSES IN INDUSTRIAL ARTS**347 Plan and Organization of a School Shop 2 hrs. Each Sem.**

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.

348 Teaching of Industrial Arts 3 hrs. Each Sem.

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.

450 The General Shop Program 2 hrs. Spring

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.

464 Industrial Arts for the Elementary School 2 hrs. Spring

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.

VOCATIONAL DISTRIBUTIVE EDUCATION

Adrian Trimpe

Wendall Fidler

Teachers or coordinators of vocational distributive education subjects should contact 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.

410 Organization and Operation of Distributive Education 2 hrs. Fall

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.

420 Teaching Techniques in Distributive Education 2 hrs. Fall

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.

425 Instructional Materials in Distributive Education 2 hrs. Spring

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.

430 Coordination Techniques in Distributive Education 2 hrs. Spring

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.

435 Job Analysis and Training Programs 2 hrs. Fall

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.

VOCATIONAL-INDUSTRIAL AND TECHNICAL EDUCATION

J. W. Giachino	Andrew C. Luff	William Schreiber
Henry J. Beukema	Don W. Nantz	William Weeks
Donald Black	Robert Ring	William Wichers
Herbert E. Ellinger	Norman K. Russell	William Whitner

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 16 to 20 hours depending upon the area of specialization. Acceptable sequence of courses may be arranged with the departmental advisor.

AVIATION**103 Airframes 4 hrs. Each Sem.**

A course designed to provide essential information and practical experience in repairing fabric, wood, and plastic components of aircraft, including control units. Practical work is also provided in repairing metal covered aircraft.

106 Powerplants 4 hrs. Each Sem.

Practical experience in assembling and disassembling various types of aircraft reciprocating and jet engines, including maintenance of carburetion, lubrication, and electrical units of aircraft engines.

110 Elementary Aviation 3 hrs. Each Sem.

An introductory course covering basic principles and terminology of various phases of aviation.

203 Airframes 4 hrs. Each Sem.

This course deals with the repair and servicing of hydraulic units, brakes, instruments, radio, and all aircraft alteration and maintenance work as prescribed by C.A.A. requirements, including periodic inspections.

206 Powerplants 4 hrs. Each Sem.

Overhauling, inspection, servicing, installation, and testing of various types of reciprocating and jet power plants, including propellers.

207 The Airline Hostess 2 hrs. Spring

A general orientation course to familiarize students with the duties and working conditions of the airline hostess.

210 Model Airplane Construction 2 hrs. Spring

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.

214A Pilot Training and Flight Theory 2 hrs. Each Sem.

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.

214B Pilot Training and Flight Theory 2 hrs. Each Sem.

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.

214C Pilot Training and Flight Theory 2 hrs. Each Sem.

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.

214D Pilot Training and Flight Theory 2 hrs. Each Sem.

This unit is planned for students who wish a few hours of flight experience and are not necessarily interested in obtaining a license.

300 Aircraft Servicing 4 hrs. Summer

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.

301 Navigation and Communications 2 hrs. Fall

Basic course in radio and ground communications; ground-to-plane and plane-to-ground radio. A study is made of the various radio and celestial aids for aerial navigation and flight planning.

302 Aeronautical Meteorology 3 hrs. Spring

A study of the weather elements, such as clouds, cloud formations, pressure systems, fronts, reading weather maps, teletype, and interpretation of forecasts for aerial navigation.

303 Airport Selection, Layout and Management 3 hrs. Spring

A detailed study of the selection and layout of airports, including buildings, classification of fields, CAA airport regulations, runways, lighting equipment, maintenance equipment, etc. Also included are administrative problems of the small and large airport.

304 Airline Traffic 3 hrs. Fall

Students will be given an opportunity to study the problems connected with air traffic, such as generation of traffic, handling of traffic, and air-traffic contracts.

305 Airline Operation 2 hrs. Spring

The operational phase of air transportation in which the student can study dispatching, equipment specification determination, cost finding, and similar operational problems.

306 Airline Administration 2 hrs. Spring

Covers in detail the history of commercial aviation in the United States. It deals with the basic federal laws governing the operations of the commercial airlines. Financing airline operations and their basic business and tax practices are also included.

449 Aviation for Classroom Teachers 2 hrs. Spring

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.

REFRIGERATION, AIR CONDITIONING, HEATING**115A Domestic Refrigeration 4 hrs. Each Sem.**

This course covers refrigeration theory and function, types of refrigerants, and the basic laws applying. Installation techniques.

115B Commercial Refrigeration 4 hrs. Each Sem.

This course covers refrigeration units of standard design and construction, installation, service operations, testings and factory-recommended repair procedures.

215A Air Conditioning and Heating 4 hrs. Each Sem.

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.

215B Air Conditioning and Heating 4 hrs. Each Sem.

A continuation of course 215A, including calculations, design, layout and installation of air conditioning and heating units.

DRAFTING**124A Elements of Industrial Drafting 4 hrs. Each Sem.**

A general course in drafting fundamentals, involving sketching, lettering, blueprint reading, instrument drawing, and conventional practices through job assignments of representative drafting-room problems.

124B Machine Drawing and Design 4 hrs. Each Sem.

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.

224A Geometry of Drafting 4 hrs. Each Sem.

A study of the relationships of points, lines, and surfaces and their applications in industrial drafting layout work.

224B Drafting for Production 4 hrs. Each Sem.

The study of drafting for industrial production and the development of the necessary tooling for manufacturing products. The use of illustrative techniques involving drawings for catalogs, sales, and service manuals will also be covered.

MACHINE TOOL**130A Industrial Machine Shop 4 hrs. Each Sem.**

A course in basic machine shop practice involving practical work on the following machines: lathe, milling machines, grinders, shapers, and drill presses.

130B Industrial Machine Shop 4 hrs. Each Sem.

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.

230 Tool Fabrication 4 hrs. Each Sem.

A course in the making of tools and fixtures. Special attention is given to precision layout and inspection.

260 Die Making 4 hrs. Each Sem.

A course in making of dies for blanking, shaving, bending, forming, and embossing.

261 Production Tooling 4 hrs. Each Sem.

A course in tooling standard and special machines for production work.

RADIO—T. V.**135A Introductory Radio 4 hrs. Each Sem.**

A basic course emphasizing the theory, operation, and servicing of radio receivers and transmitters.

135B Introductory Television 4 hrs. Each Sem.

An introductory television course treating the basic principles of television receivers and servicing procedures.

235A Television Servicing 4 hrs. Each Sem.

A continuation of course 135B with emphasis on advanced servicing problems in television receivers.

235B Color Television 4 hrs. Each Sem.

A basic course in color television reception with practical work in testing and servicing color television receivers.

AUTOMOTIVE MAINTENANCE**155A Automotive Engines and Accessories 4 hrs. Each Sem.**

A study of the construction features and operation of all component parts of modern automobiles.

155B Automotive Chassis and Running Gear 4 hrs. Each Sem.

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.

255A Automotive Analysis 4 hrs. Each Sem.

The study of complete engine analysis and adjustment using motor analysers, distributor testers, generator-regulator testers, and chassis dynamometer.

255B Automotive Engine Overhaul 4 hrs. Each Sem.

Practical work in disassembly, cleaning, inspection, repair, and assembly of the complete engine with special emphasis upon overhaul equipment and processes.

422 Automotive Transportation Workshop 2 hrs.

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 1955-1956.

424 Automotive Diagnosis and Correction Workshop 1 hr.

This course deals with correct usage of testing equipment for locating and correcting automotive engine malfunctions. It is designed particularly for teachers of auto mechanics. Not offered in 1955-1956.

ELECTRICITY—ELECTRONICS**145 Fundamentals of Electricity 4 hrs. Each Sem.**

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.

146 Direct Current Electricity 4 hrs. Each Sem.

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.

245 Alternating Current Electricity 4 hrs. Each Sem.

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.

246 Industrial Electronics 4 hrs. Each Sem.

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.

RELATED SUBJECTS**170A Drawing 2 hrs. Each Sem.**

A basic course in drawing involving blueprint reading, schematic drawing, and sketching.

170B Drawing 2 hrs. Each Sem.

A continuation of Drawing 170A with emphasis on instrument drawing involving lettering, dimensioning, orthographic projection, and sectional views.

173 Applied Physics 3 hrs. Each Sem.

An introductory course dealing with heat, simple mechanics, forces, time, rate, motion, thermal expansion, properties of solids, liquids, and gases.

174 Electricity 2 hrs. Each Sem.

A basic course in electricity intended to familiarize students with electrical terminology, circuits, motors and various testing equipment.

175 Basic Metal Work 2 hrs. Each Sem.

A beginning machine-shop course involving correct usage of tools, layout, bench work, and simple lathe work.

176 Machine Shop 2 hrs. Spring

A continuation of 175 with emphasis on work involving the shaper, lathe, milling machine, grinder and drill press.

178 Testing of Materials 3 hrs. Each Sem.

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.

211 Metal Processing 2 hrs. Fall

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.

231 Basic Metallurgy 3 hrs. Each Sem.

This course offers practice in heat treating and testing all standard materials used in machine, tool, and die work.

270 Tool and Die Designing 2 hrs. Spring

Layout and design of jigs, fixtures, dies and production tools, related to the machinist and tool diemakers fields.

272 Principles of Industrial Electronics 2 hrs. Spring

A course dealing with the fundamental theory and technical applications of circuits used in various standard electronic equipment.

273 Technical Physics 3 hrs. Each Sem.

A study of magnetism, electricity, sound and light.

274A Welding 2 hrs. Each Sem.

A course involving the safe use of oxy-acetylene, arc-welding and helium-arc equipment and acquisition of essential welding skills and technical knowledge.

274B Welding 2 hrs. Each Sem.

A continuation of 274A.

275 Sheetmetal 2 hrs. Each Sem.

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.

279 Personnel Relations 3 hrs. Each Sem.

A basic course dealing with the principles of employee-employer relations, trade unions, workmen's compensation, social security, and psychology of human relations.

370 Strength of Materials 3 hrs. Each Sem.

This course deals with compression, tension, shear, torsion, and bending forces in structural members, including distribution of stress and fatigue on construction materials.

371 Thermodynamics 2 hrs. Spring

A basic course covering the practical applications of heat into mechanical work.

477 Welding for Teachers 2 hrs.

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 1955-1956.

INDUSTRIAL SUPERVISION**353 Fundamentals of Industrial Supervision 2 hrs. Fall**

A basic course in the study of the foreman's duties, responsibilities, and employer-employee relationship in modern industrial practice.

354 Quality Control 3 hrs. Spring

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.

355 Plant Maintenance and Safety 2 hrs. Fall

A study of modern industrial maintenance and safety methods and their relationship to production and production costs.

356 Production Control 3 hrs. Spring

A study of methods of controlling and coordinating the factors of production, including materials, time and labor.

358 Motion and Time Study 3 hrs. Fall

This course deals with the analysis of motions involved in performing a job, timing the execution of operations, and determining efficient time standards.

COORDINATED INDUSTRY**150 Coordinated Industry 3 hrs. Each Sem.**

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.

152 Coordinated Industry 3 hrs. Each Sem.

Continuation of 150.

250 Coordinated Industry 3 hrs. Each Sem.

Continuation of 152.

252 Coordinated Industry 3 hrs. Each Sem.

Continuation of 250.

350 Coordinated Industry 3 hrs. Each Sem.

Continuation of 252.

352 Coordinated Industry 3 hrs. Each Sem.

Continuation of 350.

PROFESSIONAL COURSES IN VOCATIONAL-INDUSTRIAL EDUCATION**200 Introduction to Vocational Education 2 hrs. Fall**

A course designed to familiarize prospective industrial education teachers with the basic philosophy of vocational education and its function in an educational program.

452 Teaching of Vocational Industrial Education 3 hrs. Spring

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.

460 Cooperative Education in Secondary Schools 2 hrs. Spring

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.

472 Course Planning and Construction 2 hrs. Spring

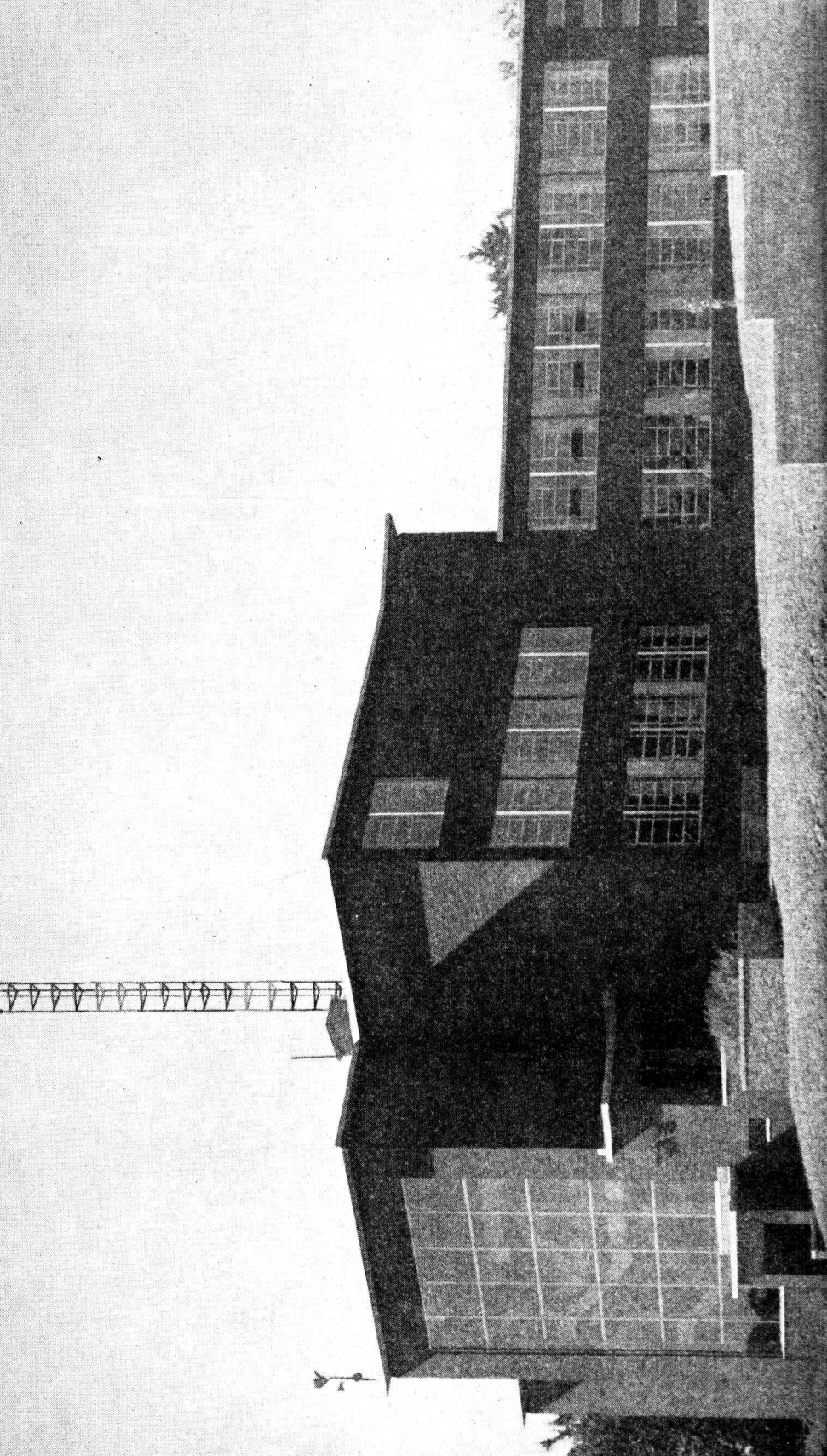
Principles and techniques of selecting and analyzing suitable teaching activities and arranging such material into a functional instructional order. Instructional units prepared will be based on an analysis of a trade, occupation or activity. Opportunity will be provided to prepare a detailed course of study.

474 Testing and Grading in Industrial Education 2 hrs. Fall

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.

478 Exploring Industry 2 hrs.

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 1955-1956.



PART IV—*Miscellaneous Information*

AWARDS, FELLOWSHIPS AND SCHOLARSHIPS

For complete details and application blanks, please write to the registrar.

AWARDS

DEPARTMENTAL

Athletics—The Athletic Board of Control Award is a medal given to an outstanding athlete who ranks high in scholarship and participation.

Biology—The Harold Cook Memorial Prize of \$20 is given to a student judged most proficient by the Committee on Scholarship, in cooperation with the president of the Faculty Science Club.

Chemistry—The William McCracken Award was named in honor of the first head of the Chemistry Department. It is given to a senior who, in the opinion of the chemistry staff, has shown the greatest aptitude in the field of basic chemistry.

Education—Election to Kappa Delta Pi.

French—The French Embassy gives an annual prize to the outstanding student of French in the graduating class.

Home Economics—An award to a freshman girl based on scholarship and leadership.

Industrial Arts—A plaque is given to the outstanding student in that department.

Mathematics—This prize is awarded to the senior student judged by the Department of Mathematics to have exhibited the highest proficiency and promise in that field.

Occupational Therapy Award—An annual award of \$25 and a letter of commendation are given by the Alumni Association to an outstanding senior in the department who gives promise of being a superior Occupational Therapist.

Physics—An annual prize of \$50 is made possible through a gift of \$1,000 by Josephine C. Rood. The recipient is selected by members of the Department of Physics.

Paper Technology—

Kalamazoo Valley Section, TAPPI, Senior Student Award	\$100
Fred C. Boyce, Junior Student Award, sponsored by the Michigan Division of the American Pulp and Paper Mill Superintendent's Association	\$200

◀ The many campus music activities have their origins in the Harper Maybee music hall,
a new model for classroom planning.

Paper and Twine Association Sophomore Award	\$150
Paper and Twine Association Future Salesman Award	\$150

Science—Membership in Kappa Rho Sigma.

Speech—Membership in Tau Kappa Alpha.

ORGANIZATIONAL

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 male student.

Pi Kappa Rho—A scholarship cup awarded annually by the Committee on Scholarship to the outstanding women's organization.

Tau Kappa Epsilon—A scholarship cup awarded annually by the Committee on Scholarship to the outstanding men's organization.

FELLOWSHIPS

State College Fellowship—A State College Fellowship with a stipend in the amount of \$800 is offered each year to a graduate of the college by the Horace Rackham School of Graduate Study at the University of Michigan.

Graduate Fellowships and Assistantships—These are available in the leading universities for students who have a high scholarship record and who show promise of success in graduate work.

SCHOLARSHIPS

State Board of Education Scholarships—The Michigan State Board of Education has made available for Western Michigan College 693 tuition scholarships for high school graduates who wish to enter the teaching profession. These cover tuition and not local fees. The scholarship is awarded for two years, providing the student maintains a high scholastic average. It may be renewed for two additional years.

Alpha Beta Epsilon Scholarships—Each of the 16 chapters of the sorority gives one or more scholarships each year. A student who receives a scholarship must fill the requirements set by the chapter.

Atlas Press—Two scholarships, each worth \$500 for the four years of college, are given by the Atlas Press Company. They are open to high school students in Michigan, matriculating in industrial arts. Application must be made before March 1 of each year.

Campus Stores Competitive Scholarships—The campus stores of the college offer annually three scholarships on a competitive basis. The prospective freshman scoring highest on a series of tests administered each spring receives \$175. The one scoring second highest receives \$125. The third receives \$100. Each award is renewable annually, provided the student's record continues satisfactory.

Credit Bureau of Kalamazoo Scholarship—The Kalamazoo Credit Bureau offers one scholarship of \$100 to any young man or woman who has successfully completed three semesters in the retail curriculum. The fund is administered by the registrar, the manager of the Credit Bureau and the supervising coordinator of Distributive Education.

Competitive Science Scholarships—In connection with the annual Science Day, a prospective freshman may compete for two scholarships. One is valued at \$150 per year; the other at \$100 a year. The scholarships are awarded only when the students actually enroll at Western. They may be renewed annually for the second, third and fourth year, provided the student carries a major in science or mathematics and maintains a satisfactory grade average.

Durametallic Scholarship—The Durametallic Corporation offers \$250 per semester to a student who has completed two years of a technical program at the college and elects to go into the degree program in industrial supervision. Application should be made two weeks before the end of the semester.

Ernest Burnham Rural Life Fund—This fund was established by friends and students of the late Ernest Burnham, to commemorate the twenty-fifth anniversary of his work at Western Michigan College. Income from the fund may be used for books or scholarships in the Department of Rural Life and Education.

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.

Gilmore Brothers Department Store 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.

Honorary Scholarships—A limited number of these scholarships are available to deserving high school graduates. They cover tuition and a portion of school fees. Scholarships may be renewed up to three times. Applications for renewal must be made at the end of each college year.

Judson A. Hyames Memorial Scholarship—The fund was established in memory of the late Judson A. Hyames of the Department of Physical Education. A scholarship amounting to one year's tuition and fees will be made annually to the student chosen by the Committee on Scholarships upon recommendation of the head of the Department of Physical Education. Only men majoring in physical education of junior or senior status are eligible.

Johnson Foundation Scholarship—Since September, 1953, the S. C. Johnson and Sons, Inc. of Racine, Wisconsin have presented to a senior major-

ing in chemistry a scholarship of \$500. The actual granting of the scholarship is administered by the Chemistry Department.

Katherine Mulry Johnson Scholarships—These were founded in 1926 by Mrs. Johnson, for some time supervisor in the Training School and later a member of the Department of History, in honor of her mother. They are awarded annually by a committee from the Department of History to two upper class women of superior ability, who plan to become teachers of history.

Librarianship Scholarships—Ten scholarships are offered to qualified June graduates of the junior colleges of Michigan. The scholarships cover the cost of tuition and a portion of local fees. They are available to candidates who qualify for a major in librarianship. A personal interview with the head of the Department of Librarianship is required before May 20 of each year.

Music Scholarships—Western Michigan College 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. No student may hold more than one scholarship at one time. All scholarships are for one year's duration, but may be renewed upon reexamination. Applications must be made not later than April 1 each year.

National Secretaries Association Scholarships—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 amount of \$25 is offered the student the following semester if the student maintains a high record. The award is based upon the student's record, need and an essay written to the National Secretaries Association.

Occupational Therapy Alumni Association Scholarship—A grant of \$100 is given annually to a first or second semester freshman enrolled as a prospective Occupational Therapy student. The grant must be refunded to the Alumni Association if the student later changes to some other major field of study.

Paper Technology Scholarships—

Norman Bardeen Scholarship Graduates of Vicksburg High School
Black-Clawson Company Scholarship

Sons of the company's employees and graduates of designated high schools.

Lewis H. Breyfogle Scholarship High school graduates.

Moore and Munger Scholarships High school graduates.

Charles E. Nelson Scholarship Otsego High School graduates.
 Paper and Twine Association Scholarships High school graduates.
 William Slavin High school graduates.

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 May 19, 1945. Grants from this fund may be made to worthy students, with first consideration given to students in the aviation program.

Student Council Scholarships—Scholarships are available to all students enrolled in a full-time course of study, beginning with the second semester of the freshman year. The amount of the grant is determined by the need of the recipient but may not exceed \$200.

Wallace B. Marshall Memorial Fund—The fund was established in 1944 in memory of Lieut. Wallace B. Marshall, U. S. Army Air Corps, and a graduate of the college, who lost his life in the defense of his country. The fund, established by his wife, Mrs. Blanche Marshall, provides an annual stipend of \$100 for assistance to a needy student of excellent character and potential qualities of leadership. The fund is administered by a committee under the chairmanship of the Dean of Men.

STUDENT LOAN AND MEMORIAL FUNDS

Please address requests for information to the Comptroller. All funds are administered by the Committee on Student Loans.

Amelia Biscomb Memorial Loan Fund—Established in 1939 through the will of Mrs. Biscomb, for over 30 years a teacher of English in Western Michigan College, who provided the sum of \$500 for this purpose.

Dwight B. Waldo Memorial Fund—Initiated by a group of faculty members at the time of Dr. Waldo's death in 1939. Loans from the fund are available to any worthy student.

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. 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.

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.

Grand Rapids Panhellenic Society Loan Fund—The Grand Rapids Panhellenic 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.

Helen Statler Fund—Established in 1944 by Mrs. Frederick C. Fischer and Frederick C. Statler in honor of their mother and is available to any worthy student.

Kalamazoo Valley Section, TAPPI, Rotating Loan Fund—For students of paper technology. This fund amounts to \$1,500. Loans are available to students upon recommendation of the head of the department of paper technology. There is no charge for interest while the student is enrolled at Western Michigan College.

LeRoy H. Harvey Memorial Loan Fund—Established in 1925 by the student Science Club to honor the memory of Dr. LeRoy H. Harvey, who until his death was the head of the Department of Biology. Loans are made to students whose major interest is in the field of science.

Occupational Therapy Fund—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 fund 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.

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 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 non-interest bearing.

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. The maximum amount per applicant will be \$50. This is a non-interest loan to be paid back within a year of the recipient's graduation date. Recommendations are made by the staff of the Home Economics Department.

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.

Stone D.A.R. Student Loan Fund—Established in 1932 through gifts from the Lucinda Hinsdale Stone Chapter of the Daughters of the American Revolution.

W.M.C.E. Student Loan Fund—In September, 1912, the nucleus of a student loan fund was established by the gift of \$200 from Miss Blanche Hull. This fund has been increased to a total of several thousand dollars. Money

is loaned to deserving students on the recommendation of a faculty committee. An interest rate of five per cent is charged, and notes not exceeding one year are accepted.

William McCracken Loan Fund In Chemistry—Established in 1945 through a gift of \$1,000 made by Mrs. William McCracken to honor the memory of her husband, who organized the Department of Chemistry and served as its head (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.

BUILDINGS AND GROUNDS

EAST CAMPUS

The original area of this campus was a hilltop site of 20 acres. Now this campus contains more than 70 acres, including 15 acres devoted to physical education and athletics. The principal buildings in this area, exclusive of student housing, are:

BUSINESS STUDIES

EDUCATION—The building houses the Campus Laboratory School, the Educational Service Library, the Audio-Visual Center, Women's Physical Education and Education Classrooms.

ENGLISH HALL

HEALTH SERVICE—The second floor of this building is devoted entirely to student health service. Also in this building are the Psycho-Educational and Speech Clinics, the Research Division and several academic departments.

INDUSTRIAL ARTS

LIBRARY—This building also houses the Departments of Librarianship and Mathematics.

MAINTENANCE—Storage and repair shops are located here.

MECHANICAL TRADES BUILDING—This building was a 1941 gift from the W. E. Upjohn Unemployment Trustee Corporation of Kalamazoo.

NATURAL SCIENCE—There is an adjoining greenhouse.

THEATRE—This is the center of campus dramatics and speech activities. It has an auditorium seating 350 persons.

WALWOOD UNION—This is the student center opened in 1938. It provides private dining rooms, a cafeteria, lounge, student offices, recreation rooms and a grand ballroom.

WEST CAMPUS

Following World War II, additional land purchases became necessary. This brought about a new campus of 180 acres called the West Campus. All the buildings in this area, except the President's house, have been erected since 1948. They are of one architectural pattern and modern in every respect. Exclusive of housing, they are as follows:

ADMINISTRATION BUILDING—Opened in 1952, it contains the Administrative offices, a branch library and 25 classrooms for the Divisions of Social Science and Languages.

ARCADIA BROOK CLUB HOUSE AND CAFETERIA

HARPER C. MAYBEE MUSIC HALL—Opened in 1949, this modern music building houses music and radio activities.

KANLEY MEMORIAL CHAPEL—This is the campus religious center. It was made possible in 1951 through a gift from the estate of the late William Kanley, a former student.

WILLIAM McCracken HALL—Erected at a cost of over \$1,000,000 in 1949, it is the home of the Departments of Chemistry, Paper Technology, Physics, Art, Home Economics and Occupational Therapy.

FACULTY AND STUDENT HOUSING

Between the years 1938-1955, the following modern residential structures for students and faculty have been erected:

EAST CAMPUS

SPINDLER HALL—for 192 women.

VANDERCOOK HALL—for 200 men.

WALWOOD HALL—for 115 men.

WEST CAMPUS

BURNHAM HALLS—for 514 men.

BERTHA S. DAVIS HALL—250 women. An addition, housing another 250 women, is under construction.

DRAPER-SIEDSCHLAG HALLS—for 520 women.

ELMWOOD APARTMENTS—Contain 96 units for married students.

HILLSIDE APARTMENTS—Provide 32 living units for faculty members.

LABORATORY SCHOOLS

Four laboratory Schools are provided for the use of student teachers at Western Michigan College. On the East Campus, there is the Campus Elementary School and Western State High School. West of Kalamazoo is the Hurd Rural School for the use of the Division of Rural Life and Education. At Paw Paw, there is a city-graded school and high school for the use of our student teachers.

ATHLETIC FACILITIES

GOLF COURSE—Adjacent to the West Campus is the 79-acre nine-hole Gateway Golf Course owned by the college.

HYAMES FIELD—One of the finest collegiate baseball layouts in the country, has seating for 2,500 spectators.

MEN'S GYMNASIUM—This building has the usual facilities for physical education and seats 2,500 for basketball. There is under construction a new physical education building for men at a cost of \$1,500,000. It is expected that there will soon be added to this building a field house providing seats for 7,500 spectators.

TENNIS COURTS—12 are provided on the East Campus.

WALDO STADIUM—There are two concrete stands, each seating 7,500 persons. There is also an eight-lane quarter-mile track with a 220-yard straightaway.

WOMEN'S GYMNASIUM—The building has a gym floor 60 by 119 feet, a stage, offices, locker rooms and a swimming pool.

OTHER FACILITIES

KLEINSTUECK WILD LIFE PRESERVE—This is a tract of nearly 50 acres given to the college in 1922 by the late Mrs. Caroline Hubbard Kleinstueck.

COLLEGE FARM—Six miles south of the college is a farm of approximately 150 acres operated by the college as a training school for students in agriculture.

STUDENT ACTIVITIES AND ORGANIZATIONS

In order to meet the needs of students, opportunity is afforded for participation in many extra-curricular activities. All campus organizations must be chartered by the Student Activities Committee consisting of both student and faculty members.

CHARTERS

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

Charters 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.

GENERAL ORGANIZATIONS

STUDENT ASSOCIATION

Every student is a member of the Student Association. The organization is governed by the Student Council. The council conducts two student elections annually—in November to select the class officers and representatives, and in the spring to elect the officers for the Student Association, the Associated Women Students and Men's Union.

ASSOCIATED WOMEN STUDENTS

All undergraduate women at the college are members of the Associated Women Students. The organization has traditions of upholding the highest social standards on the campus. Women of the faculty are honorary members. The headquarters of the group is the Davis Room in the Walwood Union.

MEN'S UNION

Organized in 1936 the Men's Union includes in its membership all undergraduate students, the men of the faculty and administration. A lounge, recreation rooms with game equipment, radio and television are located on the second floor of the union.

OTHER ORGANIZATIONS**CLUBS**

- ART**—Open to anyone interested in art.
- ATHLETICS**—The W Club is composed of men who have won an official letter in one of the major sports.
- BUSINESS**—Beta Alpha Sigma is a business professional organization.
- CHEMISTRY**—This is the Student Affiliate Chapter of the American Chemical Society.
- EDUCATION**—The Association of Childhood Education: For students of elementary education; it is a chapter of the National Association of Childhood Education.
- THE COUNTRY LIFE CLUB**—Open to students in the Department of Rural Life and Education and any others interested in rural life. Delegates are sent annually to the national conference of the Rural Youth of the U.S.A.
- FUTURE TEACHERS OF AMERICA**—The George H. Hilliard Chapter is open to both men and women students interested in teaching.
- GEOGRAPHY**—Gamma Theta Upsilon: For students specializing in Geography.
- HOME ECONOMICS**—The Colhecon Club: Open to any student in the department.
- INDUSTRIAL ARTS**—Open to students interested in industrial arts education.
- INTERNATIONAL STUDENTS**—For students whose homes are outside of the continental limits of the United States.
- LANGUAGES**—The Der Deutsche Verein: For students who have had the equivalent of one year of college German.
Ecos Espanoles: For students specializing in Spanish.
Le Cercle Francais: For students who have had the equivalent of one year of college French.
- LIBRARIANSHIP**—Colophon Club: Open to majors and minors in librarianship.
- MODERN DANCE**—Students interested in modern dance study.
- OCCUPATIONAL THERAPY CLUB**—Occupational therapy students.
- PAPER TECHNOLOGY**—Ts' ai Lun: An organization for students in this department.
- PHILOSOPHY**—The Philosophy Forum.
- PRE-MEDICAL**—The club is open to students interested in the study of medicine or dentistry.
- R.O.T.C.**—Epsilon Delta Gamma: An organization of basic course R.O.T.C. students.
Saber and Key: An organization of advanced course R.O.T.C. students.

SKIING—Ski Broncos.

SWIMMING—Water Sprites, open to men and women interested in swimming.

THEATRE—Western Michigan College Players: An organization open to any enrolled student interested in active participation in dramatics.

WESTERN WIVES—Membership open to wives of Western students.

WOMEN LIVING OFF CAMPUS—Omega Chi Gamma.

WOMEN'S PHYSICAL EDUCATION—Phi Epsilon.

YOUNG DEMOCRATS

YOUNG REPUBLICANS

SERVICE ORGANIZATIONS

ALPHA PHI OMEGA—A national service fraternity of Western men in the fellowship of the Scout oath, to promote service to students, to community and the nation.

CIRCLE K—Sponsored by the Kiwanis Club.

HONOR SOCIETIES

ARISTA—Honor society for senior women.

ALPHA KAPPA PSI—A national professional fraternity for men in the Department of Business Studies. Gamma Tau Chapter.

EPSILON PI TAU—A national professional organization in industrial education.

GAMMA THETA UPSILON—For students specializing in geography. Alpha Gamma Chapter.

KAPPA DELTA PI—A national honorary society in education. Beta Iota Chapter, 1928.

KAPPA RHO SIGMA—For students in mathematics and science.

PHI DELTA KAPPA—For students in education.

PHI MU ALPHA SINFONIA FRATERNITY OF AMERICA—A national honorary music fraternity for men.

PI GAMMA MU—A national honorary fraternity for students in social studies.

PI OMEGA PI—A national honorary fraternity for students in business education.

SIGMA ALPHA IOTA—A national honorary fraternity for music women.

SIGMA ALPHA TAU—For students in air transportation.

SIGMA TAU CHI—A national honorary fraternity for students in Business Studies. Beta Chapter.

FRATERNITIES

The Inter-Fraternity Council is the governing and coordinating body. It is composed of two men from each fraternity and two faculty members.

DELTA CHI—National. Western Michigan Chapter.

DELTA SIGMA PHI—National. Beta Tau Chapter.

KAPPA ALPHA PSI—National. Gamma Beta Chapter.
 SIGMA EPSILON—Local.
 SIGMA TAU GAMMA—National. Chi Chapter.
 TAU KAPPA EPSILON—National. Delta Alpha Chapter.
 ZETA DELTA EPSILON—Local.
 SIGMA ALPHA DELTA—National. Beta Chapter.

SORORITIES

The Panhellenic Council is the governing and coordinating body for sororities. It is composed of representatives from each sorority and two faculty sponsors.

ALPHA CHI OMEGA—National. Gamma XI Chapter.
 ALPHA OMICRON PI—National. Kappa Rho Chapter.
 ALPHA SIGMA ALPHA—National. Beta Psi Chapter.
 DELTA SIGMA THETA—National.
 DELTA ZETA—National. Gamma Pi Chapter.
 SIGMA KAPPA—National. Gamma Beta Chapter.
 SIGMA SIGMA SIGMA—National. Beta Rho Chapter.
 THETA PI ALPHA—Local.
 THETA UPSILON—National. Nu Alpha Chapter.

RELIGIOUS ORGANIZATIONS

CAMPBELL CLUB—Students from Central and Kalamazoo Christian Churches.
 CANTERBURY CLUB—Episcopal students.
 CHRISTIAN SCIENCE—Christian Science students.
 GAMMA DELTA—Lutheran students.
 HILLEL COUNSELORSHIP—Jewish students.
 INTER-CHURCH STUDENT FELLOWSHIP—An interdenominational group sponsored by the First Methodist Church, the First Presbyterian Church, the First Baptist Church and the First Congregational Church of Kalamazoo.
 INTER-VARSITY CHRISTIAN FELLOWSHIP—Conservative Christian students.
 KAPPA PHI, PHI Chapter—Methodist women.
 LUTHERAN STUDENT ASSOCIATION—Students belonging to the National Council of Lutheran Churches.
 NEWMAN CLUB—Roman Catholic students.
 PRE-MINISTERIAL CLUB—Pre-ministerial students.
 RELIGIOUS COUNCIL—A coordinating agency.
 STUDENT CHRISTIAN FORUM—Discussion group for members of Evangelical churches.
 Y.W.C.A.—Open to all women students.

STUDENT OPPORTUNITIES AND SERVICES

CAFETERIAS—On the East Campus are located Walwood Cafeteria and Soda Bar. On the West Campus are located Arcadia Brook Cafeteria and Snack Bar.

CAMPUS STORES—Store No. 1 is located in the Administration Building on the West Campus. Store No. 2 is located in the Education Building on the East Campus.

ATHLETICS

Athletics at Western Michigan College consists of two major programs: intercollegiate athletics and intramural athletics.

INTERCOLLEGIATE—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.

Western Michigan College has been a member of the Mid-American Conference since 1947. The other members of the Conference are Bowling Green, Kent State, Marshall, Miami, Ohio, Toledo and Western Reserve. The athletics are governed by an Athletic Board, composed of faculty members and students, which adheres to the Athletic Code of the Mid-American Conference and the policies and principles established by the National Collegiate Athletic Association. The teams winning the Mid-American Conference championship, both in basketball and baseball, qualify automatically for the annual NCAA playoffs.

To date Bronco teams have finished in the first division 36 times and have finished in the second division only 12 times. Teams have won championships nine times in addition to one tie for a championship.

Western Michigan College is a member of the Central Collegiate Conference. Participation in this conference furnishes competition with a number of the stronger track teams in the middle west.

INTRAMURAL—An extensive intramural program provides opportunity for students to engage in competitive sports on campus 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.

CLINICS

PSYCHO-EDUCATIONAL CLINIC

The purpose of the Psycho-Educational Clinic at Western Michigan College 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 psy-

chological 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.

SPEECH CLINIC

Among the services provided students at Western Michigan College are those of the Speech Clinic. Diagnosis and therapy are provided for all individuals with voice, articulation, stuttering, hearing, cleft palate, or foreign accent problems. Individuals unable to carry on their classroom activities or to achieve adequate results in the general speech courses or to do their practice teaching because of speech difficulties are treated in this modern clinic. Student speech therapists use the facilities of the clinic in preparing for their careers.

WRITING CLINIC

The clinic is for those students recommended by their instructors to receive help in improving organization, expression, and technical competence in written English. The clinician analyzes the particular difficulties of each student and tries to help him establish ways of overcoming them. No credit.

DEBATING—FORENSICS—DRAMATICS

Opportunities are offered for participation in all or any of the following activities: (1) Debate—separate programs for women and men offer experience in debating current issues with other colleges of the state and nation. (2) Forensics—extemporaneous speaking, oratory, discussion and various activities and contests are held on local, state, and national bases. (3) Dramatics—activity in theatre includes the production of three major plays per year. In none of the above activities is it necessary to belong to an organization or to be enrolled in the speech curriculum.

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.

HEALTH SERVICE

Students enrolling in college for the first time, or after a prolonged absence, are required to have a physical examination by one of the college physicians.

The physical examination is a part of the registration process, and a \$2.00 late fee will be charged, if the examination is not taken during the special clinics set up at the beginning of each semester.

Full-time students are entitled to the following services:

1. Medical and surgical examinations and conferences.
2. Dental examinations and minor repair work.

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 moderate cost, if advised by the physician.

The Health Service provides the services of medical and surgical consultants, a dermatologist, a psychiatrist, and a dentist, as well as a full-time staff of registered nurses.

The main Clinic and Infirmary are located on the East Campus in the Health Service Building. Limited clinic service is available in Room 141 of the Administration Building on the West Campus, however, any serious illness is referred to the main Health Service for medical consultation.

Consultations and treatments given at the Health Service are free to the students, except for special medications and the material used by the dentist.

LABORATORY SCHOOLS

The training schools of the college are unique in that they include a wide range of typical schools: a rural school, a large village school, a city-graded school and a high school; thus approximating the types of schools students may expect to work in after graduating. Neighboring public school systems are also used. Transportation to outlying schools is provided by the college.

LIBRARIES

Educational Service Library. The Educational Service Library is located in Room 103, Education Building. It 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.

General Library. Its collection consists of about 104,000 volumes. Approximately 740 periodicals are currently received and of these more than 325 are bound for permanent retention.

About 2,000 volumes are housed on the West Campus in Room 206, Maybee Hall, where a Music Library with a seating capacity of 50 is supervised by a member of the professional library staff as a branch of the General Library. This branch receives a dozen current periodicals and has a collection of 2,500 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 1,800 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 four newspapers. The holdings include 1,100 bound periodicals in science.

MUSIC

The Band rehearses twice a week, three times during the football season, and gives concerts on and off the college campus. 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 in other cities of the state. It joins each year with the choral groups to present the Christmas program. Any student with reasonable proficiency in any orchestral instrument is eligible for membership.

An important part in the musical life of the college is played by the Glee Clubs and the Choirs. The Men's Glee Club, Women's Glee Club, the College Choir and the Auxiliary Choir aim to develop and maintain a high standard of choral ensemble singing. They make a number of appearances on the campus, at high schools throughout the state, and with organizations like the Kalamazoo Symphony. The Auxiliary Choir is designed for students with little choral experience, but many of the students in this organization later find their way into the Glee Clubs and the College Choir.

PERSONNEL AND GUIDANCE SERVICES

Student personnel and guidance services are centered in the offices of this division in Room 131, Administration Building.

Freshmen, sophomores and first-year transfer students are assigned to counselors, in accordance with the curriculum chosen, for advice and counsel in planning their academic schedules. Entering students are urged to come to the campus during the summer months to plan for the fall semester; during December and January for the spring semester. This pre-enrollment counseling is followed by stated counseling periods during the first two years.

When students have completed 45 semester hours of work they are encouraged to choose, in consultation with their counselors, majors and minors. When the choice has been made they should contact the proper departmental advisors to secure written approvals for majors and minors. At this time plans for the work to be done in the junior and senior years are made with the counselor.

In addition to regular counseling periods, students are invited to talk with their counselors at any time concerning their programs of studies and related problems.

An occupational counseling service is available for students to use in making suitable vocational choices. They are especially urged to make use of this service, if they plan to change from one curriculum to another.

A complete counseling service is maintained exclusively for veterans. Assistance is given to them in enrolling and preparing papers and reports required by the Veterans' Administration, filing applications for loans and checking on other matters in which they may be interested.

PUBLICATIONS

The Brown and Gold is the annual yearbook written and edited by the students of the college. Policies and control of the publication are handled

by the Brown and Gold subcommittee. The editor and business manager are appointed and receive remuneration for their work. They are responsible for naming other staff members and carrying the project to completion. Offices are maintained in the Ty house, East campus.

The Western Herald is the student newspaper, now published weekly through the fall and spring semesters. Policies controlling the publication are set by the Herald subcommittee of the student activities committee. The editor and business manager are paid positions, appointed by the above committees. Offices are maintained in the Ty house and the paper is printed in the college print shop.

The Student Directory is published during the fall semester each year by the Student Council, with that organization's publicity director charged with the responsibility.

The Western Way is published each fall by the Student Council as a guide for students to the campus organizational and social life. Copies are available free for all students at the opening of school.

RADIO

WMCR, the FM voice of Western Michigan College, began official broadcasts in April, 1951, operating at 91.1 megacycles with an effective radiated power of 400 watts.

In 1954 a grant of \$7,500 from the Kellogg Foundation made it possible for the station to secure equipment increasing its power to 36,000 watts, effective radiated power. With the power increase WMCR enables the college to serve an area sixty miles in radius.

In addition to broadcasting classroom lectures, special programs from various departments, athletic events, recitals from the Music Department, assembly speakers, and special college events, the station also brings to its service area scores of significant radio series from the tape network of the National Association of Educational Broadcasters.

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.

R.O.T.C.

The United States Army has established a Reserve Officer Training Corps Unit at Western Michigan College, which offers the student an opportunity to prepare for military service and to occupy positions of leadership in the Armed Forces. Students pursue a General Military Science course including subjects common to all branches of the army.

The first two years of ROTC comprise the Basic Course, and the final two years the Advanced Course. Uniforms and textbooks are furnished. Advanced Course students receive a monetary allowance of approximately \$27 each month. Two 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. Enrollment in ROTC together with an acceptable scholastic average will entitle a student to apply for a draft deferment so that he may complete his college training without interruption.

RELATED SERVICES

ALUMNI

Western Michigan College has granted degrees and/or certificates to more than 25,000 individuals. An additional 55,000 former students have received part of their educational training here. All of these persons are considered alumni and are eligible to membership in the Alumni Association.

The News Magazine, published quarterly, contains a section devoted exclusively to alumni activities. It is sent free to all students in their senior year and regularly to all alumni who become active dues-paying-members of the Alumni Association. Membership rates are nominal.

Nearly 1,000 of Western's alumnae are members of Alpha Beta Epsilon. This is a sorority having 16 chapters in various cities of Michigan and Indiana. A chief activity of each chapter is to maintain one or more outstanding students at Western by means of a fine scholarship program.

Since it is a most difficult task to maintain accurate mailing lists for a large and constantly moving alumni group, all graduates are urged to keep their own mailing address up to date. We always appreciate receiving names and addresses of any alumni who have been out of contact with the college.

The Office of Placement and Alumni Relations is in Room 231, Administration Building.

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.

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.

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 31,184 persons. Of these, 5,173 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 evening 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 \$10.00 per semester hour; for graduate credit, \$10.00 per semester hour.

Fees for auditors are one-half the amounts indicated.

PLACEMENT SERVICE

Western Michigan College has operated a free placement office for many years. No graduating student can be guaranteed employment; but all graduates have the opportunity to meet prospective employers from the public schools, business, industry, social agencies and governmental services. Active communication is maintained between the college and hundreds of employing officials. Information concerning employment trends and general job opportunities is made available. Alumni are always welcome to use the placement service free of charge. Summer employment contacts for students are also maintained. The Office of Placement and Alumni Relations is located in Room 231, Administration Building.

TEACHER EDUCATION AND RELIGION PROJECT

On December 4, 1953, Western Michigan College 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.

PART V—*Graduate Division*

GENERAL STATEMENT

Graduate instruction has been given at Western Michigan College since February, 1939, under a cooperative arrangement with the University of Michigan. On October 12, 1951, the State Board of Education 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 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.

PERMISSION TO ENROLL

Permission 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.

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 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.

TRANSFER CREDIT

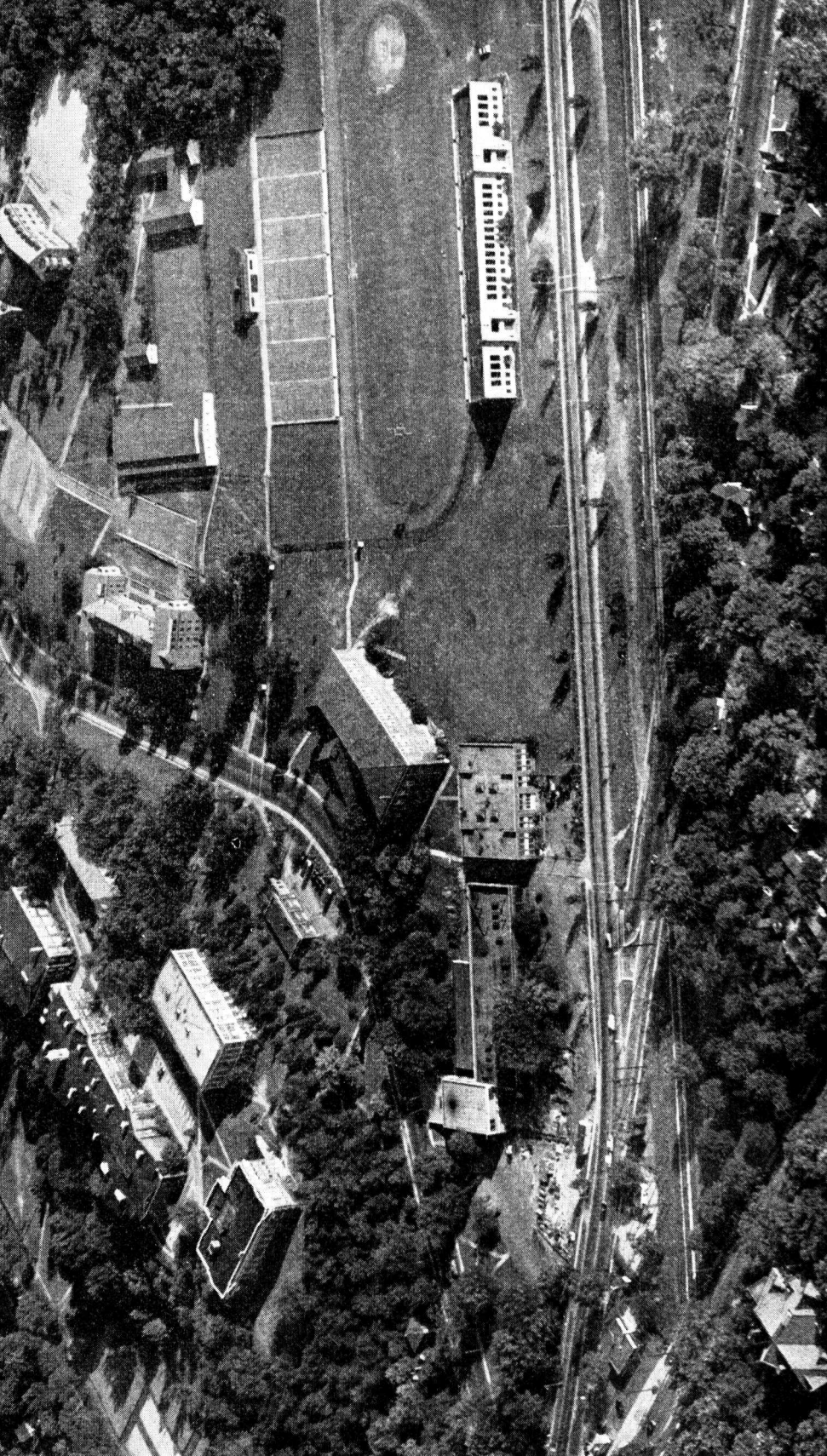
After the student has been admitted to candidacy for the degree, a total of six hours of satisfactory work taken at other approved institutions, for which such institutions grant graduate credit, may be transferred to a master's degree program in the Graduate Division of Western Michigan College, provided such courses are approved by the Curriculum Adviser as a part of the student's program of studies.

EXTENSION CREDIT

A total of twelve hours of satisfactory graduate work taken through the Extension Division of Western Michigan College 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.

DOUBLE REGISTRATION

The regulation covering any student taking both graduate and undergraduate work will be:



A student taking more **under-graduate** than graduate hours will pay tuition and fees for the **total** hours he is taking on both levels according to the rate for under-graduate work. (See schedule of under-graduate tuition and fees on page 47).

A student taking more **graduate** than under-graduate hours will pay tuition and fees for the total hours he is taking on both levels according to the rate for graduate work. A student taking the same number of graduate as undergraduate hours will pay the graduate fee.

Tuition	Resident		Semester Hours	Tuition	Non-Resident	
	Local	Total			Local	Total
\$ 9.00	\$20.00	\$29.00	1 and 2	\$18.00	\$20.00	\$38.00
18.00	26.00	44.00	3 and 4	36.00	26.00	62.00
27.00	32.00	59.00	5 and 6	54.00	32.00	86.00
36.00	38.00	74.00	7 and 8	72.00	38.00	110.00
54.00	42.50	96.50	9 or more	108.00	42.50	150.50
Summer Session						
7.00	20.00	27.00	1 - 2	14.00	20.00	34.00
14.00	20.00	34.00	3 - 4	28.00	20.00	48.00
21.00	20.00	41.00	5 - 6	42.00	20.00	62.00

CURRICULA

Work in the following curricula is offered in the Graduate Division:

Cur. Development and Co-Ord.	Teaching of Home Economics
Elem. Admin. and Supervision	Teaching of Industrial Education
General. Admin. and Supervision	Teaching of Lit. and Lang.
Guidance	Teaching of Music
School Librarianship	Teaching of Occupational Therapy
Sec. Admin. and Supervision	Teaching of Physical Education
Special Education	Teaching of Science and Math.
Teaching in Elem. School	Teaching of Social Science
Teaching of Art	Teaching of Speech Education
Teaching of Business Education	Unclassified
Teaching of Distributive Educ'n	

Further information is available in the Graduate Bulletin which may be obtained by writing to the Graduate Division, Western Michigan College.

INDEX

	Page		Page
Absences	45	Dropping Courses	45
Accreditation	1	Economics Courses	190-193
Administration	7	Educational Service Library	265
Administrative Council		Education Courses	208-216
Admission Requirements	32-34	Electrical and Electronics Courses	243, 244
Adult Education	269	Electrical Technology	103
Agricultural Courses	155-157	Elementary Curriculum	56
Agriculture Curriculum	90	Elementary Permanent Certificate	40
Aircraft Maintenance Engineering	101, 102	Elementary Provisional Certificate	39
Air Conditioning Curriculum	105	Employment, Part-Time	264
Airline Hostess Curriculum	75	Engineering	92
Air Transportation Curriculum	77	English Courses	125-131
Alumni	268	Enrollment Data	31
Alumni Placement	269	Examinations	47
Applied Music	121	Expenses (Fees and Tuition)	47
Art Collection	268	Extension Division	269
Art Courses	111	Faculty Council	9
Associated Women Students	259	Faculty Standing Committees	10
Athletic Board of Control	9	Faculty Members	11-27
Athletic Plant	257	Farm (College)	258
Athletics—Intercollegiate	263	Fees and Tuition	47-49
Attendance at Commencement	46	Fellowships and Scholarships	250-253
Automotive Maintenance Courses	243	Final Examination	47
Automotive Technology Curriculum	102	Fine Arts, Division of	111-114
Automotive Transportation	78	Forestry	93
Aviation Courses	230-241	Fraternities and Sororities	261, 262
Awards	249	French Courses	132-134
Band	266	General Degree	55
Band Credit	148	General Education Requirements	36, 37
Basic Studies, Division of	108-110	General Library	265
Biology Courses	161-167	Geography and Geology Courses	171-175
Board and Room	49	German Courses	134-136
Buildings and Grounds	256-258	Glee Clubs	266
Business Administration Curriculum	79, 80	Graduate Division	271
Business Studies Courses	219-227	Graduate Tuition and Fees	272
Business Teacher Training Curriculum	59	Graduation Requirements	49, 51
Cafeterias	263	Grounds and Buildings	256-258
Calendar	5, 6	Group Majors and Minors	38, 39
Campus Stores	263	Guidance Services	266
Carnegie Gift of Books and Pictures	268	Health Service	264
Certificates	39-43	High Scholarship List	51
Chapel, Kanley Memorial	256	Historical Sketch	31
Charters	259	History Courses	193-197
Chemistry Courses	167-170	Home Economics Courses	227-231
Choirs	266	Home Economics Curricula	60, 61, 82
Classification of Students	46	Homemaking Curriculum	101
Class Load	45	Honorary Societies	261
Clubs, Departmental	260	Honors in Course	49
College Ability Tests	46	Housing—Married Students	257
College Agreement Plan	33	Housing—Men and Women	50, 257
Commencement	46	Identification	50
Committees, Faculty Standing	10	Industrial Arts Courses	231-238
Coordinated Industry Courses	246	Industrial Arts Curriculum	62
Counseling—Advising	266	Industrial Supervision Courses	245, 246
Credit for Band, Glee Club and Orchestra	47	Industrial Supervision Curriculum	83
Credit in Semester Hours	52	Inter-Collegiate Athletics	263
Credit—Transferred	33	Journalism	93
Curricula, List of	53	Junior College Credit	33
Curricula, Non-Teaching	75-89	Kanley Memorial Chapel	256
Curricula, Pre-Professional	90-98	Kleinstueck Wild Life Preserve	258
Curricula for Teachers	55-74	Laboratory Schools	257, 265
Curricula, Two Year	98-105	Languages and Literature, Division of	125-144
Debating, Forensics, Dramatics	264	Late Enrollment Fee	48
Degree Requirements	35-39	Latin Courses	136, 137
Dentistry	91	Law	94
Departmental Awards	249	Librarianship Courses	216-218
Departmental Clubs	260	Librarianship Curriculum	63, 83
Description of Undergraduate Courses	108-247	Library:	
Dietetics Curriculum	81	Branch	265
Distributive Education Courses	238	Educational Service	265
Distributive Education Curriculum	73	General	265
Dormitories	257	Music	265
Dormitory Rates	49		
Drafting and Design Curriculum	103		
Drafting Courses	242		

	Page		Page
Liquor Regulations	46	Rural Life and Education, Division of, 155-159	
Loan Funds	253-255	Scholarship	49
Low Scholarship List	51	Scholarship Index	51
Machine Tool Technology	104	Scholarships, Undergraduate	250-253
Marking System	50	Science and Mathematics, Division of,	160-188
Mathematics Courses	175-181	Secondary Curriculum	57
Medical Examination	264	Secondary Permanent Certificate	40
Medical Technology	96	Secondary Provisional Certificate	39
Medicine	95	Social Sciences, Division of	189-207
Men's Union	259	Social Work Courses	206, 207
Michigan Veterans Vocational School,	29	Social Work Curriculum	88, 89
Military Science and Tactics	84	Sociology Courses	203-207
Military Science, Division of,	145, 146	Sororities and Fraternities	261, 262
Mortuary Science	97	Spanish Courses	137-139
Music Courses	114-122	Special Education Courses Curriculum,	68-72
Music Curricula	64, 65, 84	Speech Clinic	264
Music Ensembles	121, 266	Speech Correction Curriculum	71, 72
Nursing	97	Speech Courses	139-144
Occupational Counselling Services	266	Standard for Graduation	49, 51
Occupational Therapy Courses	122-124	Standing Committees	10
Occupational Therapy Curriculum	84	State Board of Education Scholarships	250
Office Training Curriculum	79, 98	State Elementary Provisional Certificate	39
Orchestra, Credit for	148	State Limited Certificate	40
Paper Technology Courses	181-183	State Secondary Provisional Certificate	39
Paper Technology Curriculum	85-88	Stores—Campus	263
Personnel Services	266	Student Activities	259-262
Pharmacy	98	Student Association	259
Philosophy Courses	197-199	Student Awards and Scholarships	249
Photographs, Identification	50	Student Health Service	264
Physical Education Courses—Men	147-151	Student Loan Funds	253-255
Physical Education Courses—Women	151-154	Student Organizations and Activities	259
Physical Education Regulations for Men	147, 148	Student Personnel and Guidance	266
Physical Education, Health and Recreation, Division of	147-154	Student Publications	266
Physical Science	160, 161	Student Service Facilities	259
Physics Courses	183-185	Subject Groupings	36
Placement Service	269	Teacher Education, Division of,	208-218
Political Science Courses	199-202	Teacher Education and Religion Project	270
Political Science Requirements	199	Teacher Placement	269
Pre-Dentistry	91	Teaching Certificates	39
Pre-Med Curriculum	95	Technical Business Curricula	98-101
Pre-Professional Curricula	90-98	Television	104, 242
Prizes	249	Theology	98
Psycho-Educational Clinic	263	Todd Art Collection	268
Psychology Courses	186-188	Training Schools	257, 265
Publications, Student	266	Transcripts	52
Radio	267	Transfer Students	33
Radio and Television Courses	242	Tuition and Fees, Graduate	272
Radio and Television Technology	104	Tuition and Fees, Undergraduate	47-49
Reading Laboratory	267	Tuition Refunds, Undergraduate	48
Refrigeration and Air Conditioning	105, 241	Two-Year Curricula	98-105
Refunds, Tuition	47-49	Undergraduate Scholarships	250-253
Related Courses	241-245	Veterans Vocational School	29
Religion and Teacher Education Project	270	Vocational and Practical Arts Education, Division of,	219-247
Religion Courses	198, 199	Vocational Distributive Education Courses	238
Religious Organizations	262	Vocational Distributive Education Curriculum	73
Requirements for Graduation	49, 51	Vocational Industrial Courses	246, 247
Residence Halls	50, 257	Vocational Industrial Curriculum	74
Residence Requirements	48	Vocational-Industrial and Technical Education Courses	239-247
Retailing Courses	224-226	Vocational Office Training Curriculum	98
Room and Board	49	Western's Campus Stores	263
R.O.T.C.	145, 146, 267	Wildlife Preserve	258
R.O.T.C. Credit and Physical Education	148	Withdrawal from Courses	45
Rural Elementary Curriculum	66-68	Writing Clinic	264
Rural Life and Education, Degrees	66, 67		

