



Western Michigan University  
ScholarWorks at WMU

---

Western Michigan University Course Catalogs  
(1904-present)

Western Michigan University

---

3-1956

## Bulletin: Western Michigan College Graduate Division 1956 Summer Session

Western Michigan University

Follow this and additional works at: [https://scholarworks.wmich.edu/course\\_catalogs](https://scholarworks.wmich.edu/course_catalogs)



Part of the Higher Education Commons

---

### WMU ScholarWorks Citation

Western Michigan University, "Bulletin: Western Michigan College Graduate Division 1956 Summer Session" (1956). *Western Michigan University Course Catalogs (1904-present)*. 103.  
[https://scholarworks.wmich.edu/course\\_catalogs/103](https://scholarworks.wmich.edu/course_catalogs/103)

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](mailto:wmu-scholarworks@wmich.edu).



**GRADUATE DIVISION**

# **BULLETIN**

**1956 Summer Session**

**1956-57 College Year**

**ERN MICHIGAN COLLEGE KALAMAZOO**



*Bulletin*

**WESTERN MICHIGAN COLLEGE**  
**KALAMAZOO, MICHIGAN**

**GRADUATE DIVISION**

**SUMMER SESSION 1956**  
**COLLEGE YEAR 1956-57**



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

---

**Vol. 51, No. 3**

**March 1956**

Published four times annually by Western Michigan College: October, February, March and April. Entered as Second Class Matter, January 5, 1905, at the Post Office at Kalamazoo, Michigan, under Act of August 24, 1912.



# TABLE OF CONTENTS

Administration .....	Page 4-5
Rules and Regulations .....	6-14
Tuition and Fees .....	11-12
Graduate Curricula .....	15-21
Curriculum Development and Coordination .....	17
Elementary Administration and Supervision .....	17
General Administration and Supervision .....	18
Guidance .....	19
School Librarianship .....	19
Special Education .....	20
Secondary School Administration and Supervision .....	22
Teaching in the Elementary School .....	23
Teaching in the Junior High School .....	23
Teaching of Art .....	24
Teaching of Business Education .....	24
Teaching of Distributive Education .....	25
Teaching of Home Economics .....	25
Teaching of Industrial Education .....	26
Teaching of Literature and Language .....	26
Teaching of Music .....	27
Teaching of Occupational Therapy .....	27
Teaching of Physical Education .....	28
Teaching of Science and Mathematics .....	28
Teaching of the Social Sciences .....	29
Teaching of Speech Education .....	29
Description of Graduate Courses .....	31-80
Graduate Studies (Seminar) .....	31
Division of Fine Arts .....	32-36
Art .....	32
Music .....	33
Occupational Therapy .....	35
Division of Languages and Literature .....	36-41
English .....	36
Language .....	38
Speech .....	39
Division of Physical Education, Health and Recreation .....	42-44
Physical Education for Men .....	42
Physical Education for Women .....	43
Division of Science and Mathematics .....	45-52
Biology .....	45
Chemistry .....	47
Geography and Geology .....	48
Mathematics .....	48
Paper Technology .....	49
Physics .....	50
Psychology .....	51
Division of Social Sciences .....	53-62
Economics .....	53
History .....	55
Political Science .....	58
Sociology .....	61
Division of Teacher Education .....	63-71
Education .....	63
Librarianship .....	70
Division of Vocational and Practical Arts Education .....	71
Business Studies .....	72
Distributive Education .....	74
Home Economics .....	75
Industrial Arts .....	77
Industrial Technology .....	79

## CALENDAR OF GRADUATE EVENTS

June, 1956 - June, 1957

### Summer Session, 1956

June 18, Monday	Registration
June 19, Tuesday	First day of classes
June 21, Thursday	Faculty reception for students
June 23, Saturday	Last day for change of enrollment
June 29, Friday	Diploma applications due
July 7, Saturday	Last day for dropping courses
July 16, Monday	Theses due from summer graduates
July 18, Wednesday	Graduate luncheon
July 26, Thursday	Commencement exercises
July 27, Friday	Session closes

### First Semester, 1956-57

September 22, Saturday	Registration
September 28, Friday	Last enrollment day without late fee
September 29, Saturday	First meeting of Saturday classes and last day of enrollment
October 6, Saturday	Last day for change of enrollment
October 6, 13, 20, 27	Saturday classes meet
October 29, Monday	Diploma applications due
November 3, Saturday	Last day for dropping courses
November 3, 10, 17	Saturday classes meet
November 24	Thanksgiving recess
December 1, 8, 15, 22	Saturday classes meet
December 29 and January 5	Christmas vacation
January 7, Monday	Theses due from fall graduates
January 12, 19	Saturday classes meet
January 26	Final examinations for Saturday classes
January 27, Sunday	Mid-year commencement exercises

### Second Semester, 1957

February 9, Saturday	Registration
February 15, Friday	Last enrollment day without late fee
February 16, Saturday	First meeting of Saturday classes and last day of enrollment
February 23, Saturday	Last day for change of enrollment
February 23	Saturday classes meet
March 4, Monday	Diploma applications due
March 2, 9, 16, 23, 30	Saturday classes meet
March 23, Saturday	Last day for dropping courses
April 6, 13	Saturday classes meet
April 20 and 27	Easter vacation
May 4, 11, 18, 25	Saturday classes meet
June 3, Monday	Theses due from spring graduates
June 1, Saturday	Saturday classes meet
June 8, Saturday	Final examinations for Saturday classes
June 15, Saturday	Commencement exercises

# *Administration*

## State Board of Education

CHARLES G. BURNS  
WALTER F. GRIES

STEPHEN S. NISBET  
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. A.B., Michigan State Normal; A.M., Ph.D., Michigan; LL.D., Ferris Institute	President
Wynand Wichers, LL.D. A.B., LL.D., Hope; A.M., Michigan; Litt.D., Rutgers	Vice President
James H. Griggs, Ed.D. A.B., Harvard; A.M., Ed.D., Columbia	Director of Teacher Education
George H. Hilliard, Ph.D. A.B., A.M., Ph.D., Iowa	Director of Student Personnel and Guidance
George E. Kohrman, Ed.D. B.S., A.M., Ed.D., Missouri	Director of Vocational Education and Summer Session
Elizabeth E. Lichty, Ph.D. A.B., Lake Forest; A.M., Ph.D., Wisconsin	Dean of Women
Vern E. Mabie, A.M. A.B., Western Michigan; A.M., Michigan	Director of Placement and Alumni Relations
Cornelius B. MacDonald, A.M. A.B., Western Michigan; A.M., Michigan	Comptroller
George G. Mallinson, Ph.D. A.B., A.M., New York State; Ph.D., Michigan	Director of Graduate Studies
Clayton J. Maus, M.S. B.S., Ashland College; M.S., Wisconsin	Registrar
J. Towner Smith, A.M. A.B., Western Michigan; A.M., Michigan	Dean of Men
Otto Yntema, A.M. A.B., A.M., Hope	Director of Field Services

## GRADUATE STAFF

George G. Mallinson, Ph.D.

Director of Graduate Studies

Margaret T. Mabie, A.B.

Secretary

Marion A. Davidson

Receptionist

## GRADUATE ADVISORY COUNCIL

George K. Cooper, M.B.A.

Department of Business Studies

Orie I. Frederick, Ph.D.

Research

James H. Griggs, Ed.D.

Department of Education

George E. Kohrman, Ed.D.

Division of Vocational Education

Stanley E. Kuffel, Ed.D.

Department of Psychology

Floyd W. Moore, Ph.D.

Department of Economics

Frederick J. Rogers, A.M.

Department of English

Katherine M. Stokes, A.M.L.S.

Library

William C. Van Deventer, Ph.D.

Department of Biology

Paul V. Sangren, Ph.D.

Ex-officio

# *Rules and Regulations*

## **Graduate Instruction**

Graduate instruction began at Western Michigan College in February, 1939, under a cooperative arrangement with the University of Michigan. The Board of Regents of the University at their meeting in July, 1938, passed a resolution approving a formal request from the State Board of Education that the University cooperate with the three Michigan Teachers Colleges and Michigan State Normal College in planning a program of graduate instruction. According to this action, a Graduate Division, organized and administered as an extra-mural unit of the Horace H. Rackham School of Graduate Studies, was set up at each of the four colleges.

On October 12, 1951, the State Board of Education approved the proposal of the Presidents of the Colleges of Education to set up independent graduate divisions in each of the four colleges.

The divisions were given permission to develop graduate curricula in all areas involved in the preparation of teachers, administrators and supervisors for the public schools of Michigan as soon as each college believed that it was desirable and possible to do so. The State Board authorized the Colleges of Education to grant the master's degree with specialization in Education to those completing such a program under the rules, regulations and procedures adopted by each institution and approved by the State Board of Education. Western Michigan College decided to inaugurate its own graduate program at the beginning of the fall semester of 1952 as permitted by this State Board action.

The growth of the Graduate Division is evidenced by increasing enrollments. Under the cooperative program the highest enrollment during the academic year was 209 in the fall semester, 1950; under the independent program, 487 in the Spring semester, 1956. The highest summer session enrollment under the cooperative program was 406 in 1950; under the independent program, 729 in 1955.

## **Administration**

The Graduate Division is administered by a Director of Graduate Studies and a Graduate Council of nine members. The members are appointed for terms of three years with the Director acting as Chairman and the President of the College a member *ex-officio*.

## **Permission to Enroll**

Permission to enroll in graduate courses is granted to students who have received a bachelor's degree from an accredited institution.

Note:

1. An accredited institution is one listed as approved by the regional accrediting association. A student from a non-accredited institution

may be allowed to take up to six hours of graduate work at which time his status will be reviewed.

2. Students from Western Michigan College who are within six hours of receiving the bachelor's degree will be permitted to enroll in up to six hours of graduate work during the last semester before receiving the degree.

Permission is granted in this way:

1. A student must complete and submit to the Graduate Office an Application for Permission to Enroll.

2. An official transcript from the institution awarding the bachelor's degree must be filed with the Graduate Office.

3. A pre-enrollment interview must be arranged with the Director of Graduate Studies. An interview will be held only after the student's transcript is on file in the Graduate Office.

4. Students whose transcripts indicate low scholarship in certain areas may be expected to take extra work to remedy such deficiencies. These students may be retained on an unclassified status until such extra work is completed.

## Counseling

At the pre-enrollment interview, unless retained on an unclassified status, the enrollee will be assigned to the graduate adviser for the curriculum he tentatively selects. The duties of the Graduate Adviser are to help a student set up a program which meets all of the requirements for his curriculum, select the courses which will insure the best preparation for his intended goal, plan his schedule from semester to semester, approve his Candidacy for the Master's Degree and, in general, help the student understand the curriculum set up by the Graduate Division. Prior to each enrollment, the student is counseled by the adviser with respect to the courses in which he will enroll.

## Admission to Candidacy for the Master's Degree

A student may apply for admission to candidacy for the degree after completing at least ten semester hours of graduate work in residence with at least an average grade of B. A student is urged to apply for candidacy for the master's degree when ten (10) hours of graduate work in residence have been completed. He must apply, however, prior to electing the last six (6) hours.

Application for candidacy is accomplished as follows:

1. The student must complete and file with the Graduate Office an Application for Admission to Candidacy for the Degree.

2. The student must list on the Application for Admission to Candidacy the name of an employer or critic teacher, and the names of two members of the faculty in whose courses he has been enrolled during the previous four years, who will provide statements testifying specifically to his strength and weaknesses in qualities essential to the teaching



profession, such as: (a) interest in the problems of teaching (b) ability to improve through experience (c) command of the materials and skills pertaining to his professional area (d) understanding of the responsibilities placed upon the school by the community (e) possession of acceptable personal traits and habits (f) possibility of developing into a mature, professional person and (g) command of both written and spoken English.

Note:

The Graduate Office will send to these persons the initial request for such letters. **However, it is the responsibility of the candidate to see that such letters are received by the Graduate Office. If such letters do not arrive the application will not be considered valid.**

3. The student must present at least fifteen hours of undergraduate credit in education courses or the equivalent.

4. The student must submit a program of study approved by his curriculum adviser.

5. The student shall present a certificate attesting to his physical and mental health. The examination for this certificate will be provided without cost by the Health Service and may be scheduled at the time of submitting the application for candidacy.

Note:

Students who have been admitted under the cooperative plan before the fall semester of 1952 shall be automatically admitted to candidacy for the master's degree. These students are nevertheless required to file the application for candidacy blank.

## Requirements for the Degree

In order to satisfy the requirements for the degree of "Master of Arts," the student must complete satisfactorily a **minimum** of thirty hours of graduate work with at least a B average. The thesis, which is optional, may be elected for not more than six hours credit.

**The thirty hours minimum is subject to the regulations that follow:**

### Curriculum Pattern:

All students will be required to complete one of the curricula that have been set up as leading to the degree. The details of these curricula have been established in terms of vocational objectives and are described on pages 15-30 of this bulletin.

**At least fifteen hours must be earned in courses restricted to graduate students.**

Students who started a program of work under the cooperative plan before September, 1952, may, if they desire, complete the required thirty hours for the degree by taking courses recommended under the University sequences.

### **Time Limit:**

Beginning with the summer session of 1954, a student must complete all the work for the master's degree within six consecutive years after the date of his first enrollment in graduate work. Those who enrolled before the summer session of 1954 must complete their work by June 17, 1960.

### **Residence Requirements:**

A minimum of eighteen hours must be taken in on-campus resident credit from the Graduate Division. The remaining twelve hours may be taken in off-campus work. See "Extension Courses" and "Transfer Credit" below.

A student must spend a minimum of one summer session or semester in full-time residence at Western Michigan College before the master's degree will be awarded.

### **Extension Courses:**

A total of twelve hours of approved graduate work may be taken through the Extension Division. These may be counted toward the requirements for the master's degree provided they are approved by the student's curriculum advisor as a part of the student's program of studies.

Students are urged to apply for permission to enroll in the Graduate Division before they elect extension courses at the graduate level.

### **Transfer Credit:**

All credits earned by the student before September, 1952, under the cooperative arrangements with the University of Michigan will be transferred automatically to Western Michigan College with these reservations:

1. The credits must at the time of transfer be acceptable to the University toward the master's degree.
2. They will be subject to the limit indicated above.
3. The student must assume the responsibility of submitting transcripts of such work not taken through the Graduate Division of Western Michigan College.

After the student has been admitted to candidacy for the degree at Western Michigan College a maximum of six (6) hours of graduate work may be transferred from other graduate institutions toward the master's degree provided such courses are satisfactory elections for the curriculum in which the student is enrolled.

1. In order to be acceptable for transfer, enrollment in courses in other institutions may not be more than six (6) years prior to the date of the granting of the master's degree.

2. In order to assure the acceptance of an extension course from another institution for transfer toward the master's degree a student

must request written permission from the Graduate Director for such transfer prior to enrolling in the course.

3. In order for a course to be acceptable for transfer from another institution, a student must have received a grade of at least B in that course.

4. The student must send to the Graduate Office an official transcript of the credits he desires to transfer and request that the credit be applied toward the degree.

## **Student Load:**

### **A. Part-time Students**

Graduate students, if employed during the fall and spring semesters as full-time teachers or school administrators, may elect graduate courses granting not in excess of four hours credit.

1. At the discretion of the Director of Graduate Studies a student may elect graduate courses granting five (5) hours of credit provided such credit shall not involve more than two graduate courses. Such an exception may be granted only once during the work for the master's degree.

2. The restriction to a maximum of four (4) hours applies to all graduate courses a student may elect in one semester whether taken on campus, in extension, and/or at some other institution and offered for transfer credit.

3. A graduate student, during a fall or spring semester, may enroll for the course Ed. 600 Thesis in Education that grants six (6) hours graduate credit. It is assumed that the majority of students who elect this course will require more than one (1) semester to complete the work.

A student may elect the course, Thesis in Education, in units of from two (2) to six (6) hours. This selection may not be made in more than two (2) units and must be made within a calendar year.

### **B. Full-time Students**

A normal load for a graduate student devoting full-time to graduate study shall be twelve (12) credit hours. At the discretion of the Director, permission may be given to elect graduate courses granting not in excess of fifteen (15) credit hours.

### **C. Summer Session**

All graduate students enrolled in the summer session may elect graduate courses granting not in excess of six (6) hours graduate credit.

## **Scholarship**

In order to be awarded the master's degree, a student must have earned a point-hour ratio of at least 5.0.

The following numerical equivalents are assigned to grades given in graduate courses in order to compute point-hour ratios:

A+ = 9	B+ = 6	C+ = 3	D = 0
A = 8	B = 5	C = 2	
A— = 7	B— = 4	C— = 1	

All grades of Incomplete (I) awarded in January, 1955, or thereafter will automatically become D unless removed within one calendar year. This ruling does not apply to the Thesis course—Education 600.

## **Graduation**

Commencement exercises at which the master's degrees are awarded are held at the end of each semester and summer session. The student is loaned the necessary academic regalia and issued the diploma without charge.

Attendance at commencement exercises is considered to be a requirement of the degree.

## **Diploma Applications:**

The student must file a diploma application with the Graduate Office at the beginning of the semester or summer session during which he is reasonably certain of completing the degree. Unless the application is filed on time, the awarding of the degree will be deferred until the next commencement.

## **Registration**

Registration for the Summer Session 1956 will take place on Monday, June 18 from 8:00 A.M. to 12:00 M. and from 1:00 P.M. to 4:00 P.M. Classes for the summer session will begin on Tuesday, June 19 and will continue through Friday, July 27.

Registration for graduate courses for the fall semester will take place on Saturday, September 22 from 8:00 A.M. to 12:00 M. and from 1:00 P.M. to 4:00 P.M. It will continue from Monday through Friday of the following week during the same hours. Students will be allowed to enroll on Saturday, September 29 but will be charged a late enrollment fee of \$5.00. Graduate classes will meet beginning September 24.

Registration for graduate courses for the spring semester will take place on Saturday, February 9 from 8:00 A.M. to 12:00 M. and from 1:00 P.M. to 4:00 P.M. It will continue from Monday through Friday of the following week during the same hours. Students will be allowed to enroll on Saturday, February 16 but will be charged a late enrollment fee of \$5.00. Graduate classes will meet beginning February 11.

Students should consult the **Schedule of Graduate Classes** for time and place of meeting of classes. They should also determine the prerequisites before enrolling in courses. These prerequisites may be found following the course descriptions in this bulletin.

Any changes in graduate enrollment must be made by the end of the third day of the summer session and by the end of the second complete week of the spring and fall semesters. Permission to drop courses may be given through the third week of the summer session and through the sixth week of the spring and fall semesters. Blanks for making such changes in enrollment may be secured at the Graduate Office.

## Tuition and Fees

The following fees will be charged for graduate study.

### SUMMER SESSION

Sem. Hrs.	Tuition Local Total			Tuition Local Total		
		<u>Resident</u>			<u>Non-Resident</u>	
1 - 2	\$ 9.00	\$26.00	\$35.00	\$18.00	\$26.00	\$44.00
3 - 4	18.00	26.00	44.00	36.00	26.00	62.00
5 - 6	27.00	26.00	53.00	54.00	26.00	80.00

### FALL AND SPRING SEMESTERS

Sem. Hrs.	Tuition Local Total			Tuition Local Total		
		<u>Resident</u>			<u>Non-Resident</u>	
1 - 2	\$ 9.00	\$20.00	\$29.00	\$18.00	\$20.00	\$38.00
3 - 4	18.00	26.00	44.00	36.00	26.00	62.00
5 - 6	27.00	32.00	59.00	54.00	32.00	86.00
7 - 8	36.00	38.00	74.00	72.00	38.00	110.00
9 or more	54.00	42.50	96.50	108.00	42.50	150.50

### Fees for Double Registration:

The regulation concerning students taking both graduate and undergraduate work is as follows:

A student taking **more** graduate hours than undergraduate hours will pay graduate fees for the total number of hours taken in both graduate and undergraduate work. In this instance, the undergraduate enrollment card will be stamped "double enrollment."

A student taking **more** undergraduate hours than graduate hours will pay undergraduate fees for the total number of hours taken in both undergraduate and graduate work. The graduate card will be stamped "double enrollment."

In case the student is taking an equal number of hours in both graduate and undergraduate work, he will pay the higher fee.

### Refund of Fees:

#### Summer Session

A student who withdraws seven calendar days or less after the last official registration day will be entitled to a refund of 90 per cent of the total paid.

No refund will be granted if the student withdraws after the seventh calendar day after the last official registration day of the summer session.

No refunds will be granted unless applied for by the 14th day after the last official registration day of the term in which the student withdraws.

Refunds are not automatic upon withdrawal from college but must be applied for at the Business Office within the prescribed time limits. Clearance must be made with the Graduate Office prior to this time.

### **Fall and Spring Semesters**

A student who withdraws from school will be granted a refund according to the following schedule:

Seven calendar days or less after the last official registration day—90 per cent of the total.

More than seven calendar days and less than twenty-two days after the last official registration day—60 per cent of the total.

More than twenty-one calendar days and less than thirty-six days after the last official registration day—40 percent of the total.

More than thirty-five calendar days and less than fifty days after the last official registration day—20 percent of the 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. Refunds are not automatic upon withdrawal from college but must be applied for at the Business Office within the prescribed time limits. Clearance must be made with the Graduate Office prior to this time.

### **Fees for Applied Music:**

During the regular year, there is a special departmental music fee for Applied Music of \$60.00 per semester for one hour per week of private instruction.

During the summer session, there is a special departmental music fee for Applied Music of \$20.00 per semester hour.

### **Housing**

All questions about room, board, and other living expenses should be addressed to the Dean of Men or Dean of Women, Western Michigan College, Kalamazoo, Michigan.

Graduate students are subject to the rules of the Dean of Men and the Dean of Women and to other general regulations of this institution.

### **Graduate Fellowships**

Ten graduate fellowships are available to selected students holding bachelor's degrees from accredited colleges and universities. These fellowships are granted on the basis of merit, to persons planning to pursue full-time work on the campus leading to the degree of Master



of Arts with specialization in Education. Such persons should possess a combination of qualities indicating potential leadership in the field of Education, with specific emphasis on high scholarship and desirable personal attributes.

These graduate fellowships carry a stipend of \$750 for the academic year of two semesters. The fellows are expected to participate in approximately fifteen hours each week of professional activity consistent with their educational aims and objectives. Candidates may elect from eight to twelve semester hours of graduate work each semester. Applications must be filed by March 1, 1957 and may be secured from the Graduate Office.

### **Elmer H. Wilds Graduate Award**

Each calendar year the Graduate Advisory Council may select from among the outstanding graduate students, the one whose achievement and potential bear evidence of outstanding educational leadership. This student will be designated as the **Elmer H. Wilds Scholar**.

In order to be eligible for the Award, a student must have the following qualifications:

1. A point-hour ratio of at least 7.8 for the total graduate program including transferred credit.
2. A high degree of integrity as revealed in the student's relationships with the faculty, and reports of those who work with him.
3. A high moral standard as revealed in the student's personal habits.
4. Attention to personal appearance.
5. A high degree of ability to communicate in class and in conversation.

The award will be honorary and evidenced by a leather folder in which a parchment is enclosed announcing the award and bearing the student's name. It will be awarded at the June commencement.

### **Placement Service Open to Graduate Students**

Many desirable teaching, supervisory, and administrative positions are open each year to candidates in the teaching profession who have had successful experience and advanced scholastic training. The salaries being offered such candidates are excellent.

Graduate students who desire to be eligible for consideration when these positions are available should be properly registered for placement. Any graduate student formerly registered with the Office of Placement and Alumni Relations may keep his permanent placement file active by having current recommendations from employers and professors added to it from time to time. Enrollment in the Graduate Division entitles any student to free placement service whether or not his undergraduate work was taken at Western Michigan College.

Complete information and registration materials may be secured in the office of Placement and Alumni Relations, Room 231, Administration Building. A cordial invitation is extended to all who are interested.

# Graduate Curricula

When submitting the Application for Admission to Candidacy for the Master's Degree, each student must select from the curricula described on the following pages, the one that meets his professional objective. These curricula are based on programs of courses that have a high degree of functional value. The programs in turn are highly flexible in order to provide for the differing needs of the graduate students.

It is obvious that growth in personality and the development of professional abilities are closely related and are highly important in the education of teachers, supervisors, administrators, guidance specialists and other school personnel. Hence, through the counseling process, graduate advisers will aid the students in choosing courses, both cultural and professional, that meet their individual needs. Courses and experiences should be chosen so that the graduate student becomes a more mature and more professionally proficient person—a person with greater professional skills, increased ability to analyze and interpret life situations, and greater insight into problems involved in professional leadership.

It is well for the student to remember that some of the courses listed may not be offered every semester or summer session. This is especially true of courses offered in the academic departments, namely the cognates. Hence if a cognate course, needed in the student's program of studies, is offered during a certain semester it is wise for the student to elect the course that semester.

Occasionally a student will find that some of the suggested courses are repetitions of what he has already taken at the undergraduate level. In such cases, with the approval of the adviser, substitutions may be made, provided that the general requirements for the master's degree are satisfied. When new graduate courses are offered, they may be included in the program of studies with the approval of the adviser.

All the curricula leading to the Master of Arts degree follow the same general pattern. The graduate courses elected for all of them fall into three groups:

Group I Courses in the Department of Education . . 10 sem. hrs.

Group II Courses in Departments other than Education  
10 sem. hrs.

Group III Courses from any Department . . . . . 10 sem. hrs.

## Courses in Group I

For all curricula, students must elect a minimum of ten semester hours of graduate courses in the Department of Education. The elections will be as follows:

<b>Core Courses</b>		(Elect three)	6 hours
Education	501	Educational Research	
	502	The School Curriculum	
	503	Foundations of American Education	
	504	Educational Psychology	

**Electives in Education:** (Elect two) . . . 4 hours  
Total—10 hours

The electives in this group will of course vary. Students interested in elementary education will, in all likelihood, elect four semester hours of graduate courses dealing with the elementary field; those interested in secondary education, with the secondary field. If a student is interested in administration, supervision, curriculum development or teaching it would be assumed that the elections would be oriented toward the area of interest.

A complete list of suitable offerings may be found under the listings for the Education Department on page 63 to 70. Obviously a student will do well to consult with his adviser for suitable elections.

## Courses in Groups II and III

The graduate curricula differ from one another largely in the courses that are elected in Groups II and III. Under Group II, the student must elect ten semester hours of graduate courses in departments other than Education. In the teaching curricula such as Teaching of Science and Mathematics, Teaching of Music, and Teaching of Business Education, the student will concentrate his elections in the respective academic departments or divisions. In the administrative and supervisory curricula, the student is likely to diversify his elections in the areas that fall under his administrative or supervisory activities, particularly in those in which he has an inadequate background. In the elementary curricula, these elections are likely to be made in academic courses designed especially to broaden the backgrounds of elementary teachers.

Under Group III, the student may elect ten semester hours of graduate courses that will extend his knowledge in areas already elected under Groups I and II. Or, he may decide to elect courses in other departments or divisions in which his background is inadequate. In general, if the student decides to elect the thesis option, the six hours of credit for the thesis will fall in this group.

The student should plan carefully with his adviser in selecting courses in Groups II and III so that he, in his graduate study, may do more than merely accumulate graduate credits.

The various graduate curricula together with their course patterns follow.

# CURRICULUM DEVELOPMENT AND COORDINATION

Orie Frederick, Adviser

This curriculum is designed for elementary and secondary school teachers who are or plan to become heads of departments, supervisors of instruction and curriculum directors.

It is desirable for a student in this curriculum to have a year or two of teaching experience or its equivalent before becoming a candidate for the Master's Degree.

## I. Courses in Education Department . . . . 10 hours (See page 16.)

## II. Courses Outside the Education Department . 10 hours

These courses must be selected with the advice and approval of the graduate adviser from those approved for graduate study in the various divisions of the college. Courses may be chosen from one or more departments or divisions as indicated by the needs of the graduate student in preparing for his or her vocational objective.

## III. Courses from Any Department . . . . 10 hours

These courses should be selected with the advice and approval of the graduate adviser in such a way as to meet the individual and professional needs of the graduate student. Some courses suggested for consideration are:

Education	411A	Elementary Curriculum
	438	Audio-Visual Education
	481	Techniques of Guidance
	513	Elementary School Supervision
	522	Teaching in the Core Curriculum
	524	Secondary School Administration and Supervision
	530	Improvement of Reading in Secondary Schools
Sociology	540	Social Dynamics of Human Behavior
Voc. Div.	470	Prin. of Practical Arts and Vocational Education

# ELEMENTARY ADMINISTRATION AND SUPERVISION

John A. Buelke, Adviser

It is desirable for a student in this curriculum to have a year or two of teaching experience or its equivalent before becoming a Candidate for the Master's Degree.

## I. Courses in Education Department . . . . 10 hours (See page 16.)

## II. Courses Outside the Education Department . . . 10 hours

These courses may be selected from the graduate offerings of any of the departments, other than Education, with the advice and approval of the Curriculum Adviser. Some courses suggested for consideration are:

Biology	414	Materials for School Health Education
English	403	Source Materials for Literature in Elementary Grades
Geography	411	Historical Geography of North America
Ind. Arts	464	Industrial Arts for the Elementary School
Librarian	405	Curriculum Enrichment Materials
Science	503	Science for Elementary Teachers
Sociology	540	Social Dynamics of Human Behavior
Speech	406	Public Speaking II

## III. Courses from Any Department . . . 10 hours

# GENERAL ADMINISTRATION AND SUPERVISION

Roy C. Bryan, Adviser

It is desirable for a student in this curriculum to have a year or two of teaching experience or its equivalent before becoming a candidate for the Master's Degree.

## I. Courses in Education Department . . . 10 hours (See page 16.)

## II. Courses Outside the Education Department . . . 10 hours

These courses must be selected with the advice and approval of the Curriculum Adviser from those approved for graduate study in the various divisions of the college. Courses may be chosen from departments or divisions as indicated by the needs of the graduate student.

Following are a few suggestions:

Biology	414	Materials for School Health Education
Economics	525	Public School Finance
Phys. Ed.	501	Current Studies in Adm. of Phys. Educ.
Sociology	540	Social Dynamics of Human Behavior
Speech	406	Public Speaking II
Voc. Educ.	470	Prin. of the Practical Arts and Vocational Education

## III. Courses from Any Department . . . 10 hours

## GUIDANCE

Arthur J. Manske, Adviser

It is desirable for a student in this curriculum to have a year or two of teaching experience or its equivalent before becoming a candidate for the Master's Degree.

- I. Courses in Education Department . . . . . 10 hours  
(See page 16.)

- II. Courses Outside the Education Department . . . . . 10 hours

The fields of psychology, sociology and economics should be explored for elections in this group.

Some specific courses suggested for consideration are:

Sociology	540	Social Dynamics of Human Behavior
Speech	406	Public Speaking II
Voc. Educ.	470	Prin. of the Practical Arts and Vocational Education

- III. Courses from Any Department . . . . . 10 hours

## SCHOOL LIBRARIANSHIP

Alice Louise LeFevre, Adviser

This curriculum is planned to prepare candidates for administration and supervision of libraries in elementary or secondary schools and to provide opportunity for prospective teachers and school administrators to study patterns of library service to schools and the role of the library in the school curriculum.

- I. Courses in Education Department . . . . . 10 hours  
(See page 16.)

- II. Courses in Librarianship . . . . . 10 hours

Libr.	403	Selection of Reading Materials	2 hours
	411	Reference Service	2
	470	Introduction to Classification and Cataloging	4
	509	History of Books and Printing	2



### III. Courses from Any Department . . . . . 10 hours

Libr.	402	Reading Interests of Young Adults	
	*405	Curriculum Enrichment Mat'ls	2
	406	Storytelling	2
	511	Subject Bibliography	2
	561	Seminar in Admin. Problems of School Libraries	2
	562	Foundations of Librarianship	2
	570	Advanced Classification and Cataloging	2

\*Required of those preparing for elementary school libraries.

Courses from other departments may be elected by students who present 12-16 semester hours of library science upon admission to this program.

#### NOTE:

1. Candidates in this curriculum are required to have ten semester hours in preliminary library science either in the undergraduate program or its equivalent in courses which include basic principles of selection, organization and administration of library materials and use of reference books. The program of study for each student will be planned according to specific needs and purpose. Courses recommended are determined by the undergraduate preparation of the student. A total of 30 semester hours in library science is required but 10 of these may be on the undergraduate level.

2. Candidates who wish to write a thesis may elect Education 600 in place of one of the electives in Group I and two of the courses in Group III.

3. Candidates in the librarianship curriculum are required to spend some time in field work in selected school libraries. This is to be arranged on an individual basis with the Director of the Department of Librarianship.

## SPECIAL EDUCATION

Manley M. Ellis, Adviser

### I. Courses in Education Department . . . . . 10 hours (See page 16.)

### II. Courses Outside the Education Department . . . . . 10 hours

Required Courses in Industrial Arts . . . . . 4 hours

463 Arts and Crafts for Teachers

464 Industrial Arts for the Elementary School

The following are especially recommended:

Sociology	442	Social Pathology and Personal Deviation
	446	Juvenile Delinquency and the Community
	540	Social Dynamics of Human Behavior
Psychology	505	The Deviant Individual
	507	Measurements of Intelligence

### III. Courses from Any Department . . . . . 10 hours

Education	570	Directed Teaching	4 hours
(Must be done in the field of special education in which the student intends to teach.)			

#### Specific Courses

Education and other departments:

A.	Teachers of Crippled Children . . . . .	6 hours
B.	Teachers of Deaf and Hard-of-Hearing Children	12 hours
C.	Teachers of Blind Children . . . . .	8 hours
D.	Teachers of Partially Seeing Children . . . . .	8 hours
E.	Teachers of Epileptic Children . . . . .	4 hours
F.	Teachers of Children of Lowered Vitality . . . . .	4 hours
G.	Teachers of Homebound Children . . . . .	4 or 6 hours
(Teachers of homebound children should qualify in the education either of crippled children or of those of lowered vitality.)		
H.	Teachers of Socially Maladjusted Children . . . . .	6 hours
I.	Teachers of Mentally Handicapped Children . . . . .	8 hours
Educ.	432	Education and Control of Mental Deviates
	434	Mental Deficiency
	437	Methods of Teaching Mentally Handicapped Children.

#### NOTES:

1. In electing Specific Courses the student will follow directions, under guidance, of latest edition of Michigan State Department of Public Instruction Bulletin, "Educational Requirements for Teachers of Exceptional Children," pp. 2, 3. Specific courses for all categories, except Teachers of Mentally Handicapped Children, must be taken at other approved colleges under combined guidance of counselors at the college selected and at Western Michigan College.

2. Certain courses in Group II may be substituted for those named if such courses are equivalent to those listed on p. 4, "Educational Requirements for Teachers of Exceptional Children."

3. If the student has acceptable undergraduate credit in, or equivalent of, any of the above, except the three required core courses, he may, under guidance, substitute other courses for those named.

4. In some cases where the student can produce evidence of several years of successful teaching of the type of handicapped children he is preparing to teach, he may be allowed to substitute, under guidance, other courses for 570 Directed Teaching.

# SECONDARY SCHOOL ADMINISTRATION AND SUPERVISION

Roy C. Bryan, Adviser

It is desirable for a student in this curriculum to have a year or two of teaching experience or its equivalent before becoming a candidate for the Master's Degree.

## I. Courses in Education Department . . . . 10 hours (See page 16.)

Besides core courses include:

Educ.	524	Secondary School Administration and Supervision
	560	Principles of Educational Administration

## II. Courses Outside the Education Department . 10 hours

The following are suggested for consideration:

Econ.	525	Public School Finance
	526	Applied Economics for Teachers
Speech	405	Speech for the Classroom Teacher
	406	Public Speaking
	501	Group Problem Solving
Phys. Ed.	501	Current Studies in the Admin. of Physical Education
Geog.	416	Political Geography
Psych.	407	Mental Testing
	502	Measurement of Interest, Aptitude and Personality
	505	The Deviant Individual
	508	Survey of Personnel Psychology
Soc.	446	Juvenile Delinquency
	448	Comparative Culture Studies
	540	Social Dynamics of Human Behavior
	541	Primary Group Dynamics
	544	Techniques of Intercultural Adjustment
	545	The Family
Voc. Ed.	470	Principles of Practical Arts and Vocational Education

## III. Courses from Any Department . . . . 10 hours

In selecting courses in Groups II and III, the student should choose at least one course in each of the following areas: human relations, guidance, psychology, teaching methods, and educational philosophy, together with other courses consistent with his personal and professional interests.

# TEACHING IN THE ELEMENTARY SCHOOL

James H. Griggs, Adviser

- I. Courses in Education Department . . . . . 10 hours  
(See page 16.)

- II. Courses Outside the Education Department . . . . . 10 hours

Some courses suggested for consideration by the student because of their close relationship to the elementary school program are:

Biology	414	Materials for School Health Education
English	403	Source Materials for Lit. in Elem. Grades
Geography	411	Historical Geography of North America
Ind. Arts	464	Industrial Arts for the Elementary School
Libr.	405	Curriculum Enrichment Material
Science	503	Science for Elementary Teachers
Sociology	540	Social Dynamics of Human Behavior
Speech	405	Speech for the Classroom Teacher

- III. Courses from Any Department . . . . . 10 hours

# TEACHING IN THE JUNIOR HIGH SCHOOL

Clara R. Chiara, Adviser

- I. Courses in Education Department . . . . . 10 hours  
(See page 16.)

Besides core courses include:

- Educ. 420 The Junior High School  
522 Teaching in the Core Curriculum

- II. Courses Outside the Education Department . . . . . 10 hours

Graduate courses especially designed as background preparation for junior-high-school teaching are in the process of development. Meanwhile, the following courses are suggested for consideration by students in this curriculum:

Art	503	Creative Arts for Secondary Teachers
Music	403	Psychology of Music Education
Eng.	522	American Literary Themes
	426	Structure of Modern English
Lang.	407	The Central European Area
Speech	405	Speech for the Classroom Teacher
	501	Group Problem Solving
Science	571	The Teaching of Science
Biol.	414	Materials for School Health Education
Geog.	441	Historical Geography of North America
Psych.	505	The Deviant Individual
Econ.	526	Applied Economics for Teachers
Soc.	540	Social Dynamics of Human Behavior
Lib.	402	Reading Interests of Young Adults
	405	Curriculum Enrichment Materials

- III. Courses from Any Department . . . . . 10 hours

## TEACHING OF ART

Harry S. Hefner, Adviser

Students in this curriculum must have completed at least twenty-five semester hours of undergraduate courses in Art, or the equivalent.

**I. Courses in Education Department . . . . . 10 hours**  
(See page 16.)

**II. Courses in Fine Arts and Practical Arts . . . . . 10 hours**

Unless taken previously, the following courses in the Art Department are required:

Art	410	Painting
	414	Advanced Commercial Art
	441	Art Supervision
	501A	Studio Course in Art
	501B	Studio Course in Art

The remainder of the ten hours may be chosen from the following courses:

Home Econ.	439	Consumer Buying
Ind. Arts	405A	Problems in Woodworking
Ind. Arts	405B	Problems in Woodworking
O. T.	425	Ceramics and Jewelry
		Other art courses when added to graduate offerings

**III. Courses from Any Department . . . . . 10 hours**

## TEACHING OF BUSINESS EDUCATION

George K. Cooper, Adviser

**I. Courses in Education Department . . . . . 10 hours**  
(See page 16.)

**II. Courses in Business Studies . . . . . 10 hours**

These courses must be selected from those courses approved for graduate work in Business Studies.

**III. Courses from Any Department . . . . . 10 hours**

# TEACHING OF DISTRIBUTIVE EDUCATION

George E. Kohrman, Adviser

Students desiring to work toward the degree of Master of Arts with specialization in Distributive Education must qualify for a vocational certificate as a coordinator in the field of Distributive Occupations.

**I. Courses in Education Department . . . . . 10 hours**

(See page 16.)

**II. Courses in Distributive Education . . . . . 10 hours**

Voc. Educ.	470	Principles of Practical Arts and Vocational Education
Distr. Educ.	410	Organization and Operation of Distributive Education
	420	Teaching Techniques in Distributive Education
	425	Instructional Materials in Distributive Education
	430	Coordination Techniques in Distributive Education

(If any of the above courses have been taken previously, other courses in Distributive Education may be selected upon the advice of the graduate adviser)

**III. Courses from Any Department . . . . . 10 hours**

A student must elect Vocational Education 520—Occupational Laboratory Experience in this group if it has not been taken previously.

# TEACHING OF HOME ECONOMICS

Eunice E. Herald, Adviser

Students who desire to work toward the Master's Degree with specialization in the teaching of home economics subjects must have completed a major or minor in this field.

**I. Courses in Education Department . . . . . 10 hours**  
(See page 16.)

**II. Courses in Home Economics . . . . . 10 hours**

Voc. Educ.	470	Prin. of Practical Arts and Vocational Education
------------	-----	--

The other eight hours must be selected from those courses approved for graduate study in the Home Economics Department.

**III. Courses from Any Department . . . . . 10 hours**



## TEACHING OF INDUSTRIAL EDUCATION

George E. Kohrman, Adviser

This curriculum is designed for teachers and supervisors of industrial arts subjects, and vocational-industrial teachers, supervisors, and coordinators.

Students who plan to work towards the Master's Degree in this curriculum, Industrial Education, must have completed at least a minor in undergraduate courses in this field.

- I. Courses in Education Department . . . . 10 hours  
(See page 16.)

- II. Courses in Industrial Education . . . . 10 hours

Voc. Educ.	470	Prin. of Practical Arts and Vocational Education
Ind. Educ.	472	Course Planning and Construction
	551	Trends in Industrial Arts

The other four hours must be selected from those courses approved for graduate study in Industrial Education.

- III. Courses from Any Department . . . . 10 hours

## TEACHING OF LITERATURE AND LANGUAGE

Robert M. Limpus, Adviser

This curriculum is planned to prepare teachers of the Language Arts for Secondary Schools. Students who elect this program should have a good foundation in Literary Interpretation, and in English and American Literature.

- I. Courses in Education Department . . . . 10 hours  
(See page 16.)

- II. Courses in English, Languages, and Speech . . 10 hours

These courses must be selected from those approved for graduate study in the Division of Languages and Literature. The courses are found in Departments of English, Languages, and Speech.

- III. Courses from Any Department . . . . 10 hours

# TEACHING OF MUSIC

Elwyn F. Carter, Adviser

This curriculum is designed for students who wish to continue their studies in the field of Music Education.

The student should have graduated with a Music major in his undergraduate degree to obtain permission to work for the master's degree in this curriculum. If the student lacks the necessary preparation to enter courses at the graduate level he may be required to enroll for certain undergraduate courses.

- I. Courses in Education Department . . . . . 10 hours  
(See page 16.)

- II. Courses in the Music Department . . . . . 10 hours

Unless taken previously, the following courses in the Music Department are required:

Music	401	Philosophy and History of Music Education
	403	Psychology of Music Education
	560	Seminar in Music Education

The remainder of the ten hours should be selected from courses approved for graduate study in the Music Department, keeping in mind individual and professional needs.

- III. Courses from Any Department . . . . . 10 hours

# TEACHING OF OCCUPATIONAL THERAPY

Marion R. Spear, Adviser

This course is designed to give a Master's Degree to Occupational Therapists who can present a bachelor's degree and who desire advanced training to prepare them to train and teach Occupational Therapists or to qualify themselves for administrative positions.

- I. Courses in Education Department . . . . . 10 hours  
(See page 16.)

- II. Courses in the Occupational Therapy Department 10 hours

The student will select 10 hours from courses approved for graduate study in the Occupational Therapy Department, according to previous experience and needs.

- III. Courses from Any Department . . . . . 10 hours

## TEACHING OF PHYSICAL EDUCATION

Mitchell J. Gary, Adviser

This curriculum is planned for both men and women who wish to specialize in physical education. Students in this curriculum must have completed at least a minor in undergraduate courses in physical education or the equivalent.

- I. Courses in Education Department . . . . 10 hours  
(See page 16.)

- II. Courses in the Division of Physical Education,  
Health and Recreation . . . . 10 hours

These courses must be selected from those approved for graduate study in the Division of Physical Education, Health, and Recreation.

- III. Courses from Any Department . . . . 10 hours

## TEACHING OF SCIENCE AND MATHEMATICS

Gerald Osborn, Adviser

This curriculum is planned for students whose teaching interests lie in one or more fields of the Division of Science and Mathematics.

A student wishing to work toward the Master's Degree in this curriculum must have completed at least a minor in one of the departments mentioned above or must have satisfied a group minor in the Division of Science and Mathematics. If a student lacks the background knowledge required for a given course, he may be asked to audit a prerequisite course.

- I. Courses in Education Department . . . . 10 hours  
(See page 16.)

- II. Courses in the Division of Science  
and Mathematics . . . . 10 hours

These courses must be selected from those approved for graduate study in the Division of Science and Mathematics. They may be taken in one department or spread over two departments in the division. 401 Teaching of Secondary Mathematics, 571 The Teaching of Science, or any other graduate course in methods listed in this division may be included.

- III. Courses from Any Department . . . . 10 hours

# TEACHING OF THE SOCIAL SCIENCES

Leonard C. Kercher, Adviser

This curriculum is designed for students whose professional interests lie in one or more of the fields comprising the Division of Social Sciences.

For permission to work for the Master's Degree in this curriculum the student must present at least twenty semester hours of undergraduate work in the combined fields of Economics, History, Philosophy, Political Science, and Sociology. If the student lacks the necessary preparation to enter courses on the graduate level, he may be required by the department concerned to audit background courses.

- I. Courses in Education Department . . . . 10 hours  
(See page 16.)

- II. Courses in the Division of Social Sciences . . . 10 hrs.

These courses must be selected from those approved for graduate study in the Division of Social Sciences. They may be concentrated largely in one department or spread over a maximum of three departments in the Division.

- III. Courses from Any Department . . . . 10 hours

# TEACHING OF SPEECH EDUCATION

Charles Van Riper, Adviser

Students in this curriculum must have completed at least eighteen undergraduate hours in Speech or Speech Correction.

- I. Courses in Education Department . . . . 10 hours  
(See page 16.)

- II. Courses in the Speech Department . . . . 10 hours  
(At least one from each sub-group)

A. Speech	452	Stuttering and Allied Disorders
	453	Applied Speech Correction
B. Speech	554	Teaching of Speech Correction
	441	Utilization of Radio and Recordings in the Classroom
C. Speech	442	Teacher's Workshop in Radio
	406	Public Speaking II
	408	Direction of Forensic Activities
	409	Persuasion

### III. Courses from Any Department . . . . 10 hours

The following are suggested: (At least one from each sub-group)

#### A. Education

(Consider courses listed under heading I above and

- |              |     |                                  |
|--------------|-----|----------------------------------|
| A. Education | 534 | Advanced Audiometry              |
|              | 433 | Introduction to Lip Reading      |
|              | 600 | Thesis in Education              |
| B. Speech    | 405 | Speech for the Classroom Teacher |
|              | 451 | Basic Voice and Speech Science   |
|              | 456 | Speech Therapy                   |
|              | 555 | Public School Speech Correction  |

#### C. Other departments or divisions

(Consider:

- |        |     |   |
|--------|-----|---|
| Psych. | 410 | Learning and Memory                     |
| Soc.   | 442 | Social Pathology and Personal Deviation |
|        | 540 | Social Dynamics of Human Behavior)      |

# *Description of Graduate Courses*

Two types of courses are offered in the Graduate Division; (1) Those bearing numbers 500 and above and open only to graduate students, and (2) those bearing 400 numbers and open to both upperclassmen and graduate students. In all courses open to both upperclassmen and graduates, a distinction is made between the work expected from graduate students and that from undergraduates. The work expected from graduates may be of higher quality or greater quantity or both. This applies to courses offered in extension as well as in residence. The student should consult the Schedule of Classes for hours, days of week, and places of meeting for all classes.

## **GRADUATE STUDIES**

### **For Graduates Only**

#### **610 Professional Individual Studies      2 hrs. Summer, Fall, Spring**

Designed for highly qualified advanced graduate students who wish to pursue individual studies or projects under the direction of a member of the graduate faculty. May be elected in any department or division with permission of the student's graduate adviser and of the faculty member under whom the student desires to work. Prerequisite: Acceptance for Candidacy for the Master's Degree. (Application forms may be obtained at the Graduate Office.)

#### **611 Professional Individual Studies      2 hrs. Summer, Fall, Spring**

A continuation of Graduate Studies 610. May be elected in any department or division with permission of the student's graduate adviser, Director of Graduate Studies, and the faculty member under whom the student desires to work. Prerequisite: Acceptance for Candidacy for the Master's Degree, and completion of Graduate Studies 610 with superior accomplishment. (Application forms may be obtained at the Graduate Office.)

#### **612 Professional Field Experience      2-6 hrs. Summer, Fall, Spring**

Designed for highly qualified graduate students who wish to pursue internships or apprenticeships in off-campus activities in industries, institutions or field work. May be elected in any department or division with permission of the student's graduate adviser, a faculty sponsor and the Director of Graduate Studies. Prerequisite: An outline of the purposes of the student's internship or apprenticeship. (Application forms may be obtained at the Graduate Office.)

## **DIVISION OF FINE ARTS**

Elwyn F. Carter, Chairman

This Division includes the Departments of Art, Music and Occupational Therapy.

### **ART**

Hefner, Head; Professor Siedschlag; Assistant Professors Kemper, Paden, Phillips and Smutz.

#### **For Graduates and Upperclassmen**

#### **410 Painting 2 hrs. Summer, Spring**

Painting of still life and landscape, in the studio and outdoors. Water colors are used. The course involves the study of composition, color value, and technique. Prerequisite: Art Structure 106, Elementary Design 105, Art Composition 208, or consent of instructor.

#### **414 Advanced Commercial Art 3 hrs. Fall**

Emphasizes typographic layout, booklet design, letterheads, mailing pieces, packaging and display design and construction. Covers technical methods essential to commercial art. Prerequisite: Commercial Art 214 or equivalent.

#### **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 or equivalents.

#### **For Graduates Only**

#### **501A Studio Course in Art 4 hrs. Summer, Fall, Spring**

Advanced art problems or projects creatively conceived and executed to fulfill student or college needs; such as sculpture and murals.

#### **501B Studio Course in Art 2 hrs. Summer, Fall, Spring**

A continuation of 501A

#### **502 Workshop in Art for Elementary Teachers 2 hrs. Summer**

Provides the foundations of art for elementary teachers who have little or no work in the area. Emphasizes handwork and use of scrap material.

### **503 Creative Arts for Secondary Teachers**

**2 hrs. Post-Session Workshop (July 30-August 10)**

Designed for the teacher who is not an art specialist. Survey of art materials, methods and techniques related to the instructional and learning process for secondary students with emphasis on the junior-high-school level.

## **MUSIC**

Carter, Head; Professors Matthews, Meretta and Stulberg; Associate Professors Beloof, Green and Snyder; Assistant Professors Adams, Beloof, Berger, Brown, Faustman, Kyser and Ramstad.

**For Graduates and Upperclassmen**

### **400 Elementary School Music**

**2 hrs. Spring**

Emphasizes the place of music in the curriculum and the use of music in the day to day activities of the classroom. The fundamental musical skills are developed in order to assist the teacher to achieve these objectives.

### **401 Philosophy and History of Music Education**

**2 hrs.  
Summer, Spring**

Designed to acquaint the student with 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**

Develops understandings of differences in musical ability, various music tests, attitudes toward music and behavior in musical organizations.

### **405A Counterpoint**

**2 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.

### **405B Counterpoint**

**2 hrs.**

A continuation of 405A. Not offered in 1956-57.

### **407 Music of Wagner and Beethoven**

**2 hrs. Spring**

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.



**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 311A, Choral Conducting 311B.

**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: Instrumental Conducting 311A, Choral Conducting 311B.

**455A Orchestration** 3 hrs.

A study of the characteristics of the various instruments, application in arranging for various instrumental combinations including accompaniments for solos, vocal and instrumental. Covers arranging for both band and orchestra. Prerequisite: Advanced Harmony 206A, B. Not offered 1956-57.

**455B Orchestration** 3 hrs.

A continuation of 455A. Not offered in 1956-57.

**456A Advanced Composition** 3 hrs.

Original work in composition dealing with the larger forms in both the vocal and instrumental fields. Prerequisite: Composition 306A, B. Not offered 1956-57.

**456B Advanced Composition** 3 hrs.

A continuation of 456A. Not offered 1956-57.

**For Graduates Only**

**507 Opera and Oratorio** 2 hrs. Fall

Designed to give the graduate student the historical and appreciative background into two of the great vocal forms of music from the 17th century to the present. Style and analysis are considered.

**509 Band Techniques and Organization** 2 hrs.

Organization of the school instructional program. Rehearsal techniques. Survey of band literature. Analysis and discussion of the problems of the instrumental teacher. Not offered 1956-57.

**555 Band Arranging** 2 hrs. Summer

Instruction in scoring for small wind instrument ensembles, and the band. Opportunity will be provided to hear the results of each student's work.

**560 Seminar in Music Education****2 hrs. Summer**

Each participant will be expected to develop a project which is of interest to him, but each project will be subject to group discussion, review and analysis. The lectures and reading will deal with the whole field of Music Education.

**615-688 Private Instruction in Applied Music****1-2 hrs.****Summer, Fall, Spring**

Qualified students may take graduate study in Applied Music for a total of four semester hours in the major performance area (two semester hours per semester) and for a total of two semester hours in a minor performance area (one semester hour per semester). Requires sixty minutes per week of instruction and the necessary practice.

**OCCUPATIONAL THERAPY**

Spear, Head; Assistant Professors Hamlin and Kiss

For Graduates and Upperclassmen

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

Specific instruction in the organization and administration of an occupational therapy department. Supplemented by field trips to hospitals, social agencies, and allied industries.

**410B Medical Lectures****3 hrs. Fall**

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

**410C 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 and orthopedics. Prerequisite: Kinesiology 216A.

**425A Ceramics****2 hrs. Fall**

The design of functional form in clay. Covers ceramic processes, glazing and kiln management. Prerequisite: Design 215 and Art Structure 106.

**425B Jewelry****2 hrs. Spring**

Covers the design and technical essentials of jewelry. Includes study of ceramics, copper, sterling silver, stone-setting and enameling.

**428 Advanced Weaving****2 hrs. Fall**

Gives 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.

**For Graduates Only**

**503 Clinical Training and Scheduling****2 hrs. Summer**

Objectives of clinical training and evaluation of existing hospital training centers. Mechanics of the student training schedule and the student rating program.

**511 Advanced Clinical Training****6 hrs. Summer, Fall, Spring**

A specialized course of study in cerebral palsy, poliomyelitis or physical disabilities. This work is taken on an advanced level at specified training centers. Prerequisite: Clinical Training 411.

**515 Advanced Design****2 hrs. Spring**

A studio course involving manual problems. The planning and construction of forms which lend themselves to utility and fabrication. Individual projects in terms of student's interests and abilities.

**DIVISION OF LANGUAGES AND LITERATURE**

**Mathilde Steckelberg, Chairman**

This division includes the Departments of English, Languages and Speech.

**ENGLISH**

Brown, Head; Professors Limpus and Miller; Associate Professors Gary, Loutzenhiser, Master, Nobbs, Rogers, Smith, and Van Horn; Assistant Professor Burge.

**For Graduates and Upperclassmen**

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

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

**403 Source Material for Literature in the Elem. Grades****2 hrs.**

Acquaints the student with information about books and materials for children's literature. Covers critical and historical literature, children's magazines, records of the literature of childhood and similar materials. Prerequisite: Literature for children 203—or equivalent. Not offered in 1956-57.

**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.

**410 Literary Criticism 2 hrs. Fall**

Readings in ancient and modern writers on the nature of literature and how it may be examined and judged. Discussions and papers give opportunities for practice in evaluation.

**413 Studies in the Novel 2 hrs. Summer, Spring**

A comparative study of the form and function of the novel.

**414 Shakespeare's Tragedies 3 hrs. Summer, Fall**

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. Spring**

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

**416 English Literature, 1660-1730 2 hrs. Summer, Fall**

The writings of Dryden, Swift, Pope, Addison and Steele are read as expressions of the spirit of the period.

**417 English Literature, 1730-1798 2 hrs. Spring**

The decline of the old and the development of new literary interests are studied in the work of Thomson, Gray, Cowper, Blake and others.

**422 Studies in American Literature 2 hrs. Fall**

Literary movements, international literary relationships, works of individual authors and other topics are pursued. The literature of the late nineteenth and twentieth centuries constitutes the material drawn upon.

**426 Structure of Modern English**

**2 hrs. Spring**

A study of structural devices employed in the grammar and syntax of Modern English and of recent developments in linguistic theory. A student entering this course should have a knowledge of the history of the English language.

**For Graduates Only**

**508 Studies in Drama**

**2 hrs. Fall**

A consideration of selected plays with a view toward grasping dramatic method and studying problems of the drama. A research paper is required.

**510 Poetics**

**2 hrs. Fall**

A study of poetry in terms of subject, diction, form, imagery and philosophy, supplemented by readings in the theory of poetry.

**522 American Literary Themes**

**2 hrs. Summer, Spring**

The "search for a subject" evident in American letters is the center of interest in this course, which concentrates on nineteenth-century authors.

**526 Graduate Writing**

**2 hrs.**

A course in writing clear and effective prose. Not offered in 1956-57.

**LANGUAGE**

Steckelberg, Head; Associate Professors Kraft, Noble, and Rothfuss; Assistant Professor Tamin.

**For Graduates and Upperclassmen**

**402 Mythology**

**3 hrs.**

Investigates the origins, elements and interpretation of the principal myths and legends of Greece and Rome; also their preservation not only in literature but also in painting, music, and sculpture. Not offered 1956-57.

**407 The Central European Area**

**2 hrs.**

Deals with the historical, geographical, social and religious problems necessary for an understanding of the Central European situation. Countries included will be Germany, Austria, Switzerland, and Czechoslovakia. Not offered 1956-57.

**408A Contemporary French Literature****2 hrs.**

The aims of this course are to study a few outstanding French novelists and essayists of our time and to examine the works of the masters of the preceding generation whose ideas have been influential to the present day. Not offered 1956-57.

**408B Contemporary French Literature****2 hrs.**

A continuation of French 408A. The aims of this course are to study the history and traditional purposes of the Comedie-Francaise and to make the student aware of the renovation of stagecraft in France under the impulse of great producers. Not offered 1956-57.

**417 Evolution of German Thought****2 hrs.**

A study of the development of Germany and the German national character. Includes a study of selected authors on history, philosophy and pedagogy as well as German literature in translation. No foreign language prerequisite. Not offered 1956-57.

**427 Germany Through the Centuries****2 hrs. Fall**

A study of German cultural history designed to give the student an understanding of the German problem as it developed through the centuries. Geographical, literary, philosophical, educational and art aspects will be investigated. No foreign language prerequisite.

**437 Studies in Contemporary France****2 hrs. Spring**

Investigates extensively phases of French economic, political, social and educational life mentioned in French 207A and B. No foreign language prerequisite.

**442 Instruction in Modern Foreign Languages****2 hrs. Summer**

Designed for teachers of French, German or Spanish in the high school and grades. Covers the psychological principles underlying language learning, the evaluation of current methodology, and cultural materials in the three civilizations, suitable for present-day school use.

**SPEECH**

York, Head; Professors Becker, Brown, Garneau and Van Riper; Assistant Professors Bush, Caughran, Egland and Herman.

**For Graduates and Upperclassmen****405 Speech for the Classroom Teacher****2 hrs. Summer, Spring**

Designed to help the teacher become more effective in speaking and reading. The course content will be adjusted to meet the specific needs of the individual members of the class.

**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. Training in coaching or participating in oratorical contests. Prerequisite: Public Speaking 206, or consent of instructor.

**408 Direction of Forensic Activities****2 hrs. Spring**

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

**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 deals with psychological theories and experimentation in motives and theories in persuasion ethics.

**415 Acting****2 hrs.**

A continuation of Acting 215, with intensive work in the techniques of creative acting. Each student will create at least one role in a play. Prerequisite: Fundamentals of Speech 105A, B, Interpretive Reading 210, Acting 215. Not offered 1956-57.

**416 Oral Interpretation of the Drama****2 hrs. Spring**

Platform reading of the one-act and the three-act play. A basis for judging the drama is established through class analysis and criticism. Prerequisite: Interpretive Reading 210, Acting 215, Interpretive Reading II 310, or consent of instructor.

**421 Teachers' Workshop in Dramatics****4 hrs.**

A practical workshop dealing with the basic skills of theater production. Designed for students with little or no formal training in theater. Not offered 1956-57.

**441 Utilization of Radio****2 hrs. Spring**

An exhaustive study is made of the sources of radio programs and transcriptions available to supplement other teaching aids. The group will study methods of preparation for utilization, techniques of class-listening, and follow-up procedures.

**442 Teachers' Workshop in Radio****4 hrs. Summer**

A practical workshop in radio with emphasis upon the use of radio equipment. Includes planning program series, directing radio production, and editing radio scripts.

**451 Basic Voice and Speech Science****3 hrs. Fall**

For students majoring in speech or speech-correction. Topics 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.

**452 Stuttering and Allied Disorders****3 hrs. Spring**

Designed to acquaint the student with the nature, causes, development, and treatment of the more serious speech disorders. The literature of stuttering, cleft palate, deaf and aphasic individuals will be surveyed as well as the various methods for treating these disorders. Prerequisite: Principles of Speech Correction 251.

**453 Applied Speech Correction****3 hrs. Summer, Fall, Spring**

Deals with the actual practice of speech correction. Involves training in the remedial treatment of speech defectives in the college clinic and schools associated with the college, service in a traveling speech clinic, and the study of the principles of clinical practice. Prerequisite: Fundamentals of Speech 105A, B, Principles of Speech Correction 251, and consent of instructor.

**456 Speech Therapy****2 hrs. Summer, Fall**

Gives intensive training in techniques of speech therapy for disorders of phonation, delayed speech, dyslalia, stuttering and aphasia. Permission of instructor.

**499 Teaching of Speech****3 hrs.**

Emphasizes problems of teaching speech in high schools. Considers aims, principles, materials and techniques related to speech teaching. Not offered 1956-57.

**For Graduates Only****501 Group Problem Solving****2 hrs. Summer**

Presents principles and practices in group problem solving in a democracy. Techniques employed in committee hearing, symposium, panel, forum, and board meeting will be considered.

**554 Teaching of Speech Correction****2 hrs. Spring**

A study of the methods of individual and group therapy for common speech disorders.



## **555 Public School Speech Correction**

**2 hrs.**

Deals with the organization and administration of speech therapy in the public schools. Problems of examination, certification, scheduling, inter-departmental relationships, parent and teacher education, techniques on group therapy, individual therapy and speech improvement methods for the elementary grades are covered. Not offered 1956-57.

## **DIVISION OF PHYSICAL EDUCATION, HEALTH AND RECREATION**

**Mitchell J. Gary, Chairman**

This Division includes the Department of Physical Education for Men and the Department of Physical Education for Women.

### **PHYSICAL EDUCATION FOR MEN**

Gary, Head; Professor Maher; Associate Professors Dales, Gabel, Gill, Hoy, Petoskey, Slaughter, Wietz, and White.

**For Graduates and Upperclassmen**

#### **401 Curriculum Planning in Physical Education 2 hrs. Summer, Spring**

A study and evaluation of present day trends in secondary physical education for boys. A discussion of principles and procedures for curriculum construction and criteria for selection of activities and judging of outcomes.

#### **402 Problems in Interscholastic and Intercollegiate Athletics**

**2 hrs. Summer**

Considers the relationship of athletics to education. Problems in the organization of an athletic program including eligibility, finance, liability, transportation, safety, facilities, and equipment are discussed.

#### **403 Sports Officiating**

**2 hrs. Summer**

Considers rules and officiating techniques with emphasis on football, basketball, baseball and track. Prerequisites: Fundamentals and Techniques 208, 209, 210 and 211 or equivalent.

**For Graduates Only**

#### **501 Current Studies in the Administration of Physical Education**

**2 hrs. Summer, Fall**

A study of representative programs of physical education and a discussion of standards for evaluating such programs.

## **502 Community Recreation**

**2 hrs.**

Considers problems in community recreation. The essential elements pertaining to leadership, areas, facilities, programs, activities and methods of organization and administration are studied. Not offered 1956-57.

## **503 Camp Administration**

**2 hrs.**

Deals with the organization and administration of camps and their program requirements and standards. Consideration is given to philosophy and objectives, personal skills in camp activities and methods of teaching them. Visits to camps are made and out-of-door activities are experienced. Not offered 1956-57.

## **504a, b, c, d Advanced Techniques in the Coaching of Athletics**

**1 hr. Summer**

Considers problems in the coaching of fundamentals, the organization of practice periods and offensive and defensive strategy. Prerequisite: Either coaching experience or completion of an undergraduate course in the sport concerned. a—Football; b—Basketball; c—Baseball; d—Track. Two of these may be taken during the summer session. Consult the summer schedule.

## **505 Advanced Techniques in the Coaching of Minor Sports**

**2 hrs. Summer**

Considers problems and coaching techniques in minor sports such as wrestling, tennis, archery, badminton and golf. Rules and regulations governing meets and play are discussed. Actual participation in the activities is required. Either coaching experience or completion of an undergraduate major or minor in the field of Physical Education is a prerequisite.

## **506 Methods and Materials in Recreation**

**2 hrs. Fall**

A study of the best methods and materials for the teaching and organization of recreation activities. All activities used in recreation will be presented. Opportunities for organization and actual participation and leadership will be given. This course is open to all graduate students.

## **PHYSICAL EDUCATION FOR WOMEN**

Worner, Head; Associate Professor Bottje; Assistant Professors Brown, Crane and Hussey.

### **For Graduates and Upperclassmen**

## **444 Methods in Physical Education**

**3 hrs. Spring**

Fundamental principles underlying the selection of subject matter and the technique of teaching gymnastics, games and rhythmic work for elementary and high-school pupils. Prerequisite: Introduction to Physical Education 170.

**445 Administration and Organization of Physical Education 2 hrs. Fall**

Presents the problems that arise in the everyday experience of the instructor. Considers administration of activities, physical examinations, excuses, special cases, records, schedules, and relations with other services in the school. Prerequisite: Methods in Physical Education 444.

**473 Individual Gymnastics 3 hrs.**

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. Not offered 1956-57.

**For Graduates Only**

**520 Curriculum Building in Physical Education 2 hrs.**

Deals with a practical progressive physical education program for the elementary schools and for secondary school girls. A review of characteristics of children is used as a basis for an analysis of the development of the fundamental and basic skills at the various age levels. Not offered 1956-57.

**531 Rhythms for the Elementary School Child 2 hrs. Summer**

A study of the rhythmic movement needs of the elementary school child—(a) suggested methods of teaching through which children are stimulated to create their own ways of doing—(b) folk and social dancing as outgrowths of movement fundamentals—(c) teaching examples, sample lesson plans, and up-to-date reference sources. The course will consist of lecture and activity classes.

**540 Corrective Therapy and Rehabilitation 2 hrs.**

A study of the physically handicapped child and of the contribution which the physical education program can make in his education. A study is made of muscular re-education for cases of birth injury, poliomyelitis, cerebral palsy and other handicapping deviations. Prerequisite: Applied Anatomy and Individual Gymnastics. Not offered 1956-57.

**550 Problems and Trends in Physical Education 2 hrs. Summer, Spring**

Deals with modern trends and with instructional and supervisory problems involved in conducting an effective program of physical education. Critical appraisal of present practices.

## **DIVISION OF SCIENCE AND MATHEMATICS**

**Charles H. Butler, Chairman**

This Division includes the Departments of Biology, Chemistry, Geography and Geology, Mathematics, Paper Technology, Physics and Psychology.

### **SCIENCE DIVISION**

**Professor Mallinson**

**For Graduates Only**

- 503 Science for Elementary Teachers** **2 hrs.**  
**Post-Session Workshop (July 30-August 10).**

Indicates the part played by science experiences in the development of children, acquaints teachers with types of science content and teaching procedures suitable in elementary education.

- 571 The Teaching of Science** **2 hrs. Spring**

Analyzes and evaluates the objectives of science as a high-school subject and considers modern practices with respect to topics such as classroom method, motivation, laboratory work and directed study.

### **BIOLOGY**

Van Deventer, Head; Professors Bartoo, Hinds and Steen; Assistant Professors Fuller and Reynolds.

**For Graduates and Upperclassmen**

- 410 Economic Botany** **3 hrs.**

A course dealing with plants useful to man for food, flavoring, drugs, cloth and building purposes. A knowledge of plant life of economic value useful to both elementary and secondary teachers is emphasized. Desirable also for students in business and industrial education. Prerequisite: Permission of the instructor. Not offered 1956-57.

- 414 Materials for School Health Education** **2 hrs.**

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 other subjects in the curriculum. Not offered 1956-57.

- 415 Problems of Alcohol Education** **2 hrs.**

Explores the problems associated with drinking alcoholic beverages such as physiological and psychological effects, treatment of alcoholism, and alcohol education in schools. Not offered 1956-57.

**420 Flowering Plants****2 hrs. Summer**

Field study and identification of flowering plants. Students will be expected to use keys for identification, and assemble a herbarium collection. Prerequisite: Eight hours of biology.

**421 Parasitology****2 hrs.**

A study of animal parasites, internal and external, their classification, life histories and ecological relationships. Emphasis is placed on parasites of man and domestic animals. Prerequisite: General Biology 100A and B or equivalent. Not offered 1956-57.

**422 Insect Study****2 hrs. 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: General Biology 100A and B or equivalent.

**440 Mammalogy****2 hrs.**

A study of mammals, their identification, habits, life histories, ecological relationships, economic importance and conservation, with emphasis on North American forms. Prerequisite: General Biology 100A and B or equivalent. Not offered 1956-57.

**441 Advanced Ornithology****3 hrs.**

Investigation of details of song, habitat, habits and identification of shore and marsh birds in their native haunts. Skins of birds of Michigan, both resident and migrant, are provided for identification. Prerequisite: 8 hours of college laboratory courses in biology and permission of instructor. Not offered 1956-57.

**453 Field Studies in Ecology****2 hrs. Fall**

Designed for students who have had basic work in biology and who wish to gain field and laboratory experience in plant-animal interrelationships. Prerequisite: 8 hours of college biology.

**For Graduates Only****500 Recent Advances in Biology****2 hrs. Fall**

Students will be expected to survey extensively current literature in biology at the popular and semi-technical levels, and to report this in the form of an acceptable paper. Minimum prerequisite: Eight hours of college biology and consent of the instructor.

**508 History of Biology****2 hrs. Spring**

Designed to give to graduate students, in addition to an understanding of scientific attitude and methodology, a knowledge of major trends and landmarks in the development of biological science.

**513 Advanced Health Problems****2 hrs. Fall**

Students will be expected to carry on supervised investigation of specific health problems. The investigation should culminate in the preparation of an acceptable paper. Minimum prerequisite: Two semesters of health or biology and consent of the instructor.

**530 Conservation in the Schools****2 hrs.**

Stresses the problems of human, soil, forest, water, and mineral conservation. Prerequisite: Eight hours of college biology or human geography and consent of instructor. Not offered 1956-57.

**CHEMISTRY**

Osborn, Head; Professors Knowlton and Meyer; Associate Professor Boynton.

**For Graduates and Upperclassmen****403A Physical Chemistry****3 or 5 hrs. Fall**

Covers kinetic theories of gases, liquids, solids, solutions, thermodynamics, physical basis for molecular structure, thermo-chemistry, homogeneous equilibria, heterogeneous equilibria, etc. Prerequisite: Quantitative Analysis 202, Physics 203A, B; College Algebra and Analytic Geometry 104A, B or equivalent; and Calculus 205A, B.

**403B Physical Chemistry****3 or 5 hrs. Spring**

A continuation of course 403A. Covers radioactivity, quantum theory, atomic structure, conductance of solutions, pole potentials, oxidation potentials, polarization, chemical thermodynamics, and colloids. Prerequisite: Physical Chemistry 403A.

**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.

## **GEOGRAPHY AND GEOLOGY**

Berry, Head; Professor Stout; Associate Professor Logan; Assistant Professor Brueckheimer.

**For Graduates and Upperclassmen**

### **406 Geography of Michigan**

**2 hrs.**

A study of Michigan in which the major economic, social and recreational activities are covered. The geographical implications of the location of the activities are explained. Not offered 1956-57.

### **410 Studies in Geographic Education**

**2 hrs. Spring**

Gives prospective geography teachers guidance in the selection, organization and presentation of the best materials available in this field. Not open to students who have had Geographic Techniques 303.

### **411 Historical Geography of North America**

**2 hrs. Summer**

Migrations and routes of travel of the various European colonizers. Pattern and progress of settlement together with the geographical conditions encountered in developing each part of the continent for human use. Prerequisite: Geography 105A or consent of instructor.

### **416 Political Geography**

**2 hrs.**

Study of the resources, peoples, and geographic-political problems of the various nations and empires of the world from the point of view of the reciprocal relations involved. Not offered 1956-57.

### **419 Survey of Latin American Geography**

**2 hrs. Fall**

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.

## **MATHEMATICS**

Butler, Head; Professors Beeler and Hannon; Associate Professors Peterson and Sams.

**For Graduates and Upperclassmen**

**401 Teaching of Secondary Mathematics      2 or 3 hrs. Summer, Fall**

Consideration is given to curriculum problems and trends in secondary school mathematics, but the main emphasis will be upon specific problems of teaching mathematics effectively to secondary school students. Prerequisite: Math. 116 or equivalent.

**411 History of Mathematics      2 hrs.**

Treats the history of geometry and trigonometry from earliest times to the present. Prerequisite: Math. 103B, 104B, or 116. Not offered 1956-57.

**412 History of Mathematics      2 hrs. Summer, Spring**

Treats the history of arithmetic and algebra from the earliest times to the present. Prerequisite: Math. 103B, 104B or 116.

**423 Introduction to Higher Geometry      2 or 3 hrs. Summer, 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. Prerequisite: Math. 103B, 104B, or 116.

**473 Introduction to Statistical Analysis      2 or 3 hrs. Summer**

The study of statistics as the science of experimentation: averages, dispersions, sampling, correlation, and statistical tests valid for small or large samples. Prerequisite: Analytic Geometry.

**For Graduates Only**

**501E Mathematics for Elementary School Teachers      2 hrs. Summer**

Emphasizes the understanding of concepts and foundations of mathematics commonly taught in the elementary school and of associated problems of learning and teaching.

**507E Field Work in Mathematics      2 hrs.**

Teaches students the construction and use of simple mathematical instruments. Much time is spent in actual field work. Not offered 1956-57.

**PAPER TECHNOLOGY**

Nadelman, Head; Associate Professor Diehm.



**For Graduates and Upperclassmen**

- 436A Research Problems in Pulp and Paper** 2 hrs. Fall

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

- 436B Research Problems in Pulp and Paper** 2 hrs. Spring

A continuation of course 436A.

- 437 Principles and Practice of Coated Paper Manufacture** 2 hrs.

Lectures on aspects of formulating, preparing and applying pigmented coatings to paper. Lectures on rheology, on control methods, finishing methods and on testing of finished product, with special reference to printability. Laboratory experience in formulation, in laboratory methods of application, in testing and in calendering. Visitations to nearby mills engaged in coating paper and paperboard. Not offered 1956-57.

- 438 Microbiology of Pulp and Paper** 2 hrs.

A lecture course on morphological characteristics and biochemical activities of micro-organisms in the pulp and paper mill. Methods of controlling micro-organisms in the paper industry are evaluated. Prerequisite: A course in bacteriology or equivalent. Not offered 1956-57.

**PHYSICS**

Rood, Head; Professor Marburger; Associate Professors Bradley and Kruglak.

**For Graduates and Upperclassmen**

- 440 Atomic Physics** 3 hrs. Fall

A study is made of the electron, the photoelectric effort, thermionic emission, the physics of X-rays, quantum theory, devices for accelerating nuclear particles, isotopes, spectra, and atomic structure. Prerequisites: Electricity and Light 103B, Calculus 205A, B.

- 441 Nuclear Physics** 3 hrs. Spring

A continuation of Atomic Physics 440. Covers natural and artificial radioactive transformations, the experimental methods of nuclear physics, properties of neutrons, binding energy, nuclear reactions, nuclear structure, fission, and cosmic rays. Prerequisite: Atomic Physics 440.

- 442 Foundations of Modern Physical Theory** 2 hrs. Summer

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.

**443 Theoretical Physics****3 hrs.**

Presents the fundamental structure of physics in precise mathematical terms. The topics will include mechanics from a vector point of view, flow of fluids, electric and magnetic fields. Prerequisites: Electricity and Light 103B, Calculus 205B. Not offered 1956-57.

**462 Electrical Measurements****3 hrs. Fall**

Deals with the theory and use of instruments to measure electrical and magnetic quantities. Both AC and DC bridge methods are included. Prerequisites: Electricity and Light 103B and Calculus 205A, B.

**465 Advanced Electronics****3 hrs. Spring**

Applications of electronics in different types of radio frequency communicating systems, in control devices, and in general instrumentation, are considered in this course. Some laboratory measurements at both audio and radio frequencies are included. Prerequisites: 361, Calculus 205A, B.

**For Graduates Only****501E Modern Advances in Physical Science****2 hrs.**

Treats modern developments in the field of chemistry and physics. Considers topics such as additions to the periodic table, radio-active isotopes, new organic compounds, ultrasonics, semi-conductors and transistors, and nuclear energy. Prerequisite: 16 semester hours in physics and/or chemistry. Not offered 1956-57.

**PSYCHOLOGY**

Kuffel, Head; Professor Carter; Associate Professor Fatzinger; Assistant Professors Asher and McGinnis.

**For Graduates and Upperclassmen****404 Occupational Analysis and Classification 2 hrs. Summer, 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.

**410 Learning and Memory**

**2 hrs. Summer, Spring**

A survey of the general principles of learning and memory and an introduction to learning theory.

**For Graduates Only**

**502 Measurements of Interest, Aptitude and Personality**

**2 hrs. Summer, Spring**

A survey of measures used in areas other than intelligence. Emphasizes theory, methods, construction, evaluation and psychological implications of their use.

**505 The Deviant Individual**

**2 hrs. Fall**

Study of the gifted, mentally defective, neurotic, delinquent and criminal and psychotic; with particular attention to factors in development and to distinctive manifestations of these deviations from the normal.

**506 Clinical Diagnosis**

**2 hrs. Fall**

Introductory study of the nature and application of clinical tools to the study of illustrative cases of problem behavior with consideration of means and methods of clinical treatment. Prerequisite: Psychology 305.

**507 Measurements of Intelligence**

**2 hrs. Fall**

Surveys the present status of intelligence testing, with emphasis on the theory, methods, construction, evaluation and psychological implications of group and individual intelligence tests.

**508 Survey of Personnel Psychology**

**2 hrs. Summer, Spring**

A survey of the psychological problems of personnel administration and the methods of personnel psychology. Lectures, discussions and an occasional laboratory period.

**510 Psychology of Work Effectiveness**

**2 hrs. Spring**

Factors affecting effectiveness of industrial work, such as fatigue and monotony, hours of work, rest pauses, biomechanics, and working conditions, with particular emphasis on psychological aspects.

## **DIVISION OF SOCIAL SCIENCES**

**William V. Weber, Chairman**

This Division includes the Departments of Economics, History, Political Science and Sociology.

### **SOCIAL SCIENCE DIVISION**

Professor Macmillan; Associate Professor Stine.

**For Graduates and Upperclassmen**

#### **400 Teaching of the Social Studies                      2 hrs. Summer, Fall, Spring**

Objectives of teaching of the social studies in the junior and senior high school. 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 2-5 hrs.**

A study of the historical forces molding 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. Not offered 1956-57.

### **ECONOMICS**

Moore, Head; Professors Bigelow, Bowers and Carlson; Assistant Professor Eck.

**For Graduates and Upperclassmen**

#### **420 Public Finance    3 hrs. Fall**

A study of government expenditure, revenues, debts and problems of fiscal administration. Prerequisite: Principles of Economics 220A, B. Work in government may be substituted in special cases by permission of the instructor.

#### **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: Principles of Economics 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. Prerequisite: Labor Problems 421A.

**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: Principles of Economics 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: Labor Problems 421A, B, or the consent of the instructor.

**424 International Economics**

**2 hrs. Spring**

Covers international relations with special emphasis on the fundamentals of international trade theory and the impact of national economic policies on international relations. Prerequisite: Principles of Economics 220A and B.

**425 Consumption and Standards of Living**

**2 hrs. Summer**

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. Prerequisite: Principles of Economics 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. Explains the need for regulation and provides an analysis and evaluation of the various laws from the viewpoint of encouragement, subsidization and control. Prerequisite: Principles of Economics 220A, B. Work in Political Science may be substituted by permission of the instructor.

**427 History of Economic Thought**

**2 hrs. Fall**

Gives the student the historical background for modern economic thinking. Beginning with the leaders of ancient economic thought, the main currents of such thinking are brought down through feudalism, mercantilism, the physiocrats, Adam Smith's influence, the English classical school, socialistic tendencies, and the controversial theories of the present experimental era. Prerequisite: 12 semester hours in Economics.

**428 Comparative Economic Systems****2 hrs. Spring**

The economic institutions and the conditions of capitalism, socialism, communism, fascism and the cooperative movement are critically examined as to ideology and actual operation. Prerequisite: Principles of Economics 220A, B.

**429 Business Administration****3 hrs. Fall**

Covers the elementary principles of internal organization and management of industrial enterprises. Includes plant location and construction; material equipment and power; planning and routing; accounting; market methods; production management; personnel administration; purchasing, traffic, credit and collections. Prerequisite: Principles of Economics 220A, B.

**For Graduates Only****525 Public School Finance****2 hrs. Summer, Spring**

Considers school expenditures, sources of revenue, principles of budget making, techniques of borrowing, bonding, tax allocations, and similar financial problems facing school administrators. These factors are related to public revenues and expenditures.

**526 Applied Economics for Teachers****2 hrs.**

Designed primarily to help in-service teachers. Two or three segments of our present economy, such as: installment buying, concentration of economic power, stocks and bonds, national income, the economic role of governments, the supply and demand theory of prices, banking, capitalism and full employment, cost of living, labor relations and the national debt are critically examined. No prerequisites required. Not offered 1956-57.

**HISTORY**

Russel, Head; Professors Dunbar, Macmillan, Mange and Seibert; Associate Professors Friedmann and Mowen.

**For Graduates and Upperclassmen****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 1956-57.

**404A The Era of the American Revolution, 1763-1787 2 hrs.**

The causes, character and consequences of the American Revolution. The principal aim is to acquaint students with all kinds of historical materials and to introduce them to methods of advanced historical study. Not offered 1956-57.

**404B United States History, 1787-1851 2 hrs.**

The making of the Constitution and establishment of the early republic. Not offered 1956-57.

**405A United States History, 1815-1848 2 hrs. Fall**

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.

**405B United States History, 1848-1877 2 hrs. Spring**

This course deals principally with the great sectional struggle over slavery. It is conducted in the same manner as 405A.

**406A United States History, 1901-1933 2 hrs. Summer**

An intensive study of a short period. Covers the progressive movement, World War I, and the causes of the Great Depression. Prerequisite: six semester hours of history.

**406B United States History, 1933 to the Present 2 hrs.**

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 semester hours of history. Not offered 1956-57.

**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**

Covers the crucial problems of Europe and the solutions offered. Special study of the World Depression; the revolutionary alternatives posed by Fascism and Communism; and the tensions and ideological conflicts culminating in World War II.

**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.**

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. Not offered 1956-57.

**418 The Old South****2 hrs.**

A study of economic, social and cultural conditions in the antebellum South with emphasis on the plantation system and Negro slavery and the social and political philosophy of Southern leaders. Not offered 1956-57.

**425A Intellectual History of Western Man, I (Beginning to 1550)****2 hrs.**

Leading ideas and movements in Western Civilization; their foundations in classical and Judaeo-Christian traditions. Medieval thought and Arab influences. Renaissance and Humanism. The breakup of the medieval system through the Protestant Reformation. Not offered 1956-57.

**425B Intellectual History of Western Man, II (1550-1950)****2 hrs.**

Four hundred years of the "modern mind": the dominance of the scientific perspective and the conflict with Christian ideas and ideals. Rationalism, Enlightenment and the secularization of life. Romanticism, Liberalism, and the challenge of Socialism. Not offered 1956-57.

**426 Twentieth Century Britain****2 hrs. Summer, Spring**

A study of British political, social and economic developments since 1900 and of the changing character of the Empire and Commonwealth.

**430 The Literature of History****2 hrs.**

The two-fold purpose in reading selected writings of great historians is to develop: (1) Standards of evaluation concerning sources, approaches, problems of controversy and of extraneous influences; (2) An appreciation for the pleasures of reading history through its style, story content, personal drama and conflict. Not offered 1956-57.



**For Graduates Only**

**511 Studies in the Near East 2 hrs. Summer**

Studies pertaining to the major aspects of the history of the Near East; involving lectures, supplementary reading and the critical use of historical materials.

**513 Studies in Michigan History 2 hrs. Fall**

Studies in the history of Michigan since its admission as a state. Attention is given to the critical use of historical materials and the preparation of bibliographies.

**515 Eighteenth Century Enlightenment 2 hrs. Summer**

Lectures and reading on the character of the eighteenth century enlightenment, with special attention to France; and the critical use of historical materials in the study of significant *philosophes*.

**519 Studies in Russian History 2 hrs.**

Lectures and reading on those phases of Russian history necessary for an understanding of the present. The critical use of historical materials in the preparation of papers on topics of current significance along two general lines: (a) problems connected with Russia's borders; (b) the evolution of Soviet institutions. Not offered 1956-57.

**522 The United States and Asia since 1945 2 hrs. Spring**

Considers the mid-twentieth century reorientation of United States policy and the shift in balance of power and force in so far as they relate to the Orient.

**524 Studies in the History and Culture of the Old Northwest 2 hrs.**

Reading, discussion and research on various aspects of the development of government, education, social institutions and economic life in the Old Northwest. Not offered 1956-57.

**POLITICAL SCIENCE**

Weber, Head; Associate Professors Clark and Stine; Assistant Professors Greenberg and Plano.

**For Graduates and Upperclassmen**

**437 Current Problems of American Government 2 hrs. Spring**

An advanced study of the issues and policies in government, politics, and economics in their historic and sociological perspectives for elemen-

tary and secondary teachers. Specific units for teaching may be developed by individuals or groups.

**439 Municipal Government**

**2 hrs. Fall**

City governments: their relation to the state, the rights and liabilities of municipal corporations, city pressure groups, and detailed analysis of the forms of municipal governments.

**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 1956-57.

**452 Government and Problems of the Far East**

**2 hrs.**

Covers the governmental organization and an analysis of current problems of organization and administration of countries of the Far East. Attention will be given to the growth of communism, land reform, industrialization efforts, and the development of democratic philosophy. Not offered 1956-57.

**453 Governments of the Soviet Union and Eastern Europe**

**2 hrs.**

The government and politics of the U.S.S.R. and a survey of the new regimes established in Poland, Czechoslovakia, Hungary, Romania and Yugoslavia. Prerequisite: Modern European History or equivalent. Not offered 1956-57.

**454 Governments and Problems of Central and South America**

**2 hrs.**

This course includes a study of the governmental organization and an analysis of some of the more current economic and social problems of selected Latin American countries. Not offered 1956-57.

**465 American Foreign Policy**

**2 or 3 hrs. Spring**

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.

**For Graduates Only**

**520 The Elements of Democratic Government**

**2 hrs.**

Deals with the nature and types of government and the effects of education, technology, tradition and geography. Considers constitutionalism, representation, federalism and means used to achieve political ends. Not offered 1956-57.

**530 National Government****2 hrs.**

Considers the major aspects of the national government of the United States with emphasis upon constitutional questions and inter-governmental relations; executive, legislative and judicial branches; and problems of citizenship and civil liberties. Not offered 1956-57.

**531 State Government****2 hrs.**

Emphasis is placed upon the role of the states in government, the state legislature, the executive, the courts, the role of the citizen, pressure groups and political parties. Not offered 1956-57.

**539 Problems of Municipal Government****2 hrs.**

Deals with problems resulting from the growth of cities; auxiliary departments such as personnel, finance, planning and law; and line departments including police, fire, public works and utilities, public health, parks and recreation. Prerequisite: Political Science 230B or equivalent. Not offered 1956-57.

**540 The Political Process of Government****2 hrs. Fall**

An analysis of political behavior in the United States with particular reference to the growth and internal dynamics of interest groups; the characteristics of the party system; the role of both group and party in relation to public opinion and to the operation of the formal institutions of government.

**560 Problems on International Politics****2 hrs.**

Analysis through case studies of major current international problems, their backgrounds, solutions offered and current status. Not offered 1956-57.

**562 The United Nations****2 hrs. Summer**

The structure and organization of the United Nations and the specialized agencies. Consideration will be given to the procedures and machinery of international cooperation, dispute settlement, legislation and administration of other international systems and agencies.

**593 American Political Thought****2 hrs. Spring**

A survey of the leading American contributions to our political thought, grouped around each of several great eras and issues of our national development.

## **SOCIOLOGY**

Kercher, Head; Associate Professors Horton, Hunt and Manis; Assistant Professor Reid.

### **For Graduates and Upperclassmen**

#### **442 Social Pathology and Personal Deviation 2 hrs. Summer**

A study of the social aspects of personal deviation such as the alcoholic, the drug addict, the marginal man and the sexually maladjusted. Considers deviant behavior in light of social background, causative factors and possible therapy. Prerequisite: Principles of Sociology 241, or Introduction to Contemporary Society 101A, or Social Dynamics of Human Behavior 540.

#### **443 Population Problems 3 hrs.**

The social and cultural factors influencing the reproductive behavior of man are examined. Bio-Social facts are presented and analyzed but primary stress is on the social implications of present and future population trends. Prerequisite: 12 semester hours of Social Science. Not offered 1956-57.

#### **444 History of Social Thought 2 hrs.**

A critical survey of the social thinking of outstanding students of society from Plato to those of modern social science. Prerequisite: Principles of Sociology 241 or Introduction to Contemporary Society 101A, or Social Dynamics of Human Behavior 540. Not offered 1956-57.

#### **446 Juvenile Delinquency and the Community 2-3 hrs. Fall**

A study of juvenile delinquency as a social problem. Extent, causative factors, methods of treatment, and programs of prevention and control are covered. Prerequisite: Principles of Sociology 241, or Social Dynamics of Human Behavior 540, or equivalent.

#### **447 Community Agency Resources 2 hrs. Summer, 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 and teachers.

#### **448 Comparative Culture Studies 2 hrs. Spring**

A comparative study of the structure and the functioning of aspects of culture in Britain and America. Considers the courts, the educational system, the welfare state, class stratification, correctional institutions and political organizations. Prerequisite: Principles of So-

ciology 241, or Introduction to Contemporary Society 101A, or Social Dynamics of Human Behavior 540.

**449 Contemporary Social Movements**

**3 hrs. Spring**

A study of the growth and place in contemporary society of selected social movements, including communism, fascism, Ku Klux Klan and the Townsend movement. Prerequisite: Principles of Sociology 241, or Introduction to Contemporary Society 101A, or Social Dynamics of Human Behavior 540.

**For Graduates Only**

**540 Social Dynamics of Human Behavior**

**2 hrs. Summer, Fall**

The concepts of sociology, cultural anthropology and social psychology essential to understanding human development and social behavior are systematically explored and integrated.

**541 Primary Group Dynamics**

**2 hrs. Spring**

A study of the forces that influence the outcomes of primary group activity. The effects of diverse personalities, of varying leadership roles, of person to person interaction, and of the responses of the group as a whole are considered. Prerequisite: Principles of Sociology 241, or Social Dynamics of Human Behavior 540.

**544 Techniques of Intercultural Adjustment**

**2 hrs. Fall**

A study of intercultural processes of adjustment involving different racial, national and religious groups. The factors giving rise to present day conflict situations are examined and special emphasis is given to techniques of adjustment through individual and community action. Prerequisite: Principles of Sociology 241, or Social Dynamics of Human Behavior 540 or equivalent.

**545 The Family**

**2 hrs.**

The family in a changing society. The family as the mold of child personality; cooperation of school and home in guiding children; sex guidance and family life education in the school. Prerequisite: Principles of Sociology 241, or Social Dynamics of Human Behavior 540. Not offered 1956-57

## **DIVISION OF TEACHER EDUCATION**

**James H. Griggs, Director**

This Division includes the Departments of Education and Librarianship.

### **EDUCATION**

Griggs, Head; Professors Bryan, Buelke, Carter, Chiara, Ellis, Frederick, Hilliard, McClure, Mallinson, Manske, Norrix, Sebaly and Swickard; Associate Professors Engbretson, Govatos, Hunt, Schroeder and Snow; Assistant Professors Boot, McGinnis and Thea.

#### **402 Curriculum Workshop**

**2 hrs.**

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. Not offered 1956-57.

#### **404 Workshop in Human Relations**

**2 hrs.**

Opportunity is provided for teachers, administrators and other personnel to work together in the study and solution of problems in human relations, particularly in the fields of intercultural relations, group process, communication, and home-school-community relations. Resource persons in sociology, psychology, speech, business and education will participate in the workshop. Not offered 1956-57.

#### **410 Parent Education**

**2 hrs. Fall**

Emphasizes home problems that have educational implications for the child. Parent-teacher relationships, council programs, and cooperative efforts for improvement of education in home and school are studied.

#### **411A The Elementary Curriculum**

**2 or 3 hrs. Summer**

A consideration of content and procedures to adapt experiences of pupils in elementary schools to modern conditions and to child needs and interests.

#### **411B The Elementary Curriculum**

**2 or 3 hrs. Spring**

A continuation of 411A. Emphasis will be placed on developing and organizing resource materials for actual use in school systems represented by those taking the course.

**420 The Junior High School****2 hrs. Summer**

A detailed consideration of the basic concepts underlying an effective junior high school program. Study of the development and purposes of the junior high school; curricular organization and problems; co-curricular activities; instructional materials.

**430 Educational Therapy in Reading****2 or 3 hrs. Summer, 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.

**431 Education of Exceptional Children****2 hrs. Summer, 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 Mentally Handicapped****3 hrs.**

The course deals with the roles of the courts, institutions, schools, and other agencies in the control, education, and custody of the mentally handicapped. Not offered 1956-57.

**433A Introduction to Lip Reading****2 hrs.**

Acquaints the student with the various methods of lip reading and the problems encountered in the teaching of this skill. The student is given opportunity to acquire elementary lip reading skill as well as practice in the techniques of teaching. Not offered 1956-57.

**433B Speech for the Deaf****2 hrs.**

Teaching methods used in developing speech in congenitally deaf children. Formation of speech elements and combination into words. Use of residual hearing for speech and voice improvement. Not offered 1956-57.

**433C Language for the Deaf****2 hrs. Summer**

Development and application of principles of English and presentation to deaf children. Covers the Language Principle Method, Barry Five Slate System, Straight Language for the Deaf, and Wing 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

**435 Anatomy and Pathology of the Aural Mechanism      2 hrs. Fall**

A survey of anatomical and physiological subject matter related to the speech field of hearing; functional tests of hearing; and pathological conditions of the ear and labyrinth

**436 Mental Hygiene of Childhood and Adolescence 2 hrs. Summer, 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. Not offered 1956-57.

**438 Audio-Visual Education      2 hrs. Summer, Fall, Spring**

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. Summer  
Post-Session Workshop (July 30-August 10)**

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.

**440 Advanced Audiometry      2 hrs. Spring**

This course deals with the physics of sound, with the ear as a sound receiver, and with clinical methods of measuring hearing. The interpretation of test results for the purposes of re-education and the necessary follow-up measures in an educational hearing program are studied. Students will be given actual practice in group and individual audiometric testing.

**450 Workshop: Education for Moral and Spiritual Values      2 hrs.  
Post-Session Workshop**

Designed as a pilot project of the AACTE Committee on Teacher Education and Religion. Open to teachers, counselors, administrators and others who are interested in helping children and youth develop desirable behavior patterns based on fundamental moral and ethical principles. Involves a study of procedures and activities designed to



develop good value-judgments which will carry over in family, school and community relationships.

**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 1956-57.

**465 Adult Education**

**2 hrs.**

Deals with the organization and financing of formal public school adult education programs, promoting informal adult education activities, leadership training, program planning, and adult education group techniques. Not offered 1956-57.

**480 Introduction to Guidance Services**    **2 hrs. Summer, Fall, Spring**

Surveys the history, principles, problems, methods, organization and administration of guidance. Special attention is centered on the individual, his needs and adjustments, and on counseling procedures.

**481 Techniques of Guidance**

**2 hrs. Summer, Fall, Spring**

Designed to give competencies in the use of school records, instruments of measurement, case studies, interview, group guidance, placement, follow-up and community resources.

**482 Occupational Information for Counselors and Teachers**

**2 hrs.**

**Summer, 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. Not offered 1956-57.

**For Graduates Only**

**501 Educational Research**

**2 hrs. Summer, Fall, Spring**

Acquaints students with the nature and methods of research, with special emphasis upon the practical application of research findings to the solution of educational problems.

**502 The School Curriculum** 2 hrs. Summer, Fall, Spring

A study of educational programs for children and youth, emphasizing principles and problems of curriculum development common to all levels of instruction.

**503 Foundations of American Education** 2 hrs. Summer, Fall, Spring

A study of American education as affected by the great traditions and movements of Western culture. Consideration is given to historical, socio-economic and philosophical factors in the interpretation of modern educational issues and the solution of present-day educational problems.

**504 Educational Psychology** 2 hrs. Summer, Fall, Spring

A study of the forces which motivate behavior and affect the learning process, with particular reference to problems of growth and adjustment, to the development of meaning and insights, and to individual differences.

**512 Guiding Child Development in the Elementary School** 2 hrs.  
Summer, Spring

Designed to help nursery school, kindergarten and elementary school teachers gain an understanding of the manner in which skills, information, attitudes and behavior patterns are acquired and modified. Surveys the contributions made by various curricular areas.

**513 Elementary School Supervision** 2 hrs.

Emphasis is placed on practical problems of educational leadership and supervision in the elementary school. The roles of supervisors, principals, superintendents and teachers are studied. Not offered 1956-57.

**514 Elementary School Administration** 2 hrs. Summer, Spring

Deals with problems confronting the elementary school principal, such as organization of the school program, parent and community relationships, personnel problems, discipline, evaluation and the like.

**520 Improvement of Teaching in Secondary Schools** 2 hrs. Fall

For teachers of experience, high-school principals, and superintendents who desire to consider the larger problems of classroom instruction. Open also to graduate students without teaching experience.

**521 The Secondary School Curriculum** 2 hrs.

Covers modern practices and recent emphases and trends in subject areas of the secondary school curriculum. Prerequisite: 502 The School Curriculum or equivalent. Not offered 1956-57.

- 522 Teaching in the Core Curriculum** 2 hrs. Spring  
Post-Session Workshop (July 30-August 10)  
Designed for teachers and administrators engaged in or preparing for unified programs in junior and senior high schools. Deals with newer practices regarding integration of knowledge from several fields around the needs of secondary youth.
- 523 The Role of the Secondary School in American Society** 2 hrs. Summer  
Considers the place of the high school in the American social scene. Preparation for vocation, citizenship, marriage and family life, and other problems of high school youth are discussed in relationship to major social trends and forces.
- 524 Secondary School Administration and Supervision** 2 hrs. Summer, Spring  
Designed for superintendents, principals and experienced teachers interested in administrative matters. Makes detailed study of the general problems of organization, supervision and management of the high school.
- 530 Improvement of Reading in Secondary Schools** 2 hrs. Fall  
Designed to aid teachers in developing the reading abilities and skills of their students at the secondary level. Emphasizes aims, materials and procedures.
- 531 Clinical Study of Exceptional Children** 2 hrs.  
This course is intended to illustrate methods of diagnosing and treating the problems of exceptional children. Not offered 1956-57.
- 532 Problems in Education of the Mentally Handicapped** 2 hrs.  
Problems in education of mentally handicapped children including educability; philosophy of education of the mentally handicapped; organization of programs; and functions of institutions. Not offered 1956-57.
- 533 Hearing Rehabilitation** 2 hrs.  
Considers lip reading, hearing aids, auditory training and speech re-education as rehabilitative measures. Laboratory teaching of hard-of-hearing children and adults. Not offered 1956-57.
- 550 Evaluation in Education** 2 hrs.  
Designed to develop skills, techniques, attitudes and understandings involved in the measurement and evaluation of individual learning and development as well as in the appraisal of the total school program. Emphasis is placed on the construction, use and interpretation of formal

and informal evaluative devices, and upon the development of a philosophy of evaluation as an integral part of learning. Not offered 1956-57.

**560 Principles of Educational Administration      2 hrs. Summer, Fall**

The philosophy and principles underlying school administration including governmental control, school plant, finance, personnel and the internal organization. Presupposes a rudimentary knowledge of administration and some practical field experience.

**561 Social Interpretation      2 hrs. Summer, Spring**

Deals with community education with respect to the educational program. Considers the principles of educational interpretative service and their application in every phase of the system.

**566 Workshop in Educational Administration (School Buildings)      2 hrs. Summer**

Open to experienced administrators and others interested in working through administrative problems in school systems. Areas to be studied include: school buildings, finance, public relations, internal administrative problems, personnel policies and educational leadership.

**570 Directed Teaching      3-6 hrs. Summer, Fall, Spring**

Open to graduate students who have completed the major portion of professional courses required for certification.

**580 Seminar in Guidance      2 hrs. Spring**

A critical review of the research literature relating to guidance and allied fields. Emphasis will be placed upon the practical application of these findings in the respective schools of the participants.

**581 Interpretation and Use of Tests in Guidance      2 hrs. Fall**

Designed to familiarize students with various psychological tests and scales that may be used in school guidance programs. Tests are taken and scored by students, and the results are interpreted and evaluated.

**583 Organization and Administration of Guidance Programs      2 hrs. Summer, Spring**

Administrative and supervisory problems of guidance directors. Need for local and state administration, function of administration and supervision, improvement of group guidance programs in homeroom and classroom.

**585 Elementary School Guidance**

**2 hrs. Summer, Fall**

Designed to give teachers, administrators and guidance workers an understanding of principles and techniques of guidance programs in elementary schools.

**600 Thesis in Education**

**6 hrs. Summer, Fall, Spring**

Candidates for the Master of Arts degree may elect to write a thesis in a specialized field of education under the supervision of one or more faculty advisers. (See p. 10 for regulation on electing thesis.)

**LIBRARIANSHIP**

LeFevre, Head; Associate Professor Hunt; Assistant Professors Lowrie and Van Zee.

**For Graduates and Upperclassmen**

**402 Reading Interests of Young Adults**

**2 hrs. Summer, Spring**

Study of the fields of literature, both adult and juvenile, of interest to youth. Wide reading of books followed by critical and descriptive analysis. Emphasis on awakening interest in reading.

**403 Selection of Reading Materials**

**2 hrs. Summer, 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.

**405 Curriculum Enrichment Materials**

**2 hrs. Summer, Fall**

Study of selection of teaching material such as books, pamphlets, periodicals, maps and audio-visual materials. Emphasis laid on evaluation of content and on methods of distribution in relation to the school organization.

**406 Storytelling**

**2 hrs. Summer, Fall**

Underlying principles of the art of storytelling; techniques, content and sources of materials. Planning the story hour for developing appreciation of literature and stimulating reading interest.

**411 Reference Service**

**2 hrs. Fall**

Covers basic reference and bibliographic sources in the subject fields. Critical examination of various publications especially as reference sources. Attention given to organization and methods of reference. (Not open to students who have had 311 Reference Service)

**470 Introduction to Classification and Cataloging 4 hrs. Fall**

Principles of classifying and cataloging the book collection, including study and practice in making the dictionary catalog and in classifying materials according to the Dewey Decimal Classification Scheme.

**For Graduates Only**

**509 History of Books and Printing 2 hrs. Summer, Spring**

Studies of the physical book and its relationship to social and cultural developments. Includes history of the alphabets, early writing materials, manuscripts, invention and spread of printing and evolution of production.

**511 Subject Bibliography 2 hrs. Spring**

A study and evaluation of the bibliographical sources in the social sciences, the pure and applied sciences and the humanities. Prerequisite: an introductory course in Reference 302A, B or 311 or 411.

**561 Seminar in Administrative Problems of School Libraries 2 hrs. Spring**

For the experienced school librarian who has had a basic course in administration of school libraries. Analysis of the problems involved in establishing a system of school libraries or information centers in county, city or state units and of problems of supervision.

**562 Foundations of Librarianship 2 hrs. Fall**

Historical development of the American library as a social institution; study of present status and function of the school library in relation to other libraries and to the community.

**570 Advanced Classification and Cataloging 2 hrs. Summer, Spring**

A continuation of 470. Comparison of classification systems; cataloging of special types of materials and methods of organizing centralized cataloging units in school systems. Prerequisite: 470 Introduction to Classification and Cataloging.

**DIVISION OF VOCATIONAL AND PRACTICAL ARTS EDUCATION**

**George Kohrman, Director**

This Division includes the Departments of Business Studies, Home Economics, Industrial Arts, and Vocational-Industrial and Technical Education.

## VOCATIONAL DIVISION

Kohrman, Head

For Graduates and Upperclassmen

### 470 Principles of Practical Arts and Vocational Education

2 hrs. Summer

The place and function of the practical arts and vocational education in the modern school; fundamental principles upon which this work is based.

For Graduates Only

### 520 Occupational Laboratory Experience

4 hrs. Summer

A supervised business and industrial experience program involving full-time employment for at least eight weeks. Students will study and participate in experiences in a specific occupational area. Prerequisite: consent of instructor.

### 578 Administration and Supervision of Practical Arts and Vocational Education

2 hrs. Summer

The functions of administration and supervision; problems involved in the organization and operation of practical arts and vocational education programs.

### 580 Seminar in Vocational Education

2 hrs. Spring

An intensive study of problems related to vocational education. For teachers, coordinators and administrators who have completed at least fifteen hours graduate credit.

## BUSINESS STUDIES

Schneider, Head; Associate Professors Burdick, Cooper, Healey, Lindquist, Null and Wetnight; Assistant Professors Anderson, Kirby, Sokolowski and Trader.

For Graduates and Upperclassmen

### 410A Advanced Accounting

3 hrs. Summer, Fall

This course is designed specifically for the balance sheet accounts. Also included will be corporations and determination of net income. Prerequisite: Accounting 210B.

### 410B Advanced Accounting

3 hrs. Spring

This is a study of accounts for special sales, consolidations and miscellaneous accounting methods.

**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. Prerequisite: Accounting 310A or consent of instructor.

**412 Income Tax Accounting****3 hrs. Summer, Fall**

Federal income tax laws, social security and payroll tax retabulations as they apply to old-age benefits. Prerequisite: Accounting 310A, or consent of instructor.

**423 Life Insurance****2 hrs. Fall**

Deals with the place of life insurance in the over-all financial picture of economic life of the nation. Covers life insurance, not only from its consumer aspects, but also as a vocational field.

**433 Business Report Writing****2 hrs. Summer, 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.

**436 Personnel Administration****3 hrs. Summer, Fall, Spring**

The duties 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.

**440 Advanced Salesmanship****2 hrs. Spring**

A detailed course with background of basic principles and analysis of selling techniques applied principally to specialty fields.

**442 Advanced Advertising****3 hrs. Spring**

A detailed course with special concentration on media, copy and layout. Study and projects on radio, television, newspapers and magazines.



**For Graduates Only**

**501 Principles of Business Education 2 hrs. Fall**

Principles of business education and their implications for the teachers of business subjects. A study of objectives, guidance, occupational research, extra-curricular activities and the growth of business education in the United States.

**502 Curriculum in Business Education 2 hrs.**

Principles, practices and problems involved in the evaluation and construction of business curricula. Not offered 1956-57.

**503 Improvement of Instruction in Shorthand and Secretarial Business Subjects 2 hrs. Summer**

A study of the latest research findings, materials, teaching procedures, tests, and measurements, and possible future development in shorthand.

**504 Improvement of Instruction in Typewriting 2 hrs.**

A study of the latest research findings, materials, teaching procedures, tests and measurements, and possible future developments in typewriting. Not offered 1956-57.

**505 Improvement of Instruction in Bookkeeping and General Business Subjects 2 hrs. Spring**

A study of the latest research findings, materials, teaching procedures, tests and measurements, and possible future developments in the business subject-matter of this field.

**506 Organization and Teaching of Office Practice 2 hrs.**

A consideration of aims and content of office-practice courses in the secondary school, with plans and techniques for organizing and teaching the subject-matter of the course and its laboratory material. Not offered 1956-57.

**DISTRIBUTIVE EDUCATION**

Associate Professors Fidler and Trimpe.

**For Graduates and Upperclassmen**

**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. Consideration is given to advisory committees and local, state and federal relationships.

**420 Teaching Techniques in Distributive Education 2 hrs. Fall**

Deals with the methods and techniques of teaching distributive education in high school and post high school programs. Emphasis is given to the relationship between room activities and on-the-job experiences.

**425 Instructional Materials in Distributive Education 2 hrs.**

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. Not offered 1956-57.

**430 Coordination Techniques in Distributive Education 2 hrs. Summer, Spring**

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-curricular activities in the community.

**435 Job Analysis and Training Programs 2 hrs.**

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. Not offered 1956-57.

**For Graduates Only**

**500A Problems in Distributive Education 2 hrs.**

An intensive study of approved techniques and practices in merchandising. Not offered 1956-57.

**500B Problems in Distributive Education 2 hrs.**

An intensive study of methods used by business and industrial organizations in training personnel. Not offered 1956-57.

**510 Job Supervisory Training 2 hrs. Spring**

Covers the techniques and skills used in supervision of employees. Deals with conference leading, how to train, how to develop the skills of leadership and the corrective interview.

**HOME ECONOMICS**

Herald, Head; Associate Professors Acree, Taylor and Volle; Assistant Professor Stamm.

**For Graduates and Upperclassmen**

**400 Family Living in the Schools 2 hrs. Summer, Spring**

Problems of organizing materials in family living for the purpose of teaching classes and working with groups in the school program.

**416 Advanced Nutrition 3 hrs. Fall**

Study of recent developments in nutrition through readings and experiences. Prerequisite: Home Economics 211 and 311.

**419 Experimental Food 2 hrs. Summer**

Application of principles affecting food preparation. Development of experimental techniques. Individual problems in food preparation. Prerequisites: Chemistry 105A and B and Foods 111.

**421 The Homemaking Center and Equipment 2 hrs. Fall**

Consideration of fundamentals in planning laboratory and living area in terms of needs with special emphasis on built-ins, furnishings and equipment. Selected problems to be chosen by the individual.

**423 Institutional Management 3 hrs.**

Study in institutional administration, job analysis, labor policies, personnel problems and cost control in different types of food-service institutions. Prerequisite: Home Economics 311, 312. Not offered 1956-57.

**425 Food Technology 2 hrs. Spring**

Food preparation with special emphasis on individual problems related to school food teaching units. Study of commercial food preparations.

**439 Consumer Buying 2 hrs. Fall**

Study of marketing problems and consumer credit. Student work on individual problems which concern the technique of buying a specific type of consumer goods. Prerequisite: Consent of instructor.

**For Graduates Only**

**500 Supervision of Home Economics 2 hrs.**

New developments in the teaching of home economics and the supervision of student teaching will be studied. Problems of the students will receive major consideration. Not offered 1956-57.

**502 Coordinated Program in Home Economics** 6 hrs. Summer

A workshop type program for experienced teachers. Three areas of homemaking will be emphasized: clothing construction problems of teachers, teaching of foods on a meal basis and problems in teaching family living. Special consultants will be secured to assist the staff.

**504 Advanced Clothing Techniques** 2 hrs.

This course is planned to meet the needs of the advanced student in clothing construction techniques. Prerequisites: Clothing 205, 305 and the consent of the instructor. Not offered 1956-57.

**505 Advanced Tailoring Techniques** 2 hrs.

Specialized tailoring techniques in coats and suits. Problems in the use and performance of new textiles in clothing included. Prerequisites: 304 and 504. Not offered 1956-57.

**INDUSTRIAL ARTS**

Feirer, Head; Associate Professors Brink, Farnan, Huff and Nichols; Assistant Professor Plough.

For Graduates and Upperclassmen

**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.

**415 Arts and Crafts Techniques** 2 to 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. Not offered 1956-57.

**416 Advanced Problems in Graphic Arts** 2-4 hrs.

Opportunity is provided for the individual student to undertake advanced study of the technical problems in the field of graphic arts. Advanced instruction in imposition, presswork and linotype composition will be available. Not offered 1956-57.

**450 The General Shop Program** 2 hrs. Spring

Covers the place of the general shop in general education and the historical development of the general shop program. Problems of organization, administration, methods, articulation, equipment and supplies will be investigated.

**463 Arts and Crafts for Teachers** 2 hrs. Summer, Spring

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.

**464 Industrial Arts for the Elementary School** 2 hrs. Summer, Fall

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.

**For Graduates Only**

**500 Research in Machine Shop Practices** 2 hrs.

A course designed for teachers who wish to carry out advanced techniques in the area of machine shop. Not offered 1956-57.

**505 Problems in Woodworking** 2 hrs. Summer

Advanced laboratory experiences in some of the more common areas of woodworking such as pattern-making, carpentry, upholstery, caning and finishing. Content selection, project building and new techniques will be covered.

**508 Problems in Metalworking** 2 hrs. Summer

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.

**520 Advanced Drafting Practices** 2 hrs. Summer

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.

**551 Trends in Industrial Arts** 2 hrs.

A study of current literature in the field. Research studies will be reviewed. Commercial and industrial publications will be studied to determine their place in the school shop program. Not offered 1956-57.

**553 Project Planning and Designing** 2 hrs.

A study of the principles of design and their application to shop projects. Special attention will be given to planning and designing new projects that will enrich the school shop program. Not offered 1956-57.

**585 Shop Planning****2 hrs. Summer**

Planning of the shop and selecting the equipment and supplies for an industrial arts laboratory. A study of the basic principles of planning and equipment selection to harmonize with modern industrial arts philosophy.

**INDUSTRIAL TECHNOLOGY**

Giachino, Head; Professor Luff; Associate Professors Beukema and Ellinger.

**For Graduates and Upperclassmen****422 Automotive Transportation Workshop****2 hrs.**

A study of current maintenance procedures and methods of handling specialized equipment in diagnosing and servicing automobiles. Instructional material will be developed for use in teaching automotive courses. Not offered 1956-57.

**424 Automotive Diagnosis and Correction Workshop****2 hrs.**

This course deals with the correct usage of testing equipment for locating and correcting automotive engine malfunctions. It is designed particularly for teachers of auto mechanics. Not offered 1956-57.

**449 Aviation for Classroom Teachers****2 hrs.**

For elementary and secondary school teachers desiring an understanding of various phases of aviation and their relationships to social, political, economic and educational problems. Analysis of various educational activities that are appropriate to different grade levels. Not offered 1956-57.

**452 Teaching of Vocational-Industrial Education****2 hrs. Fall**

Deals with specific techniques used in teaching trade and industrial subjects. Emphasizes teaching problems associated with this type of education.

**460 Cooperative Education in the Secondary School****2 hrs.**

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. Not offered 1956-57.

**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.

**474 Testing and Grading** 2 hrs.

A study of the technique for preparing and using correctly written and practical tests. Attention will be given to interpretation of test results and grading student achievement. Not offered 1956-57.

**476 History and Philosophy of Industrial Education** 2 hrs.

Industrial education in America, with special attention to European influences, experiments, industrial developments and theories. Emphasizes developments leading to modern practices both in industrial arts and in vocational-industrial education. Not offered 1956-57.

**477 Welding for Teachers** 2 hrs.

Instruction on oxy-acetylene, DC and AC arc, Heli-arc, and Atomic-Hydrogen welding. Attention is given to organizing instructional material for setting up welding units in shop classes. Not offered 1956-57.

**478 Exploring Industry** 2 hrs.

Designed for teachers who wish to acquire a better understanding of the various types of industries and their relationship to our social structure. Not offered 1956-57.

**For Graduates Only**

**510 Electricity and Electronics for Teachers** 2 hrs. Summer

Designed for teachers of industrial arts and trades and industry. Deals with basic principles of electronics and the utilization of electricity and electronics in industrial appliances.

**512 Radio and Television** 2 hrs.

Deals with the basic principles of radio and television. Each student will develop the necessary instructional material for use in a teaching situation. Not offered 1956-57.

**530 Materials of Construction** 2 hrs.

Various types of ferrous and non-ferrous metals, woods, cement and plastic will be tested with precision testing equipment. Characteristics of these materials will be studied and their suitability and application determined for fabricating processes. Not offered 1956-57.

**573 Instructional Aids** 2 hrs.

Methods of selecting, constructing and using effectively appropriate aids in various industrial arts and vocational teaching situations. Not offered 1956-57.

**575 Curriculum Construction in Industrial Education** 2 hrs.

Bases for selecting subject matter to be taught in the various fields of industrial arts and vocational education. Relates industrial education program to other curriculum areas. Not offered 1956-57.







- 1. EDUCATION BUILDING & WOMEN'S GYM
- 2. TRAINING SCHOOL - ELEMENTARY & STATE HIGH
- 3. LIBRARY BUILDING
- 4. NATURAL SCIENCES BUILDING
- 5. HEALTH SERVICE BUILDING
- 6. MEN'S GYMNASIUM
- 7. VANDERCOOK HALL
- 8. SPINDLER HALL
- 9. THE THEATRE
- 10. WALWOOD HALL (UNION & DORMITORY)
- 11. GARAGE
- 12. MECHANICAL TRADES BUILDING
- 13. INDUSTRIAL ARTS BUILDING
- 14. WALDO STADIUM - N.W. STANDS
- 15. a. WALDO STADIUM - S.E. STANDS
- 16. HYAMES FIELD
- 17. BUSINESS EDUCATION BUILDING
- 18. THEATRE STORAGE
- 19. ENGLISH HALL
- 20. INDUSTRIAL EDUCATION ANNEX
- 21. MAINTENANCE BUILDING
- 22. GREENHOUSE
- 23. a. BARTOO HOUSE
- 24. b. COLHEON HOUSE
- 25. c. "TY HOUSE" - HERALD OFFICE & BROWN & GOLD OFFICE
- 26. a. HILLSIDE APARTMENTS
- 27. b. HILSDALE APARTMENTS
- 28. MCGRACKEN HALL
- 29. BURNHAM HALL
- 30. MAYBEE HALL
- 31. GRAYER-SIEDSCHLAG HALLS
- 32. KANLEY CHAPEL
- 33. ADMINISTRATION BUILDING
- 34. c. "TY HOUSE" - RESIDENCE
- 35. GOLF COURSE CLUB HOUSE
- 36. PHYSICIAN EDUCATION BUILDING
- 37. PHYSICIAN HOUSE
- 38. DAVIS HALL
- 39. FOOD SERVICE BUILDING
- 40. WOMEN'S DORMITORY
- 41. ELWOOD APARTMENTS

