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Bulletin

Western Michigan University

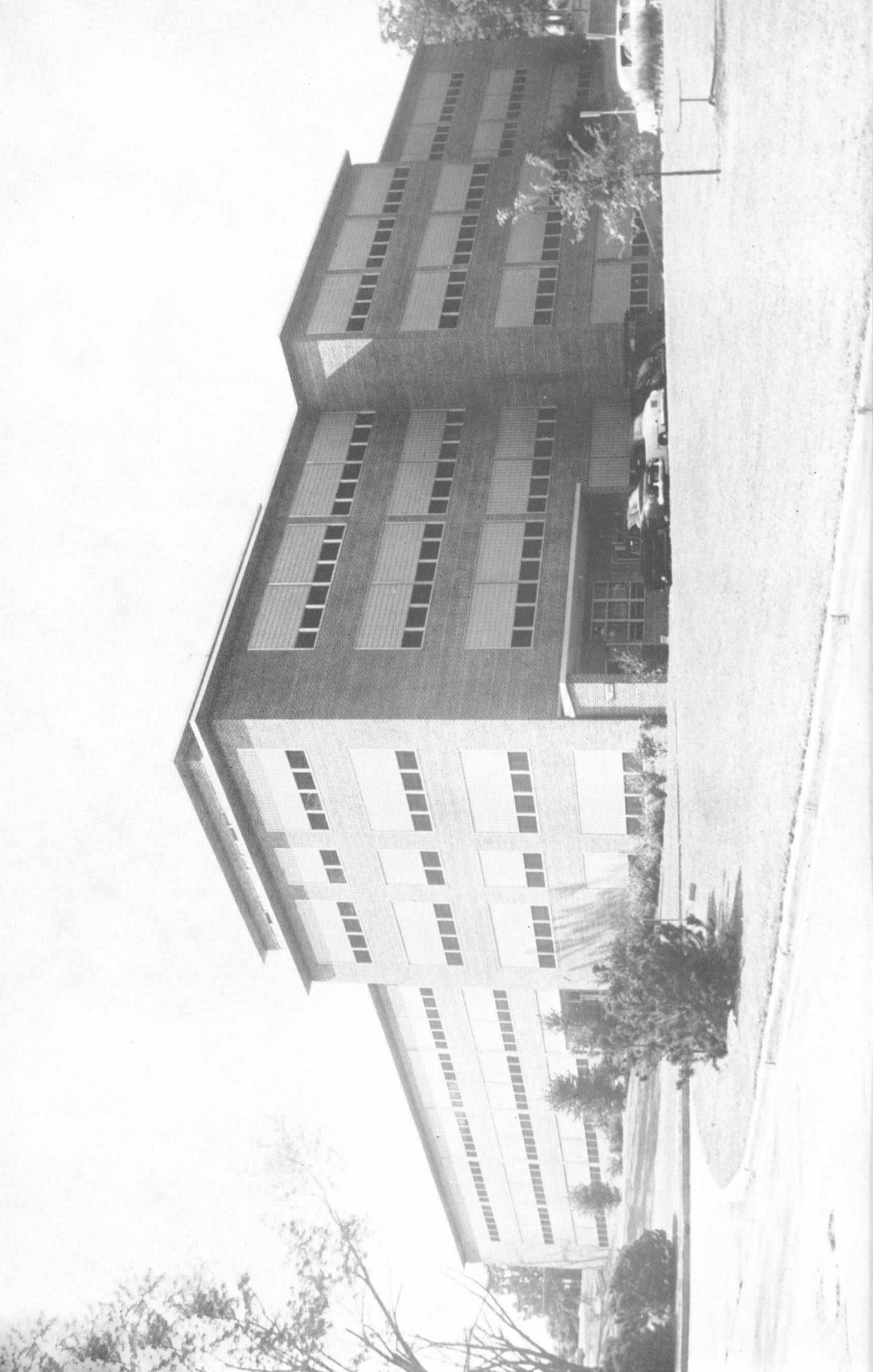


SCHOOL OF GRADUATE STUDIES

1958 Summer School

1958-1959 College Year





Bulletin

WESTERN MICHIGAN UNIVERSITY
KALAMAZOO, MICHIGAN

SCHOOL OF GRADUATE STUDIES

SUMMER SESSION 1958
COLLEGE YEAR 1958-59

This university 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. 53 No. 3

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CALENDAR OF GRADUATE EVENTS

June 1958 — June 1959

Summer Session, 1958

June 23, Monday.....Registration
June 24, Tuesday.....First day of classes
June 26, Thursday.....Faculty reception for students
June 27, Friday.....Last day for change of enrollment
June 30, Monday.....Diploma applications due
July 11, Friday.....Last day for dropping courses
July 21, Monday.....Theses due from summer graduates
July 23, Wednesday.....Graduate luncheon
July 31, Thursday.....Commencement exercises
August 1, Friday.....Session closes
August 4, Monday - August 15, Friday.....Post-Session Workshops

First Semester, 1958-59

September 20, Saturday.....Registration
September 26, Friday.....Last enrollment day without late fee
September 27, Saturday.....First meeting of Saturday classes
and last day of enrollment
October 4, Saturday.....Last day for change of enrollment
October 4, 11, 18, 25.....Saturday classes meet
October 10, Friday.....Diploma applications due
October 31, Friday.....Last day for dropping courses
November 1, 8, 15, 22.....Saturday classes meet
November 29, Saturday.....Thanksgiving recess
December 6, 13, 20.....Saturday classes meet
December 27 and January 3.....Christmas vacation
January 12, Monday.....Theses due from fall graduates
January 10, 17.....Saturday classes meet
January 24, Saturday.....Final examinations for Saturday classes
January 25, Sunday.....Mid-year commencement exercises

Second Semester, 1959

February 7, Saturday.....Registration
February 13, Friday.....Last enrollment day without late fee
February 14, Saturday.....First meeting of Saturday classes
and last day of enrollment
February 21, Saturday.....Last day for change of enrollment
February 21 and 28.....Saturday classes meet

February 27, Friday.....Diploma applications due
 March 7, 14, 21, 28.....Saturday classes meet
 March 20, Friday.....Last day for dropping courses
 April 4.....Easter vacation
 April 11, 18, 25.....Saturday classes meet
 May 2, 9, 16, 23.....Saturday classes meet
 May 25, Monday.....Theses due from spring graduates
 May 30.....Memorial Day vacation
 June 6, Saturday.....Final examinations for Saturday classes
 June 13, Saturday.....Commencement exercises

Note: Classes open **only to graduate students** meet during the week previous to the meeting of Saturday classes. They do not meet during the preceding week if Saturday classes are not scheduled. Courses open to graduates and upperclassmen follow the undergraduate schedule for time of meeting. Classes numbered 600 (500) and above have the first meeting of the second semester during the week beginning February 9, 1959.

Administration

State Board of Education

WALTER F. GRIES
CHRIS H. MAGNUSSON

STEPHEN S. NISBET
LYNN M. BARTLETT

State Superintendent of Public Instruction

LYNN M. BARTLETT

Executive Council of Presidents

CHARLES L. ANSPACH
Central Michigan College

PAUL V. SANGREN
Western Michigan University

EUGENE B. ELLIOTT
Eastern Michigan College

EDGAR L. HARDEN
Northern Michigan College

Officers of Administration

Paul V. Sangren, President
Russell H. Seibert, Vice President, Academic Affairs
L. Dale Faunce, Vice President, Student Services and Public Relations
John A. Goldsworth, Superintendent, Building, Grounds and Construction
James H. Griggs, Dean, School of Education
George H. Hilliard, Director, Counseling
George E. Kohrman, Dean, School of Applied Arts and Sciences
Elizabeth E. Lichty, Dean of Women
Vern E. Mabie, Director, Placement and Alumni Relations
Cornelius B. MacDonald, Comptroller
George G. Mallinson, Dean, School of Graduate Studies
Clayton J. Maus, Registrar and Director of Admissions
Gerald Osborn, Dean, School of Liberal Arts and Sciences
Arnold E. Schneider, Dean, School of Business
J. Towner Smith, Dean of Men
Otto Yntema, Director of Field Services

GRADUATE STAFF

George G. Mallinson, Ph.D.	Dean, School of Graduate Studies
Margaret T. Mabie, A.B.	Assistant to the Dean
Betty A. Kocher	Secretary
Jacqueline M. Peabody	Receptionist

GRADUATE ADVISORY COUNCIL

George E. Bradley, Ph.D.	Department of Physics
George K. Cooper, M.B.A.	School of Business
John L. Feirer, Ed.D.	Department of Industrial Arts
James H. Griggs, Ed.D.	School of Education
George E. Kohrman, Ed.D.	School of Applied Arts and Sciences
Floyd W. Moore, Ph.D.	Department of Economics
Gerald Osborn, Ph.D.	School of Liberal Arts and Sciences
Frederick J. Rogers, Ph.D.	Department of English
Hermann E. Rothfuss, Ph.D.	Department of Languages
Arnold E. Schneider, Ph.D.	School of Business
Paul V. Sangren, Ph.D.	Ex-officio
Russell H. Seibert, Ph.D.	Ex-officio

Rules and Regulations

Graduate Instruction

Graduate instruction began at Western Michigan University in February, 1939, under a cooperative arrangement with the University of Michigan. The Board of Regents of the university at its 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 University decided to inaugurate its own graduate program at the beginning of the fall semester of 1952 as permitted by this State Board action.

Beginning with the year 1956, a number of significant milestones were reached by Western Michigan University, all of which had implications for the graduate program. On July 1, 1956, the administrative organization of the institution was changed to that of a university. At this time, the Graduate Division became an independent unit known as the School of Graduate Studies. On February 26, 1957, the name of the institution was changed to Western Michigan University in recognition of its organization and educational program. On December 23, 1957, the State Board of Education authorized six new programs leading to the master's degree in fields of liberal arts.

Administration

The School of Graduate Studies is administered by a Dean and a Graduate Advisory Council of ten members, consisting of the deans of the other four schools of the university and six members of the faculty appointed for terms of three years each. The Dean of the School of Graduate Studies acts as chairman and the President of the University and the Vice President in charge of Academic Affairs are members *ex-officio*.

Admission to the Graduate Program

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 may be reviewed.

2. Students from Western Michigan University who are within six hours of receiving a bachelor's degree will be permitted to elect a maximum of six hours of graduate work in the semester during which the work for the bachelor's degree is being completed.

Permission to enroll 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 Dean or the Assistant to the Dean to discuss the student's graduate work. An interview will be held only after the student's transcript is on file in the Graduate Office.

Unclassified Status

A student desiring to enroll for work on a non-degree status will be permitted to do so merely by meeting the stipulations described under the preceding section. He may elect any courses he chooses provided he has the necessary prerequisites. However, such a status does not suggest that these courses will be accepted toward a degree program if the student later desires to obtain a master's degree.

Degree Status

A student may seek degree status at the time of initial enrollment or may seek transfer from an unclassified status. This degree status involves two steps:

1. At the time the student indicates his intention to enroll in a degree program, he will confer with the Dean or Assistant to the Dean. At this time, his previous educational record will be examined. If his record indicates satisfactory status, he will be given unqualified permission to seek admission to a degree program. If his undergraduate record indicates low scholarship in certain areas, he will be expected to complete extra requirements without credit to remedy such deficiencies. He will be given qualified permission to seek admission to a degree program, until such deficiencies are removed.

2. The student may obtain admission to a degree program by con-

ferring with representatives of the unit offering that degree program. This conference will be held subsequent to the one described above. At this time, the record of the student will again be examined in order to determine his background for the degree program in which he wishes to enroll. He will be expected to meet the requirements set up by the unit. He may be given unqualified acceptance to this program or qualified acceptance until he completes certain requirements without credit.

Counseling

At the time of acceptance into a degree program, the student will be assigned to an adviser (or advisers) in the unit in which he is seeking a degree. The duties of the adviser(s) are to help the student set up his program, select the courses which will insure the best preparation for his intended goal, plan his schedule from semester to semester, and, in general, assist the student in meeting the requirements of the School of Graduate Studies. Prior to each campus enrollment, the student will be counseled by his adviser(s) 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 be admitted to candidacy, 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 superior and the name of a member of the faculty in whose course he has been enrolled during the previous four years, who will provide letters testifying specifically to his strength and weaknesses in qualities essential to success in graduate school and to his ability to use the English language effectively.

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 these letters do not arrive, the application will not be considered valid.

3. The student must present evidence of having met the prerequisites established by the unit for acceptance into the degree program.
4. The student must submit a program of study approved by his curriculum adviser.
5. The student may, at the discretion of the School of Graduate Studies, be required to present a certificate attesting to his physical and

mental health. The examination for this certificate will be left to the responsibility of the student.

6. A Committee on Candidacy will then examine the application of the student for candidacy and indicate to the Graduate Advisory Council the action recommended.

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 programs that have been set up as leading to the degree. The details of these programs have been established in terms of vocational objectives and are described on pages 17-26 of this bulletin.

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

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 School of Graduate Studies. 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 residence at Western Michigan University 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 adviser as a part of the student's program of studies.

It is required that all students who are enrolled in graduate extension courses must apply for and receive permission to enroll before credit will be given for the graduate work taken through extension. Permission to enroll for **extension courses only** may be secured by filing the regular application and an official transcript of the student's undergraduate work with the Graduate Office. Procedures for permission to enroll are outlined on page 8 of this bulletin.

Transfer Credit

After the student has been admitted to candidacy for the degree at Western Michigan University, 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 Dean 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. Students in other fields may be allowed to elect a maximum of six hours of graduate credit at the discretion of the Dean.

1. At the discretion of the Dean, a student employed in a field of education 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 in the field of education, during a fall or spring semester, may enroll for the course, 700 (600) Thesis, that grants six (6) hours graduate credit. It is assumed that the majority of students who elect this course will require more than one semester to complete the work. A student may elect this course in units of from two to six hours. This selection may not be made in more than two 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 Dean, 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 regular summer session may elect graduate courses granting not in excess of six (6) hours graduate credit. A student may elect a maximum of two (2) hours of graduate credit in the Post-Session Workshops.

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) will automatically become D unless removed within one calendar year.

This ruling does not apply to the thesis course, 700 (600) Thesis.

Courses in which grades of D are earned may not be applied toward the master's degree.

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, 1958, will take place on Monday, June 23 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 24 and will continue through Friday, August 1. Students will be permitted to enroll on Tuesday, June 24 provided they pay the late enrollment fee of \$5.00. **No enrollments will be allowed after this date.**

Registration for graduate courses for the fall semester will take place on Saturday, September 20 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 27, but will be charged a late enrollment fee of \$5.00. **No enrollments will be allowed after this date.** Graduate classes will meet beginning September 22.

Registration for graduate courses for the spring semester will take place on Saturday, February 7 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 14, but will be charged a late fee of \$5.00. **No enrollments will be allowed after this date.** Graduate classes will meet beginning February 9.

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	\$12.00	\$29.00	\$41.00	\$24.00	\$29.00	\$53.00
3 - 4	24.00	29.00	53.00	48.00	29.00	77.00
5 - 6	36.00	29.00	65.00	72.00	29.00	101.00

POST-SUMMER WORKSHOPS

Sem. Hrs.	Tuition Local Total			Tuition Local Total		
	<u>Resident</u>			<u>Non-Resident</u>		
1	6.00	14.00	20.00	12.00	14.00	26.00
2	12.00	14.00	26.00	24.00	14.00	38.00

FALL AND SPRING SEMESTERS

Sem. Hrs.	Tuition Local Total			Tuition Local Total		
	<u>Resident</u>			<u>Non-Resident</u>		
1 - 2	12.00	23.00	35.00	24.00	23.00	47.00
3 - 4	24.00	29.00	53.00	48.00	29.00	77.00
5 - 6	36.00	35.00	71.00	72.00	35.00	107.00
7 - 8	48.00	41.00	89.00	96.00	41.00	137.00
9 or more	66.50	47.50	114.00	133.00	47.50	180.50

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 the university 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 per cent of the total.

More than thirty-five calendar days and less than fifty days after the last official registration day—20 per cent 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 the university 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 University, 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. Such persons should possess a combination of qualities indicating potential leadership in their respective fields with specific emphasis on high scholarship and desirable personal attributes.

These graduate fellowships carry a stipend of \$1,000 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, 1958 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 School of Graduate Studies entitles any student to free placement service whether or not his undergraduate work was taken at Western Michigan University.

Complete information and registration materials may be secured in the office of Placement and Alumni Relations, Room 231, Administration Building.

Graduate Programs

Before submitting the Application for Admission to Candidacy for the Master's Degree, each student must select from the curricula listed on the following pages, the one that meets his professional objective. These programs are based on 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 graduate education. 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. Care should be taken, therefore, to ascertain through the section under "Description of Courses" of this bulletin when the desired courses will be offered. 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.

DEGREES IN EDUCATION

All the curricula leading to the Master of Arts degree in educational fields with the exception of the curricula, Teaching in the Junior College and School Psychologist, follow the same general pattern. The latter curricula differ in several respects and are described in pages 20 and 21, respectively. The graduate courses, elected for other than the two mentioned, fall into the three following 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

Students must elect a minimum of ten semester hours of graduate courses in the Department of Education. The elections will be as follows:

Core Courses:	(Elect three).....	6 sem. hrs.
Educ. 601 (501)	Introduction to Research	
602 (502)	The School Curriculum	
603 (503)	Foundations of American Education	
604 (504)	Educational Psychology	

Electives in Education:	(Elect two)	4
	Total	10 sem. hrs.

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 pages 40 to 48. Obviously a student will do well to consult with his adviser for suitable elections.

Courses in Groups II and III

CURRICULA IN EDUCATION

The graduate curricula in Education 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 or Teaching of Music, 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 are related to his administrative or supervisory objectives, 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 in Education follow:

Curriculum	Advisers	Prerequisite
Curriculum Development and Coordination	Orie I. Frederick	A minimum of one year of teaching experience before candidacy
Elementary Administration and Supervision	<u>John A. Buelke</u>	A minimum of one year of teaching experience before candidacy
General Administration and Supervision	Roland S. Strolle	A minimum of one year of teaching experience before candidacy.
Guidance	Arthur J. Manske	A minimum of one year of teaching experience before candidacy
Secondary School Administration and Supervision	Roy C. Bryan and Roland S. Strolle	A minimum of one year of teaching experience before candidacy
Special Education	Manley M. Ellis	*See below
Teaching in the Elementary School	Sara R. Swickard and Louis A. Govatos	
Teaching in the Junior High School	Clara R. Chiara	
Teaching of:		
Art	Harry S. Hefner	Twenty-five hours in Art or equivalent
Business Education	George K. Cooper	Major or minor in Business or equivalent
Distributive Education	George E. Kohrman	Must qualify for a vocational certificate as a coordinator
Home Economics	Eunice E. Herald	Major or minor in Home Economics
Industrial Education	George E. Kohrman	Major or minor in Industrial Education
Literature and Language	Frederick J. Rogers	Satisfactory foundation in Literary Interpretation, English and American Literature
Music	Elwyn F. Carter	Major in Music
Occupational Therapy	Marion R. Spear	Major in Occupational Therapy

Physical Education	Mitchell J. Gary	Major or minor in Physical Education
Science and Mathematics	Gerald Osborn	At least a minor in one department or in the division of Science and Mathematics
Social Sciences	Leonard C. Kercher	Twenty hours in combined fields of Economics, History, Philosophy, Political Science and Sociology
Speech Correction	Charles Van Riper	Nine hours of undergraduate Speech Correction before or in conjunction with graduate work, and consent of adviser
General Speech	Zack York	Major or minor in Speech with suitable cognates

*Notes:

1. In electing specific courses, the student will follow directions, under guidance, in the 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 college selected and at Western Michigan University.

2. The courses selected in Group II should be equivalents of those listed on p. 4, "Educational Requirements for Teachers of Exceptional Children."

3. If the student has elected some of the courses required in the bulletin as an undergraduate, 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 for whom he is preparing to teach, he may be allowed to substitute, under guidance, other courses for 670 (570) Directed Teaching.

School Psychologist Stanley Kuffel

Michigan teaching certificate and major or minor in Psychology to include courses deemed advisable by the Psychology Department.*

The courses required for this curriculum are:

- Educ. 604 (504) Educational Psychology
- 610 (512) Guiding Child Development in the Elem. School
- 534 (437) Methods and Mat. for Mentally Handicapped Child.
- 533 (432) Education and Control of the Mentally Handicapped
- Psych. 650 (505) The Deviant Individual
- 651 (506) Clinical Diagnosis
- 560 (406) Vocational Psychology
- 681 (502) Meas. of Interests, Aptitudes and Personality
- 680 (507) Measurements of Intelligence
- Educ. 585 (436) Mental Hygiene of Childhood and Adolescence
- Psych. 624 (531) Personality Theory
- 682 (532) Individual Testing
- 661 (535) Psychological Counseling
- 662 (536) Counseling Practicum

***Note:**

1. The psychology courses deemed advisable for a background in this program include: Abnormal Psychology, Psychology of Personality, Laboratory in Psychological Testing, Elementary Statistical Methods in Psychology, Mental Testing, Elementary Experimental Psychology, Learning and Memory, or their equivalents. They must be taken either at the undergraduate level or made up with additional graduate courses.

2. A minimum of thirty-six hours in courses approved by the State Department of Public Instruction in the areas of sociology, psychology and education, twenty-four of which are on the graduate level, will entitle the student to apply for certification as a school psychologist. The pattern of courses to be followed will be arranged through a conference with the adviser.

Teaching in the Junior College	William C. Van Deventer	A certificate to teach in Michigan or fifteen hours of course credit in Education suitable for a Junior College teacher.
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Courses of a professional nature.....6 hours

- Educ. 601 (501) Introduction to Research
- 650 (551) Growth and Development in Later Adolescence
- 690 (590) The Community College

Courses in the major academic field.....14-16 hours

The courses in these areas would be offered by one department such as chemistry, history, English or mathematics. It would be assumed that the student would have an undergraduate major in this area.

Courses in the minor area (related to the major area) ..8-10 hours

It would be assumed that the courses in this area would be based on at least a minor at the undergraduate level, but they should be related to the major field. For example, the area might be political science, economics or sociology, with a major of history. It might be a minor of mathematics with a major of physics, or a minor in psychology with a major in biology. The minor area would enable the person to teach the introductory or survey courses in a field in addition to teaching his specialized departmental courses. Obviously certain flexibility would be necessary in order to handle the needs of individuals.

DEGREES IN SOCIAL SCIENCE

All of the programs leading to the Master of Arts degree in one of the social sciences demand the same basic qualifications for admission and candidacy as described earlier. Certain additional qualifications, however, may be required, depending on the background of the student. In general, in all of these programs, a minimum of twenty hours of graduate work will be elected in the major field and a minimum of six in a field or fields allied with the major.

History

In order to earn the Master of Arts degree in History, a student, in addition to meeting the general requirements of the School of Graduate Studies applicable to all curricula, must satisfy the following departmental requirements:

1. As a prerequisite for admission to candidacy, either (a) presentation of thirty semester hours of undergraduate credit in the social sciences and closely related subjects, including at least fifteen hours of History, or (b) possession of other preparation accepted as the equivalent by the departmental committee.

2. Completion of at least twenty semester hours of work in History including 592 (430) The Literature of History, a course in historical method and at least one seminar.

3. The option of preparing an acceptable thesis for which six semester hours credit will be awarded.

4. Distribution of work among the following fields of history in such manner that, together with his credits in advanced undergraduate courses, the candidate shall have earned not less than eight semester hours in each of three fields, including one European

and one United States: (a) United States to 1865 and contemporary Latin America; (b) United States since 1865 and contemporary Latin America; (c) Ancient and Medieval; (d) Modern Europe, 1500-1815; (e) Modern Europe, 1815 to the present; (f) Asia, including the Middle East and Russia.

Political Science

In order to earn the Master of Arts degree in Political Science, a student in addition to the basic requirements for admission to the School of Graduate Studies, must qualify as follows:

1. Have completed at least twenty-four hours of work in Social Science at the undergraduate level.

2. Complete twenty hours of graduate work in Political Science, to be distributed among the three areas of study listed below with a minimum of four credit hours in each.

- a. American Government and Administration

- b. International Relations and Comparative Government

- c. Political Theory and Methodology

3. Upon recommendation of the major professor, the student will be permitted to write a thesis.

4. Before being recommended for candidacy, the student may be required to pass, with a satisfactory rating or better, an oral examination. The examination will cover bibliographical information as well as the basic subject matter of the field.

Sociology

The master's degree program in Sociology is designed (1) to give students a better understanding of the significant factors and processes of contemporary society, (2) to advance the preparation of those planning to teach in the social-science field, (3) to lay the foundation for more advanced graduate work in Sociology, and (4) to provide professional training for a variety of occupational opportunities in government, industry, research organizations, welfare agencies, correctional systems and the like.

In order to earn the Master of Arts degree in Sociology, a student, in addition to meeting the general requirements of the School of Graduate Studies applicable to all curricula, must satisfy the following departmental requirements:

1. The student must have completed at least twenty-four hours of undergraduate work in the combined fields of Economics, History, Political Science and Sociology with a minimum of twelve semester hours in Sociology, or in equivalent course work approved by the departmental graduate adviser.

2. A student will take a major of twenty hours of graduate work in Sociology in courses that will be selected from the graduate

offerings listed in the graduate bulletin. The program of courses will be worked out in consultation with the departmental adviser.

3. An original thesis may be required of a candidate in which the candidate will demonstrate his competence to use appropriate methods for investigating a sociological problem. An oral examination will be administered covering the thesis problem.

DEGREES IN SCIENCE

As required for the Degrees in Education and Social Studies, the basic qualifications for admission and candidacy remain as described in the first part of this bulletin. The additional qualifications for degrees in Biology and Psychology are listed below.

Biology

While the degree is intended to be a general degree in the field of Biology, it includes a limited amount of specialization in the area of the student's major interest. It is designed to meet the needs of people in teaching, in research, in biological laboratory and field work, and in conservation. It may be used as a foundation for continued graduate work toward a doctor's degree at another institution, or may be considered terminal.

To satisfy the requirements for the master's degree in Biology, a student must complete satisfactorily at least twenty hours of graduate work in Biology and six to ten hours of graduate work in a related field or fields. The choice of the related courses will be made with the recommendation of the student's advisory committee and must involve a demonstrable relationship in terms of the student's goals.

The requirement of a thesis is at the discretion of the advisory committee. The chairman of the student's advisory committee will be a member of the graduate faculty having competence in the area of the student's major interest. Specialization is permitted in any one of the following areas: botany, zoology, ecology, parasitology, genetics, immunology, microbiology, wildlife management, public health and science education.

Psychology

In order to qualify for a master's degree in Psychology, a student must meet all the regular admission standards as well as those of the Psychology Department. In general, the requirements for the degree are as follows:

1. Completion of a major or broad minor at the undergraduate level with satisfactory grades.
2. Completion of at least twenty hours of graduate credit in Psychology with ten hours in an allied field or fields. The distribution of credit will be determined in conference with the ad-

viser and on the basis of the area of psychology in which the student wishes to specialize.

3. A thesis for six hours credit will ordinarily be required. The requirement may be waived with the approval of the student's adviser(s).

4. The areas in which a student may specialize are these:

a. General—for those whose aim is to teach psychology at the college level and who intend to enroll for the doctorate elsewhere.

b. Industrial—for those wishing to specialize in industrial psychology. Five courses should be selected from Psychology 542 (404), 560 (406), 644 (508), 645 (510), 646 (546), 647 (547).

c. Clinical—for those interested in case work and counseling. Their programs should include Psychology 624 (531), 650 (505), 651 (506), 661 (535), and 662 (536).

LIBRARIANSHIP

The purpose of the Librarianship Curriculum is to prepare qualified college graduates for the library profession. The curriculum offers a basic general program of studies at the graduate level in the five major areas of library science: (1) history, philosophy and background of libraries in society; (2) technical processes; (3) library resources; (4) library clientele; (5) library organization and administration. Courses in these areas together with specific electives prepare candidates for the differentiated services in college or university, school, public and special libraries. In addition to the general admission requirements, the student must

a. Give evidence of ability to carry graduate work in library science. Applicants will be judged on the basis of their scholastic record, their college program and adaptability for the library profession, and

b. Present a reading knowledge of at least one modern foreign language. This requirement may be met either by completing one academic year of study at the college level or by passing a proficiency examination.

In order to earn the Master of Arts degree in Librarianship, in addition to meeting the general requirements of the School of Graduate Studies, a student must satisfy the following departmental requirements:

1. Successful completion of a minimum of thirty semester hours of approved graduate courses, of which eighteen semester hours must be in library science.

Candidates without previous academic training in library science will need to take the required courses plus elective courses in the fields of their special interest. The program for each student is developed according to his needs.

Students who have earned eighteen or more semester hours of library science at the undergraduate or post-baccalaureate level may elect from eight to ten of the required thirty hours in fields other than library science.*

2. Submission of a satisfactory research paper prepared as partial fulfillment of course requirements.

Candidates may, with the consent of the graduate adviser, present a thesis for which no more than six semester hours of course credit will be given.

Required Courses

Sem. Hrs.

510 (403) Selection of Books and Related Materials	3
512 (411) Reference Service	3
530 (470) Introduction to Classification and Cataloging	4
600 (562) Foundations of Librarianship	2
622 (520) Library Organization and Administration	2
601 (501) Introduction to Research	2

Electives

602 (509) History of Books and Printing	2
612 (511) Subject Bibliography, Humanities and Soc. Sci.	3
613 (512) Subject Bibliography, Sciences	3
629 (561) Seminar in Administrative Problems	2
630 (570) Adv. Classification and Cataloging	3
520 (480) Field Assignment and Seminar	2
521 (481) Field Assignment and Seminar	2
516 (407) Library Materials for Children	2
617 (507) Reading Guidance for Children	2
546 (406) Storytelling	2
624 (563) Children's Library Service	2
620 (560) Public Library Service	2
644 (504) Adult Reading Interests	2
648 (510) Adult Education Methods in Libraries	2
522 (461) School Library Service	2
616 (505) Curriculum Enrichment Materials	2
542 (402) Reading Interests of Young Adults	2
626 (564) Library Service to Youth	2
712 (612) Professional Field Experience	2-6
700 (600) Thesis	6

*Candidates preparing for school library service must meet the teacher certification requirements in the state in which they wish to be employed.

Application for candidacy for the master's degree in library science may be filed upon completion of the required courses: 510 (403), 512 (411), 530 (470), 600 (562), 622 (520) providing the candidate has maintained at least an average of B.

Description of Graduate Courses

Two types of courses are offered in the School of Graduate Studies: (1) Those bearing numbers 600 (500) and above and open only to graduate students, and (2) those bearing 500 (400) through 599(499) 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

700 (600) Thesis **6 hrs. Summer, Fall, Spring**

Candidates for the Master of Arts degree may elect to write a thesis in their field of specialization under the supervision of one or more faculty advisers.

A student may elect this course in units of from two to six hours. This selection may not be made in more than two units and must be made within a calendar year. Application forms are to be submitted at the time of election of the thesis.

710 (610) Professional Individual Studies **2 hrs. Summer, Fall, Spring**

Designed for highly qualified advanced graduate students, or small groups, who wish to pursue individual studies or projects under the direction of a member of the graduate faculty. It may be elected in any department or division with permission of the Dean of the School of Graduate Studies, the student's graduate adviser and the faculty member under whom the student desires to work. Applications are to be submitted prior to the time of election of this course.

711 (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, Dean of the School 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.)

712 (612) Professional Field Experience

2-6 hrs. Summer, Fall, Spring

Designed for superior 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 Dean of the School of Graduate Studies. Prerequisite: An outline of the purposes of the student's internship or apprenticeship. (Application forms and information about established programs may be obtained at the Graduate Office.)

ART

Hefner, Head

For Graduates and Upperclassmen

501 (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, Elementary Design, Art Composition, History of Art, Commercial Art, or equivalents.

515 (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, or equivalent.

540 (410) Painting

2 hrs. Summer, Fall

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, Elementary Design, Art Composition, or consent of instructor.

For Graduates Only

600 (502) Workshop in Art for Elementary Teachers

2 hrs. Spring, Summer, Fall

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

602 (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.

603 (501B) Studio Course in Art

2 hrs. Summer, Fall, Spring

A continuation of 602.

605 (503) Creative Arts for Secondary Teachers 2 hrs. Spring

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

BIOLOGY

Van Deventer, Head; Professors Bartoo, Hinds, Steen and Wiseman; Assistant Professors Carter, Jackson, Robinson and Vander Beek.

For Graduates and Upperclassmen

504 (404) Microtechnique 2 hrs. Fall

A study of the methods employed in the preparation of tissues for microscopic study. Prerequisite: Three semesters of laboratory work in biology, or consent of instructor.

505 (405) Advanced Studies in Genetics 2 hrs.

Special problems in genetics with emphasis on laboratory work. Prerequisite: Biology 306 or its equivalent. Not offered 1958-59.

512 (413) Health Problems 2 hrs. Fall

An intensive study of those diseases and practices which constitute major social problems. Frequent reports are made and an investigative project is required for graduate credit. Prerequisite: sixteen hours in biology and/or chemistry, or consent of the instructor.

514 (414) Methods and 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 1958-59.

515 (415) Alcohol Problems 2 hrs.

An objective study of a major social problem, examined critically with regard to its physiological, psychological, legal, cultural and sociological aspects. Frequent reports are made and an extensive project is required of graduate students. Prerequisite: Twenty hours in the field of biology and/or sociology or consent of the instructor. Not offered 1958-59.

518 (418) Endocrinology 2 hrs.

The glands of internal secretion, the active principles produced by each, and their effects on bodily metabolism. Prerequisite: Three semesters of laboratory biology, or consent of instructor. Not offered 1958-59.

521 (520) Plant Taxonomy 2 hrs.

Designed for those interested in carrying on investigations in the

identification, classification and ecological distribution of higher plants. Students should have some knowledge of plant classification and plant families. They should be able to use standard plant keys and should be familiar with the organization of a herbarium. Time will be spent in the use of such knowledge to work out a field problem and a special area of interest, selected after consultation with the instructor. Prerequisite: An equivalent of an undergraduate minor in the field of biology. Not offered 1958-59.

525 (425) Biological Constituents 2 hrs. Spring

The elements present in plants and animals as well as the synthesis, characterization and degradation products of the more important compounds. Prerequisite: Eight hours of laboratory courses in biology and consent of instructor.

527 (526) Advanced Studies in Plant Physiology 2 hrs.

An advanced course in plant physiology covering such topics as photosynthesis, respiration, tropisms, plant-growth regulators and enzymes. This course is especially adapted to those students who expect to teach biology at the college level, but whose past training has been largely in the field of animal or general biology. Students are required to carry out individual investigations. Prerequisite: Twelve hours of biology including 220 or its equivalent. A knowledge of chemistry is desirable. Not offered 1958-59.

542 (442) Entomology 2 hrs. Summer

A general study of insects, their structure, classification, life histories, ecological relationships, economic importance, and methods of control. Prerequisite: 100 and 101 or equivalent, or consent of instructor.

543 (443) Protozoology 2 hrs. Spring

A study of the comparative anatomy, physiology and ecology of the Sarcodina, Mastigophora and Ciliata, with consideration of their evolutionary relationships. Prerequisite: A minor in biology, or consent of instructor.

545 (445) Ichthyology 2 hrs. Spring

A study of the anatomy, physiology, taxonomy and ecology of freshwater fishes, with particular emphasis on those occurring in Michigan. Prerequisite: Eight hours of biology, or consent of instructor.

547 (441) Advanced Ornithology 3 hrs. Summer

A study of details of song, habits and identification of shore and marsh birds in their native habitats. Skins of birds of Michigan, both resident and migrant, are provided for identification. Prerequisite: Eight hours of college laboratory courses in biology, or consent of instructor. Early morning field trips.

551 (451) Parasites and Parasitism 2 hrs. Spring

A study of parasitism and its effects on parasite and host. Typical

representatives of the principal groups of animal and plant parasites will be studied in detail. Special attention will be given to the parasites of humans. Prerequisite: Biology 100 and 101 or equivalent, or consent of the instructor.

554 (453) Field Studies in Ecology 2 hrs. Fall

This course is designed for students who have had sufficient experience in field biology to enable them to carry on studies of specific ecological problems in the field. Prerequisite: Twelve hours of college biology.

555 (455) Natural History of Land Vertebrates 3 hrs.

To acquaint students and teachers with the classification, life histories, adaptations, ecology and behavior of amphibians, reptiles and mammals. Prerequisite: Two college laboratory courses in biology or the equivalent, or consent of the instructor. Not offered 1958-59.

557 (457) Natural History of Invertebrates 3 hrs. Summer

To acquaint students and teachers with the ecology, distribution and taxonomy of the invertebrates of the region with special reference to the life histories and economic importance. Students will prepare their own teaching collections. Prerequisite: Two college laboratory courses in biology or equivalent, or consent of instructor.

For Graduates Only

600 (500) Recent Developments in Biological Science 2 hrs. Fall

Students will be expected to survey extensively current literature in biology at the popular, semi-technical and technical levels, and to carry on an intensive investigation on a specific topic. Prerequisite: Eight hours of college biology, or consent of instructor.

602 (502) Human Ecology 2 hrs. Spring

A study of the man-dominated biotic community of civilization and its interrelationships. Lectures and field work. Prerequisite: Eight hours of college biology, or consent of instructor.

609 (508) Historical Studies in Biology 2 hrs. Spring

Designed to give to graduate students an understanding of scientific attitude and methodology, and an opportunity to study the application of these to specific situations in the development of biological science. Prerequisite: 309, or consent of the instructor, with concurrent fulfillment of special assignments equivalent to this course.

616 (516) Hematology and Immunology 2 hrs. Fall

A study of the properties of blood, including immuno-hematologic mechanisms, observation of blood cells, both normal and dyscrasic, and appropriate serologic phenomena. Prerequisites: Bacteriology and organic chemistry or consent of instructor.

631 (530) Advanced Conservation 2 hrs. Summer

Special studies in selected areas of conservation of natural resources. Prerequisite: An undergraduate course involving principles of conservation or consent of instructor.

653 (553) Environmental Analysis (Advanced Ecology) 2 hrs. Summer

This is designed for students who have had basic work in ecology and who wish to gain further knowledge regarding the integration of ecological principles in order to evaluate the interactions and interrelationships of organisms. Prerequisite: 201 or 554, or consent of instructor.

BUSINESS STUDIES

Schneider, Dean; Associate Professors Beal, Grossnickle, Wetnight; Assistant Professors Behling, Hardin.

For Graduates and Upperclassmen

510 (410A) Advanced Accounting 3 hrs. Fall

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

511 (410B) Advanced Accounting 3 hrs. Spring

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

512 (411) Cost Accounting 3 hrs. Spring

The relation of cost accounting to management for control; general principles involved in constructing a cost system; distribution of cost materials, labor and burden; cost records; operating reports; joint and by-product costs and budgetary control. Prerequisite: Accounting 310, or consent of instructor.

514 (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 310, or consent of instructor.

520 (420) Security Analysis 3 hrs. Spring

Analysis of securities, market values and investment programs. Interpretation of financial reports, factors and conditions. Prerequisite: 440 Current Business Trends.

522 (423) Life Insurance 3 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.

550 (449) Management Problems 3 hrs. Summer

An opportunity to approach business from the case-study method by working solutions to actual management problems.

552 (433) Management Report Writing 2 hrs. Fall, Spring

A study of the techniques in and applications of management reports and management-report writing. Actual management reports in the various fields will be studied. The development and practice of technical report writing will be stressed.

556 (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.

558 (562) Purchasing Problems 3 hrs. Spring

A case study course of purchasing problems such as organization, operation, materials management, vendors relations, value analysis and the evaluation of purchasing department performance. Not offered 1958-59.

570 (440) Advanced Salesmanship 3 hrs. Fall, Spring

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

572 (442) Advanced Advertising 3 hrs. Fall, Spring

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

576 (447) Marketing Research 3 hrs. Spring

Designed to give business students experience in using maps, map analysis and other geographic techniques in presenting market data, evaluating market potential, delineating trading and selling territories and selecting locations for wholesale, retail and service establishments: Prerequisites: Business 222, or approval of instructor.

For Graduates Only

620 (520) The Capital Market 2 hrs. Fall

Study of the courses and flow of demand and supply of credit. The business application of monetary theory to financial institutions and their operational problems. Prerequisite: 440 Current Business Trends and 520 Security Analysis, or permission of the instructor.

680 (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, occupa-

tional research, extra-curricular activities and the growth of business education in the United States.

682 (502) Curriculum in Business Education 2 hrs.

Principles, practices and problems involved in the evaluation and construction of business curricula.

684 (503) Improvement of Instruction in Shorthand and Secretarial Subjects

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

686 (504) Improvement of Instruction in Typewriting 2 hrs. Spring

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

688 (505) Improvement of Instruction in Bookkeeping and General Business Subjects 2 hrs. Summer

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.

689 (506) Organization and Teaching of Office Practice 2 hrs. Summer

A consideration of aims and content of office-practice course in the secondary school, with plans and techniques for organizing and teaching the subject-matter of the course and its laboratory material.

CHEMISTRY

Osborn, Dean; Meyer, Acting Head; Professor Knowlton; Associate Professor Iffland; Assistant Professors Anderson, Holkeboer, Nagler and Tuller.

For Graduates and Upperclassmen

505 (405) Chemical Literature 2 hrs.

An introduction to the use of the various types of chemical literature such as journals, handbooks, abstracts, monographs, government and institutional publications and patents. Problems in the course require a search of the literature in fields of analytical, inorganic, bio, organic and physical chemistry. Not offered 1958-59.

530 (403A) Physical Chemistry 3 or 5 hrs. Fall

The course includes studies in kinetic theories of gases, liquids, solids, solutions, thermodynamics, physical basis for molecular struc-

ture, thermo-chemistry, homogeneous equilibria, heterogeneous equilibria, etc. Prerequisite: Quantitative Analysis 222, Physics 113, College Algebra and Analytic Geometry or equivalent, and Calculus.

531 (403B) Physical Chemistry 3 or 5 hrs. Spring

A continuation of course 530. The course includes radioactivity, quantum theory, atomic structure, conductance of solutions, polepotentials, oxidation potentials, polarization, chemical thermodynamics, colloids, etc. Prerequisite: Physical Chemistry 530.

551 (450) Biochemistry 2 hrs. Spring

Elementary study of the chemistry of the body, digestion, metabolism, excretion, the endocrines and vitamins. Prerequisite: 360.

552 (451) Biochemistry Laboratory 1 hr. Spring

Analysis of blood, urine and gastric juice and experiments on carbohydrates, lipides and proteins. To accompany 551 Biochemistry. Prerequisites: 222, or 340, and 360.

553 (452) Special Topics in Biochemistry Laboratory 1 hr. Spring

Further topics in biochemistry laboratory. This course will accompany Biochemistry 551 and 552.

560 (406) Qualitative Organic Analysis 3 hrs.

A course in the methods of identification of organic compounds in the pure state and in mixtures which has as secondary goals the familiarization with many organic reactions and the development of deductive reasoning in the field of organic chemistry. Not offered 1958-59.

564 (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.

565 (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. Given on request.

580 (408) History of Chemical Theory 2 hrs. Summer, 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.

590 (497A) Special Problems in Chemistry 2 hrs. Fall

Advanced students who have completed certain basic work in chemistry may select a special problem in the fields of analytical, organic, bio or physical chemistry. Prerequisite: Chemistry 222, 361 and 530. Given on request.

591 (497B) Special Problems in Chemistry 2 hrs. Spring

A continuation of special problem work started under 590. Given on request.

For Graduates Only

601 (501) Graduate Seminar 1 hr. Fall

Graduate seminar in Chemistry. Required of all candidates for the master's degree in Chemistry.

610 (510) Inorganic Chemistry 3 hrs. Spring

This course covers the principles of inorganic chemistry and the chemical elements. Such topics as extranuclear structure of the atoms, periodic classification of the elements, valency and the chemical bond, complex ions and coordination compounds, acids and bases, and non-aqueous solvents are included in the study of chemical principles. The remainder of the course concerns the chemical elements and their compounds.

620 (520) Advanced Analytical Chemistry 3 hrs.

The theory and technique involved in the more complex separations and determinations in quantitative analysis. In addition to gravimetric and titrimetric methods, such physicochemical methods as spectrophotometry, colorimetry, chromatography, and potentiometry are discussed. The laboratory work is an application of the above techniques. Prerequisite: Physical Chemistry 530. Not offered 1958-59.

630 (530) Advanced Physical Chemistry 3 hrs. Spring

This course covers in more detail topics which can not be developed extensively or were not included in the introductory physical chemistry class. Some of these are equations of state, chromatography, physical properties and molecular structure, viscosity applied to molecular weight determinations, crystal structure, fractionation using columns, activities, electrochemistry, kinetics. Prerequisite: Physical Chemistry 530.

631 (531) Colloids 2 hrs.

The fundamentals of colloid chemistry including the nature of the colloid state, adsorption, types of colloids, methods of colloid formation, properties of colloids, plastics and polymers. Not offered 1958-59.

632 (532) Electrochemistry 2 hrs.

This course includes chemical thermodynamics, conductivity of solutions, transport number, electrode potentials, electrolysis and over voltage. Prerequisites: Mechanics, Sound and Heat; Calculus; Physical Chemistry 530 and Quantitative Analysis 222. Not offered 1958-59.

650 (550) Advanced Biochemistry 3 hrs. Fall

Study of enzymes and hormones. Methods of enzyme chemistry, mode of action, role in metabolism, the chemistry of hormones and their functions. Prerequisite: 551.

660 (560) Advanced Organic Chemistry 3 hrs. Fall

The following topics are considered: relation between structure and reactivity of organic compounds, stereochemistry, chemistry of the hydrocarbons (particularly the alkenes) and chemistry of carbonyl compounds. Prerequisite: 360.

DISTRIBUTIVE EDUCATION

Trimpe, Head.

Open to Graduates and Upperclassmen

570 (410) Organization and Operation of Distributive Education 2 hrs. Fall

Deals with the organization and operation of distributive education in relation to the total education program. It is concerned with preparatory, cooperative and adult programs. Consideration is given to advisory committees and local, state and federal relationships.

572 (420) Teaching Techniques for Cooperative Education 2 hrs. Fall

This course deals with the methods and techniques used in teaching the related subjects to students on cooperative work-study programs. Special emphasis will be given to group and individual methods of instruction.

575 (430) Coordination Techniques in Cooperative Education 2 hrs. Summer, Spring

A study of the duties and responsibilities of the coordinator. Includes the organization of training programs, supervision of trainees on the job and the development of working relationships among the school business and home.

Open to Graduates Only

671 (510) Job Supervisory Training 2 hrs. Spring

This course provides for mastery of the techniques and skills used in supervision of employees. It deals with conference leading, how to train, how to develop the skills of leadership and the corrective interview. This training is useful for vocational teachers and those preparing for supervisory positions.

ECONOMICS

Moore, Head; Professors Bigelow, Bowers and Carlson; Assistant Professors Beinbauer and Wend.

For Graduates and Upperclassmen

502 (430) Modern Economics 3 hrs. Summer, Fall, Spring

A one-semester survey course designed for students who do not intend to major or minor in economics and hence do not take Principles

of Economics. The basic economic principles necessary for a better understanding of present-day economic problems are illustrated by current developments. This course should be of value to prospective teachers, graduate students and others who have the opportunity for only one beginning course in economics. Credit in Principles of Economics will preclude credit in 502.

504 (428) Comparative Economic Systems 2 hrs. Spring

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

506 (427) History of Economic Thought 2 hrs. Fall

The course aims to give the student the historical background for modern economic thinking. Beginning with the leaders of ancient economic thought, the main currents of such thinking are brought down through feudalism, mercantilism, the physiocrats, Adam Smith's influence, the English classical school, socialistic tendencies and the controversial theories of the present experimental era. Prerequisite: not fewer than twelve semester hours in Economics.

508 (434) Economic Development 3 hrs. Fall

An analysis of the economic factors such as population, resources, innovation and capital formation which affect economic growth. Selected underdeveloped areas will be studied to understand the cultural pattern and economic reasons for lack of development and the steps necessary to promote economic progress. Special attention will be paid to evaluating the effectiveness of the United States foreign-aid program and examining the issues arising as a result of the conflict with the U.S.S.R. Prerequisite: Principles of Economics.

510 (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.

511 (421B) Labor Problems 2 hrs. Spring

A study of the methods by which workers, employers and the public have been and now are attempting to solve labor problems. Present programs are evaluated in the light of underlying economic principles in order to develop sound thinking about these problems. Prerequisite: Labor Problems 510.

512 (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 510 and 511 or consent of instructor.

514 (432) Labor and Government

3 hrs. Spring

The course deals with the government's role in the problem arising from labor-management relations and from labor's search for security. It covers the court's attitude toward labor organization from the rule of conspiracy through Taft-Hartley. It also includes protective legislation and the development of security legislation.

524 (420) Public Finance

3 hrs. Fall

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

532 (425) Consumption and Standards of Living

2 hrs. Fall

A comparative study of standards and levels of living, designed to acquaint the student with the ways people actually live in different types of communities and various economic levels. Of special interest to the teacher. Prerequisite: Principles of Economics or consent of the instructor.

552 (426) Business and Government

3 hrs. Fall

A study of the regulatory policies of government and their impact on private enterprise. The course seeks to explain the need for regulation, and to provide an analysis and evaluation of the various laws from the viewpoint of encouragement, subsidization and control. Special attention will be directed to certain aspects of concentration of economic power, public ownership and nationalization programs. Prerequisite: Principles of Economics. Work in political science may be substituted in special cases by permission of the instructor.

574 (422) Corporations

3 hrs. Fall, 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. Students may not receive credit in this course and Business 330 Corporation Finance.

576 (429) Business Administration

3 hrs. Fall, Spring

This course deals with the elementary principles of internal organization and management of industrial enterprises. It includes a discussion of plant location and types of construction; material equipment and power; planning and routing; statistics and accounting; marketing methods and problems; production management; personnel administration; purchasing, traffic, credit and collections. Prerequisite: Principles of Economics.

580 (424) International Economics

2 hrs. Summer, Spring

A general course in international relations with special emphasis on the fundamentals of international trade theory and the impact of

national economic policies on international relations. Prerequisite: Principles of Economics.

Open to Graduates Only

604 (524) Economic Problems 2 hrs. Fall

Some contemporary economic problems in such areas as economic security, labor relations, finance matters related to public expenditures and taxation, governmental controls and the balance between freedom and order are analyzed and studied. Some previous work in economics is desirable but not mandatory.

612 (528) Labor Union Structure and Practice 2 hrs. Spring

An analysis of the government and operation of American labor unions with particular reference to the problems of union leadership, disciplinary procedures, membership control and the economic and social consequences of these practices.

626 (525) Public School Finance 2 hrs. Spring

This course considers problems of school expenditures, sources of revenue, principles of budget making, techniques of borrowing, bonding to finance building programs, tax allocations and similar financial problems facing school administrators. These factors of school cost and expenditures are coordinated with the over-all subject of public revenues and expenditures.

628 (526) Applied Economics for Teachers 2 hrs. Summer, Spring

Designed as a modern aid to in-service teachers and others who desire practical help in managing some of their economic affairs which are more personal than professional. Among items stressed are credit buying, savings, insurance programs, home ownership vs. renting, personal investments, taxes, wills and trust plans.

EDUCATION

Griggs, Dean; Strolle, Head; Professors Bryan, Buelke, Carter, Chiara, Ellis, Frederick, McClure, Mallinson, Manske, Sebaly and Swickard; Associate Professors Govatos, Hunt, McCuskey and Snow.

502 (402) Curriculum Workshop 2 hrs. Fall, Spring

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.

504 (404) Workshop in Human Relations 2 hrs.

Opportunity is provided for teachers, administrators and other school personnel to work together in the study and solution of problems in human relations, particularly in the fields of intercultural relations,

group process, communication and home-school-community relations. Resource persons in sociology, psychology, speech, business and education will participate in the workshop. Not offered 1958-59.

506 (465) Adult Education 2 hrs.

This course will include such topics as organizing and financing formal public school adult education programs, promoting informal adult education activities, leadership training, program planning and adult education group techniques. Students will be permitted to select special areas of interests for research and study. Not offered 1958-59.

508 (410) Parent Education 2 hrs. Summer, Fall

Places major emphasis on home problems which have educational implications for the child. Parent-teacher relationships, council programs and cooperative efforts for improvement of education in home and in school are studied.

510 (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. Individual or committee reports concerning the improvement of various aspects of the elementary school curriculum will be prepared.

511 (411B) The Elementary Curriculum 2 or 3 hrs. Fall

A continuation of 510. Emphasis will be placed on developing and organizing resource materials for actual use in school systems represented by those taking the course.

520 (420) The Junior High School 2 hrs. Summer, Fall

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.

530 (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.

532 (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.

533 (432) Education and Control of the Mentally Handicapped 3 hrs.

The course deals with the roles of the courts, institutions, schools and other agencies in control, education and custody of the mentally handicapped. Organization and administration of special classes for mentally handicapped at all levels.

534 (437) Methods and Materials for Mentally Handicapped Children
3 hrs. Fall, Spring

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.

535 (433A) Introduction to Lip Reading 2 hrs.

A course designed to acquaint the student with the various methods of lip reading and the problems encountered in the teaching of this skill. The student is given opportunity to acquire elementary lip reading skill as well as practice in the techniques of teaching. Not offered 1958-59.

536 (433B) Speech for the Deaf 2 hrs. Fall

Teaching methods used for the development of speech in congenitally deaf children. The formation of speech elements and their combination into words. Use of residual hearing for speech and voice improvement.

537 (433C) Language for the Deaf 2 hrs. Summer

The development and application of the principles of the English language and presentation to the deaf children. Attention will be given to the Language Principle Method, the Barry Five Slate System, Straight Language for the Deaf and Wing Symbols.

538 (435) Anatomy and Pathology of the Aural Mechanism
2 hrs. Summer

A survey of anatomical and physiological subject matter bearing on the speech field of hearing; functional tests of hearing; and discussion of the pathological conditions of the ear and labyrinth.

539 (440) Advanced Audiometry 2 hrs. Fall

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.

546 (439) Driver Training and Safety Education
2 hrs. Summer, Fall, Spring

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.

548 (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.

550 (450) Workshop: Education for Moral and Spiritual Values 2 hrs.

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.

551 (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 1958-59.

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

Basic introductory course for all secondary and elementary teachers including a survey of the history, principles, problems, methods, organization and administration of guidance. Readings and discussions will include the following areas: study of the individual, imparting information essential to adjustment, counseling, placement and follow-up.

581 (481) Techniques of Guidance 2 hrs. Summer, Fall, Spring

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

**582 (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.

583 (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 1958-59.

**585 (436) Mental Hygiene of Childhood and Adolescence.
2 hrs. Summer, Fall**

Deals with the problems of emotional adjustment and maladjustment in childhood and adolescence.

587 (430) Educational Therapy in Reading 2 hrs. Summer

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 treat-

ment of reading problems. Open only to experienced teachers by permission of the instructor.

Open to Graduates Only

601 (501) Introduction to Research 2 hrs. Summer, Fall, Spring

An introduction to the nature and methods of research, with special emphasis upon the practical application of research findings to problems in each student's area of major interest.

602 (502) The School Curriculum 2 hrs. Summer, Fall, Spring

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

603 (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.

604 (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, development of meanings and individual differences. Provisions are made to meet the needs of students with varying backgrounds in psychology.

610 (512) Guiding Child Development in the Elementary School

2 hrs. Spring, Summer

This course is designed to help nursery, kindergarten and elementary school teachers gain an understanding of the manner in which skills, information, attitudes and behavior patterns are acquired and modified. The contributions of each curricular area, such as: language arts, arithmetic, science, social studies, health, etc. are stressed with emphasis on suitability of experience for different stages of growth, instructional practices and appropriate procedures of evaluation.

613 (513) Elementary School Supervision 2 hrs. Summer, Spring

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 1958-59.

614 (514) Elementary School Administration 2 hrs. Fall

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.

615 (515) Seminar in the Teaching of Reading 2 hrs.

This course is designed to acquaint teachers, reading specialists and administrators with the current literature, research, methods and ma-

terials used in teaching children how to read. Special emphasis is placed on reading in relation to other aspects of language and on reading in the content fields. Not offered 1958-59.

620 (520) Improvement of Teaching in Secondary Schools **2 hrs. Summer, 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.

621 (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 1958-59.

622 (522) Teaching in the Core Curriculum **2 hrs. Summer, Spring**

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.

623 (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. Not offered 1957-58.

624 (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.

630 (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 1958-59.

632 (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 1958-59.

633 (533) Hearing Rehabilitation **2 hrs. Fall**

Considers lip reading, hearing aids, auditory training and speech re-education as rehabilitative measures. Laboratory teaching of hard-of-hearing children and adults.

649 (549) Production of Instructional Materials 2 hrs. Summer

Provides many laboratory experiences in making such instructional materials as: bulletin board displays, charts, wet and dry mounting of pictures, film strips and 2" x 2" slides, silk screen process, magnetic boards, handmade slides, mimeograph techniques, etc. Opportunity will be given for students to work on those materials which interest them.

650 (551) Growth and Development in Later Adolescence 2 hrs. Summer

This course is designed to develop an understanding of the behavior patterns, problems and adjustments of college-age youth. Special emphasis is placed on the role of the junior college teacher in guiding the social and emotional as well as the intellectual development of the students.

660 (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.

661 (561) Social Interpretation 2 hrs. Summer

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.

662 (562) Educational Leadership 2 hrs. Summer, Spring

Designed for present and prospective administrators, supervisors and college instructors interested in improving educational programs through constructive methods of leadership. Special emphasis is placed on the importance of human relations in curricular change.

663 (566) Workshop in Educational Administration 2 hrs.

Open to experienced administrators and others interested in working through administrative problems in school systems. Areas to be studied include: school buildings, finance, public relations, internal administrative problems, personnel policies and educational leadership. Not offered 1958-59.

664 (564) School Plant Planning 2 hrs. Summer

This course is designed for present and prospective administrators and supervisors interested in the process of planning school plants. It includes such aspects as building surveys, the determination of needs, and legal and financial considerations. Emphasis is on planning for the building. Some field visits will be expected.

669 (540) Supervision of Student Teaching 2 hrs. Summer, Spring

This course deals with the significance of student teaching in the pre-service education of teachers, the role of the supervising teacher, and

the problems associated with providing high quality student teaching experiences. Many types of student teaching programs and their components of planning, evaluation, supervisory conferences and follow-up are analyzed.

670 (570) Directed Teaching 2-6 hrs. Summer, Fall, Spring

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

680 (580) Seminar in Guidance 2 hrs.

A critical review of the research literature relating to guidance and allied fields. Emphasis will be placed upon the practical application of these findings in the respective schools of the participants. Not offered 1958-59.

681 (581) Interpretation and Use of Tests in Guidance 2 hrs. Summer, 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.

683 (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.

684 (585) Elementary School Guidance 2 hrs. Fall

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

687 (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.

688 (550) Evaluation in Education 2 hrs.

This course is 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 1958-59.

690 (590) The Community College 2 hrs. Summer

Studies the historical development of the junior and community college movement; the function of the community college in the total educational program; the divergent aims and curricular requirements of pre-professional, academic and pre-vocational courses; the problem of guidance and counseling as an integral part of the program; and methods and materials of instruction at the college level.

ENGLISH

Rogers, Head; Professors Limpus and Miller; Associate Professor Nelson; Assistant Professors Bergman, Denenfeld, Freund, Holaday, Lo and Sadler.

Open to Graduates and Upperclassmen

534 (416) Restoration Literature 2 hrs.

The writings of Dryden, Swift, Pope, Addison and Steele are read as expressions of the spirit of the period. Not offered 1958-59.

535 (417) Eighteenth Century Literature 2 hrs.

The decline of the old and the development of new literary interests are studied in the work of Thomson, Gray, Cowper, Blake and others. Not offered 1958-59.

536 (409A) Early Romantic Literature 2 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.

537 (409B) Later Romantic Literature 2 hrs. Spring

A continuation of 536 emphasizing Byron, Shelley, Keats, Hazlitt, Lamb, and DeQuincey.

559 (422) Midwestern Literature 2 hrs. Fall

The origins, characteristics and historical development of the imaginative literature of the American Midwest.

568 (410) Literary Criticism 2 hrs. Summer, 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.

574 (426) Structure of Modern English 2 hrs. Summer, 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.

580 (401) Teaching of Secondary English 2 hrs. Summer, Spring

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

**582 (403) Source Material for Literature in the Elementary Grades
2 hrs. Spring**

Books and materials about children's literature—indexes, lists, studies both critical and historical. Prerequisite: Literature for Children.

Open to Graduates Only

622 (522) American Literary Themes 2 hrs. Summer

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

640 (510) Poetics 2 hrs. Spring

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

642 (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.

644 (513) Studies in the Novel 2 hrs. Fall

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

652 (514) Studies in Shakespeare 2 hrs.

A study of the dramatic structure, characterization, imagery and world outlook of selected plays. Not offered 1958-59.

662 (526) Graduate Writing 2 hrs. Summer, Spring

A course in writing clear and effective prose.

680 (501) Teaching of Freshman English

A consideration of the philosophies underlying various courses in freshman English and of methods suited to teaching the communication skills. Not offered 1958-59.

GEOGRAPHY AND GEOLOGY

Berry, Head; Professor Stout; Assistant Professors Horst and Brueckheimer.

For Graduates and Upperclassmen

510 (406) Geography of Michigan 2 hrs. Spring

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.

512 (419) Survey of Latin American Geography 2 hrs.

Comprehensive survey of Latin America. Includes the physical landscape, natural resources and the cultural adjustments in each of the countries. May not be taken by those who have credit in South America, and Mexico and the Caribbean. Not offered 1958-59.

540 (416) Political Geography 2 hrs. Summer, Fall

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.

542 (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: Human Geography, or consent of instructor.

560 (410) Studies in Geographic Education 2 hrs.

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. Not offered 1958-59.

Open to Graduates Only

630 (530) Physical Geography 2 hrs. Fall

Intensive study of the basic earth sciences. The study of the processes and forms which develop in the atmosphere, hydrosphere and on the earth's land surfaces.

664 (564) Development of Geographic Thought 2 hrs. Spring

Development of geographic thought from the Greeks to the present time with special emphasis on the development and contributions of American geographic thought.

HISTORY

Russel, Head; Professors Dunbar, Friedmann, Macmillan, Mange, Seibert and Starring; Associate Professor Mowen; Assistant Professors Breisach, Brown, Brunhumer, Elsasser and Hamner.

Open to Graduates and Upperclassmen

506 (425A) Intellectual History of Western Man to 1550 2 hrs.

Leading ideas and intellectual movements in Western Civilization, their foundations in Judaeo-Christian traditions, Medieval thought, Arab influences, the spirit of Gothic art, the Renaissance and Humanism, and the final breakup of the Medieval system through the Protestant Revolution. Not offered 1958-59.

507 (425B) Intellectual History of Western Man, 1550 to the Present 2 hrs.

Four hundred years of the Modern mind; the dominance of the scientific perspective and its conflict with Christian ideas and ideals; Calvinism and the economic revolution; rationalism, the Enlightenment, and the secularization of life; romanticism, liberalism and the challenge of socialism; and the world at a crossroads. Not offered 1958-59.

508 (423) Modern Nationalism 2 hrs. Spring

Factors promoting the rapid growth of nationalism in early Modern Times; its part in eighteenth- and nineteenth-century revolutions; changes in twentieth-century nationalism; and recent effects of nationalism on international relations.

516 (417) Constitutional History of the United States 3 hrs. Spring

A study of the development of the political institutions of this country from Colonial times to the present with emphasis on the growth of the Federal constitution.

518 (427) History of United States Foreign Policy 3 hrs. Fall

A study of the formation and evolution of foreign policy by the United States from the time of independence to the present.

520 (403) American Foundations 2 hrs. Fall

The English colonies in America both continental and island, 1607-1763, with emphasis upon the development of institutions and upon imperial policy and administration.

521 (404A) The Era of the American Revolution, 1763-1787 2 hrs. Fall

The causes, character and consequences of the American Revolution. An intensive study of selected topics. The principal aims are to acquaint students with all kinds of historical materials and to introduce them to methods of advanced historical study.

522 (404B) United States History, 1787-1815 2 hrs. Spring

The making of the Constitution and establishment of the early republic. The course is conducted in the same manner as 521 (404A).

523 (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.

524 (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 523 (405A).

527 (418) The Old South

2 hrs.

A study of economic, social and cultural conditions in the ante-bellum South with emphasis on the plantation system and Negro slavery and the social and political philosophy of Southern leaders. Not offered 1958-59.

532 (406A) United States History, 1901-1933

2 hrs. Fall

An intensive study of a short period. The principal topics are the Progressive Movement, World War I, and the causes of the Great Depression.

533 (406B) United States History, 1933 to the Present

2 hrs. Summer, Spring

A continuation of 532. The big topics are the Great Depression, the New Deal, World War II, and our foreign relations since the war.

554 (422A) The Renaissance

2 hrs. Spring

Social and economic conditions in Italy in the fourteenth century; life, thought and art of the Renaissance, 1350-1550; Humanism in northern Europe.

555 (422B) The Reformation

2 hrs. Fall

A history of the religious reformation in Europe at the beginning of Modern Times.

558 (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.

559 (416) The French Revolution and the Napoleonic Era, 1789-1815

2 hrs. Summer, Spring

The overthrow of the French monarchy and the 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.

560 (410A) Continental Europe, 1815-1870

3 hrs. Fall

The principal topics are the reaction following the Napoleonic Wars, the revolutions in behalf of liberty and democracy, the emergence of new states and the unification of Germany and Italy.

561 (410B) Continental Europe, 1870-1914

3 hrs. Spring

The principal topics are the liberal and socialist movements of the time and the growth of nationalism and its consequences.

562 (408) Europe, 1900-1925

3 hrs. Fall

A study of the causes of World War I and the frustrated opportunities of the peace, to the Locarno Conference.

563 (409) Europe, 1925 to the Present 3 hrs. Spring

A study of the crucial problems after 1925 and the solutions offered. Special attention is given to the World Depression, Fascism and Communism, the tensions and ideological conflicts that culminated in World War II, and the positions of victor and vanquished after the war.

567 (426) Twentieth-Century Britain 2 hrs.

A study of British political, social and economic developments since 1900 and of the changing character of the Empire and Commonwealth. Not offered 1958-59.

592 (430) The Literature of History 2 hrs. Spring

The reading of selected writings of great historians. The purpose is to develop (1) standards for evaluating approaches, the use of sources and the handling of controversial matters and (2) appreciation of good history.

Open to Graduates Only

602 (511) Studies in the Middle East 2 hrs.

Studies pertaining to the major aspects of the history of the Middle East. They involve lectures, supplementary reading and the critical use of historical materials in the preparation of papers. Not offered 1958-59.

610 (513) Studies in Michigan History 2 hrs. Summer, 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.

628 (524) Studies in the History and Culture of the Old Northwest 2 hrs. Spring

Reading, discussion and research on various aspects of the development of government, education, social institutions and economic life in the Old Northwest, 1776-1840.

658 (515) Eighteenth-Century Enlightenment 2 hrs.

Lectures and reading on the character of the eighteenth-century enlightenment, with special attention to France; and the critical use of historical materials in the preparation of papers on significant *philosophies*. Not offered 1958-59.

662 (519) Studies in Russian History 2 hrs. Summer

Lectures and reading on those phases of Russian history necessary for an understanding of the present. The critical use of historical materials in the preparation of papers on topics of current significance along two general lines: (a) problems connected with Russia's borderlands, (b) the evolution of Soviet institutions.

666 (566) Studies in the History of Victorian England 2 hrs. Spring

Attention is devoted to economic, social, intellectual and political problems and developments of the period.

674 (574) Studies in Recent Latin American History 2 hrs. Fall

An intensive exploration and analysis of various aspects of the modern Latin American scene will be undertaken with emphasis on the relationship between present-day realities and past experience.

686 (522) The United States and the Far East Since 1945 2 hrs. Fall

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

HOME ECONOMICS

Herald, Head; Associate Professor, Savage.

Open to Graduates and Upperclassmen

500 (426) Textile Fiber Clinic 2 hrs.

A workshop type program. Specialist and visual aids will present the newest information on textiles. To be followed by a study of methods implementing the new learnings. Not offered 1958-59.

510 (416) Advanced Nutrition 3 hrs. Spring

Study of recent developments in nutrition through readings and experiences. Prerequisite: Nutrition and Meal Planning and Food Preservation.

518 (419) Experimental Foods 2 hrs.

Application of principles affecting food preparation. Development of experimental techniques. Prerequisites: Chemistry, Foods and Advanced Foods.

512 (423) Institutional Management 3 hrs.

Study of institutional administration, job analysis, labor policies, personnel problems and cost control in different types of food-service institutions. Prerequisite: Meal Planning and Food Preservation, Quantity Foods. Not offered 1958-59.

514 (425) Food Technology 2 hrs. Fall

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

550 (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 the groups in the school program.

552 (421) The Homemaking Center and Equipment 2 hrs. Spring

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.

554 (422) Housing 2 hrs.

A study of economic and social aspects of housing. Single, duplex and multiple housing problems are considered. Prerequisite: Home Furnishings, or consent of the instructor. Not offered 1958-59.

Open to Graduates Only

600 (504) Advanced Clothing Techniques 2 hrs.

This course is planned to meet the needs of the advanced student in clothing construction techniques. Prerequisites: Clothing, Family Clothing and consent of instructor. Not offered 1958-59.

602 (505) Advanced Tailoring Techniques 2 hrs. Fall

Specialized tailoring techniques in coats and suits. Problems in the use and performance of new textiles in clothing included. Prerequisite: Tailoring and Advanced Clothing Techniques, or consent of instructor.

640 (500) Supervision of Home Economics 2 hrs. Summer

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.

642 (502) Coordinated Program in Home Economics 6 hrs.

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. Not offered 1958-59.

644 (506) Curriculum Planning in Home Economics 2 hrs.

Consideration of changes in family living and society in relationship to the developmental needs of students as a basis for curriculum building in junior and senior high school. Programs in homemaking education. Not offered 1958-59.

646 (507) Evaluation in Home Economics 2 hrs.

A study of the techniques of evaluation applicable in home economics. Review of published devices in this field. Construction of objective devices and their use in the classroom. Prerequisite: consent of instructor. Not offered 1958-59.

648 (508) Adult Education in Homemaking 2 hrs.

A study of the developmental needs of adults and changes in society affecting families as a basis for developing adult programs in homemaking education. Prerequisite: consent of instructor. Not offered 1958-59.

INDUSTRIAL ARTS

Feirer, Head; Assistant Professor Spence

Open to Graduates and Upperclassmen

507 (407) Furniture Construction 3 hrs. Summer

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.

564 (464) Industrial Arts for the Elementary School 2 hrs. Summer, Spring

Deals with the problems of organizing and teaching industrial arts for the elementary grades. Course materials, techniques and materials in the industrial and craft areas will be stressed.

565 (463) Arts and Crafts for Teachers 2 hrs. Summer, Fall

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.

566 (415) Arts and Crafts Techniques 2 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. Course content will be adapted to individual needs. Not offered 1958-59.

Open to Graduates Only

605 (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.

620 (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.

630 (500) Research in Machine Shop Practices 2 hrs. Summer

A course designed for teachers who wish to carry out advanced techniques in the area of machine shop.

638 (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.

650 (416) Advanced Problems in Graphic Arts 2 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 1958-59.

661 (551) Electricity for Shop Teachers 2 hrs.

This is a skill course for students who wish to plan an electrical area in their general shop or plan to teach electricity on a unit shop basis. Special attention will be given to the development of suitable projects and technical information related to them. Prerequisite: Electricity, Adv. Electricity. Not offered 1958-59.

670 (550) 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.

671 (561) Industrial Arts Materials 2 hrs. Summer

A study of all the basic materials of industry with special emphasis on new materials. Written reports on the material will be based on a review of government studies, handbooks, industrial publications and scientific reports. Each material will be evaluated as to its working characteristics and its possible application in the school shop.

641 (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 1958-59.

644 (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 1958-59.

645 (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.

646 (586) Teaching Problems in Industrial Arts 2 hrs. Fall

Special attention will be given to teaching methods and the techniques that are useful to experienced industrial arts teachers. Emphasis will be placed on problem solving in industrial arts, pupil planning and the demonstration technique. Each student will be required to work out a program of teaching methods useful in his particular school.

INDUSTRIAL TECHNOLOGY

Giachino, Head; Luff, Acting Head; Associate Professors Nantz and Wilcox.

For Graduates and Upperclassmen

500 (459) Practical Labor-Management Relations 3 hrs.

A course dealing with existing relationships between government agencies, labor organizations and management. Particular emphasis will be placed on collective bargaining procedures. Not offered 1958-59.

510 (422) Automotive Transportation Workshop 2 hrs.

Practical experience is provided to secure an understanding of the basic elements of automotive and aircraft transportation. Instructional material will be developed for use in teaching units of transportation in junior or senior high schools. Not offered 1958-59.

512 (449) Aviation for Classroom Teachers 2 hrs. Spring

This course is intended for elementary and secondary school teachers desiring an understanding of various phases of aviation and their relation to social, political, economic and educational problems in the modern world. Opportunities will be provided to analyze various educational activities that are appropriate to different grade levels, and provision will be made for visiting airports and acquiring some flight experience.

514 (424) Automotive Performance Problems 2 hrs.

A brief study of the operating curves, advance testing procedures, automotive ratings and requirements as they apply to automotive performance and service life. Not offered 1958-59.

520 (452) Teaching of Vocational-Industrial Education 3 hrs. Spring

This course deals with specific techniques used in teaching trade and industrial subjects. Emphasizes teaching problems associated with trade and industrial education on the secondary school and technical school levels.

522 (472) Course Planning and Construction 2 hrs. Spring

Principles and techniques of selecting and analyzing suitable teaching activities and arranging such material into a functional instructional order. Instructional units prepared will be based on an analysis of a trade, occupation or activity. Opportunity will be provided to prepare a detailed course of study.

524 (474) Measurement in Industrial Education 2 hrs. Fall

A study of the selection, preparation, administration and interpretation of manipulative and educational test and diagnostic devices including the criterion problem and techniques of validation, test reliability theory and the appraisal of educational programs.

528 (476) History and Philosophy of Industrial Education 2 hrs. Fall

A course in the historical developments of modern industrial education, the educational theories underlying its developments and the educational concepts upon which present programs and procedures are based.

Open to Graduates Only

620 (573) Instructional Aids 2 hrs. Spring

Method of selecting, constructing and using effectively appropriate aids in various teaching situations.

622 (575) Industrial Surveys and Curriculum Development 2 hrs. Fall

Acquaints the student with significant research relating to surveys and curriculum development. Curriculum development will be analyzed on the basis of judgmental, experimental, analytical and consensual procedures.

LANGUAGE

Steckelberg, Head; Associate Professors Noble and Rothfuss.

Open to Graduates and Upperclassmen

500 (437) Studies in Contemporary France 2 hrs.

Investigates extensively phases of French economic, political, social and educational life mentioned in French 207A and B. No foreign language prerequisite. Not offered 1958-59.

502 (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 1958-59.

503 (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 1958-59.

510 (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 1958-59.

512 (417) Evolution of German Thought 2 hrs. Fall

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.

514 (427) Germany Through the Centuries 2 hrs. Summer

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.

530 (405) Contemporary Spanish Theater 2 hrs.

The Spanish theater and the dramatists of the 20th century are studied. Lectures and reading assignments in English include representative works of the important writers for the theater. No prerequisite in Spanish. Not offered in 1958-59.

558 (402) Mythology 3 hrs. Spring

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

580 (442) Instruction in Modern Foreign Languages 2 hrs.

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. Not offered 1958-59.

LIBRARIANSHIP

LeFevre, Head; Associate Professor O'Hara

510 (403) Selection of Books and Related 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. Opportunity given for developing competence in writing annotations and book reviews.

512 (411) Reference Service 2 hrs. Summer, Fall, Spring

Study and evaluation of basic reference and bibliographic sources. Critical examination of the publications of governmental agencies, societies and institutions especially as reference sources. Attention given to organization and methods of reference services in the library.

516 (407) Library Materials for Children 2 hrs. Summer, Fall

Problems in the selection and evaluation of books, periodicals, films, recordings and other materials for children with special emphasis on the content areas in the elementary school curriculum. Methods of stimulating interest in reading with attention to the retarded as well as to the gifted child. For teachers, parents, librarians and others who work with children.

520 (480) Field Assignment and Seminar

2 hrs. Summer, Fall, Spring

An assignment in selected cooperating libraries for the purpose of giving the student experience in the organizational and administrative activities in specific types of libraries as basis for understanding their function and the principles underlying policy. The assignment may precede the opening of college or may be carried on during the term. Laboratory period for discussion of problems is held throughout the term. Term project also required of graduate students enrolled.

521 (481) Field Assignment and Seminar 2 hrs. Fall, Spring

A continuation of 480. May be elected concurrently.

522 (461) School Library Service 2 hrs. Spring

The function of the library as a department in elementary and secondary schools. Includes study of special problems in budget planning, in provision of staff and in planning for space and equipment. Standards for the evaluation of school library services are studied. Open to students in school administration programs as well as to librarianship students.

530 (470) Introduction to Classification and Cataloging 4 hrs. Fall

Introduction to the principles of cataloging and classifying the book collection. Includes study and practice in making the dictionary catalog and in classifying according to the Dewey Decimal Classification Scheme. Students are taught to use the unit card system and are given practice in adapting Library of Congress and Wilson printed catalog cards, in assigning subject headings and in cataloging non-book materials.

542 (402) Reading Interests of Young Adults

2 hrs. Summer, Spring

Study of the fields of literature suited to the interests of young people. Students are given opportunity through wide reading to develop principles and standards for the selection of the book collection. Includes an introduction to methods of stimulating broader reading interests and of conducting group book discussions with young people. Open to students in the Education Department and to others who expect to work with youth.

546 (406) Storytelling

2 hrs. Summer, Fall

Underlying principles of the art of storytelling; techniques; content and sources of materials. Practice in telling stories before groups of children is provided. Planning the story hour program for various ages as a means of developing appreciation of literature and stimulating an interest in reading.

Open to Graduates Only

600 (562) Foundations of Librarianship

2 hrs. Fall

The course aims to give the student professional background through study of the historical development of the library, European and American; the function of the modern library and its contribution to society; current trends in librarianship and current library literature.

602 (509) History of Books and Printing

2 hrs. Summer, Spring

Study of the development of the book from the earliest period to modern times. Considers the appraisal of the physical book as well as its relationship to social and cultural developments. Includes history of the alphabet, early writing materials, manuscripts, invention and spread of printing and evolution of book production.

612 (511) Subject Bibliography: The Humanities and Social Sciences

3 hrs. Fall

A study and evaluation of the bibliographical sources in the social sciences and the humanities. Each student will be expected to compile a bibliography on a topic of his choice. Prerequisite: an introductory course in Reference. 612 need not precede 613.

613 (512) Subject Bibliography: The Sciences

3 hrs. Summer, Spring

A study and evaluation of the bibliographical sources in the sciences including the technical fields. Each student will be expected to compile a bibliography on a topic of his choice. Prerequisite: an introductory course in Reference. 612 need not precede 613.

616 (505) Curriculum Enrichment Materials

2 hrs. Summer, Fall, Spring

Study of the sources for selection of teaching materials with emphasis on the content areas in the secondary school curriculum. In-

cludes evaluation of books, pamphlets, periodicals, map and other audio-visual materials. Methods of instruction in the use of such materials are also studied and students are expected to complete a term project. Open to teachers and librarians.

617 (507) Reading Guidance for Children 2 hrs. Spring

Principles and techniques in guidance of children's reading interests; includes a study of the development of a body of literature for children from approximately the 8th century in England and the Colonial Period in America to the present time; establishment of policies for selection of books especially in building the collections of public library children's departments.

620 (560) Public Library Service 2 hrs. Spring

Origin and development, purposes and functions of the tax-supported public library (county and regional) in a democracy. Relation to other educational units in the community; distinctive problems and practices in public library organization and administration. Prerequisite: Library Administration and Organization or equivalent.

622 (520) Library Administration and Organization 2 hrs. Summer, Fall

Organizational and administrative factors requisite for effective library service. Consideration given to governmental and community relations, to personnel, finance, buildings and equipment. Individual projects, lectures and class discussion supplemented by observation trips. Prerequisite: 510, 530, 512 or equivalents.

624 (563) Children's Library Services 2 hrs. Fall

Organization and administration of public library service to children; emphasis on coordination with elementary school library service.

626 (564) Library Service to Youth 2 hrs. Spring

The function and administration of youth service in public libraries; study of methods in use in various library systems and the coordination with secondary school libraries.

629 (561) Seminar in Administrative Problems 2 hrs. Spring

Analysis of administrative problems in various types of libraries; larger units of service, new buildings, centralization and supervision. Students may develop a term project relating to their own institutions. Prerequisite: Library Administration and Organization.

630 (570) Classification and Cataloging 3 hrs. Summer, Spring

A continuation of Introduction to Classification and Cataloging. Attention is given to comparison of classification systems; to cataloging of special types of materials including audio-visual materials and to methods of organizing centralized cataloging units.

644 (504) Adult Reading Interests 2 hrs. Summer, Spring

Evaluation of the findings of reading interest studies and their implications in library service. Survey of the field of popular reading in various subject areas. Development of an understanding of the reading habits, abilities and needs of adults.

648 (510) Adult Education Methods in Libraries 2 hrs. Fall

Function of the library in the continuing education of adults; relationship to other adult education agencies. Introductory leadership training and development of techniques in group work, book discussions and film forums.

MATHEMATICS

Butler, Head; Professors Beeler and Hannon; Associate Professor Powell; Assistant Professors Becksfort, McCully and Seber

Open to Graduates and Upperclassmen

504 (425) Theoretical Mechanics 2 hrs.

A vectorial treatment of the kinematics and dynamics of particles and of rigid bodies, with emphasis on problem solving. Prerequisite: Vector Analysis. Not offered 1958-59.

505 (405) Vector Analysis 3 hrs.

The formal processes of vector analysis, with application to geometry and mechanics. Prerequisite: Calculus. Not offered 1958-59.

540 (423) Introduction to Higher Geometries 2 or 3 hrs. Summer, Spring

The nature of proof. Introduction to non-Euclidean, inversive, finite and projective geometries. Constructions. Especially recommended for those planning to teach high school geometry. Prerequisite: 104B or equivalent.

550 (401) Teaching of Secondary Mathematics 2 or 3 hrs. Summer, Fall

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

552 (411) History of Mathematics 2 hrs. Summer

This course treats of the history of geometry and trigonometry from earliest times to the present. Prerequisite: Analytic Geometry.

553 (412) History of Mathematics 2 hrs. Fall

This course treats of the history of arithmetic and algebra from earliest times to the present. Prerequisite: Analytic Geometry.

560 (473) Introduction to Statistical Analysis

2 hrs. Summer, Spring

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.

570 (431) Advanced Calculus

3 hrs. Spring

This course constitutes a further study of limits, continuity, ordinary and partial derivatives, improper integrals and infinite series, beyond that in the first year's work in calculus. Prerequisite: Calculus.

Offered to Graduates Only

600 (500) Institute Credit in Mathematics

6 hrs. Summer

Composite credit for full work in N.S.F. Summer Institute for Teachers of High School Mathematics, Summer 1958.

610 (511) Concepts of Mathematics I

2 hrs. Fall

Some consideration is given to the number system of mathematics, the theory of numbers, the mathematical analysis of infinity and the algebra of sets. This course is especially recommended for secondary school teachers. Prerequisite: Approval of the instructor.

611 (512) Concepts of Mathematics II

2 hrs. Spring

The following topics are considered: the modern concept of a geometry and its relation to group theory and invariance; brief survey of some geometries, especially those essential for physics, programming, etc.; some geometric constructions, including the construction of algebraic numbers; some maximum and minimum problems, from a geometric viewpoint. This course is especially recommended for secondary school teachers. Prerequisite: Approval of the instructor.

650 (501E) Mathematics for Elementary School Teachers

2 hrs. Fall, Spring

This course, which emphasizes understanding of the concepts and foundations of the mathematics commonly taught in the elementary school, and of associated problems of learning and teaching, should be valuable to all elementary school teachers. Each student will be expected to study and report on some special problem or aspect of the teaching of arithmetic.

652 (502E) Mathematics for Junior High School Teachers

2 hrs.

A careful re-study of the concepts, principles and subject matter of the mathematics commonly taught in grades 7, 8 and 9 with major attention to associated problems of learning and teaching. Not offered 1958-59.

656 (507E) Field Work in Mathematics

2 hrs.

The aim of this course is to equip students (teachers and prospective teachers of mathematics) with a first-hand familiarity with the

construction and use of simple mathematical instruments. There will be class discussions and assigned problems, but much time will be spent in actual field work. The course should be valuable and interesting to teachers and to persons interested in camping or scouting activities. Not offered 1958-59.

MUSIC

Carter, Head; Professors Matthews, Meretta and Stulberg; Associate Professors Belooof and Birkby.

Open to Graduates and Upperclassmen

- 530 (452) Advanced Choral Conducting** 1 hr.
Supervised experience in conducting vocal groups. The student may be called upon to prepare an ensemble for public performance. Prerequisite: Choral Conducting. Not offered 1958-59.
- 531 (451) Advanced Instrumental Conducting** 1 hr.
Supervised experience in conducting instrumental groups. The student may be called upon to prepare an ensemble for public performance. Prerequisite: Instrumental Conducting. Not offered 1958-59.
- 540 (400) Elementary School Music** 2 hrs. Summer, 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.
- 542 (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.
- 543 (403) Psychology of Music Education** 2 hrs. Summer, Fall
Develops understanding of differences in musical ability, various music tests, attitudes toward music and behavior in musical organizations.
- 560 (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.
- 561 (405B) Counterpoint** 2 hrs. Spring
A continuation of 560.
- 562 (456A) Advanced Composition** 2 hrs. Fall
Original work in composition dealing with the larger forms in both the vocal and instrumental fields. Prerequisite: Composition.

563 (456B) Advanced Composition 2 hrs. Spring
A continuation of 562.

567 (455A) Orchestration 2 hrs. Fall

A study of the characteristics of the various instruments, application in arranging for various instrumental combinations including accompaniments for solos, vocal and instrumental. Covers arranging for both band and orchestra. Prerequisite: Sophomore Theory.

568 (455B) Orchestration 2 hrs. Spring
A continuation of 567.

570 (407) Music of Wagner and Beethoven 2 hrs. Fall
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.

590 (402) Operetta and Musical Production 2 hrs.
A course designed to give the school music teacher the techniques for presenting musical productions. Such areas as selection of the production, casting, lighting, scenery, staging, publicity, costumes, make-up, etc. will be discussed. The course will culminate in a public performance. Graduate students will be required to assist with other parts of the production in addition to participating in the performance. Not offered 1958-59.

For Graduates Only

640 (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. Offered odd-numbered summers. Not offered 1958-59.

665 (555) Band Arranging 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. Offered even-numbered summers.

670 (507) Opera and Oratorio 2 hrs. Spring
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.

650 (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.

Applied Music

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.

H36-H37	Harp
H56-H57	Piano
H76-H77	Organ
H96-H97	Voice
Z36-Z37	Stringed Instruments
Z56-Z57	Brass Instruments
Z76-Z77	Woodwind Instruments
Z96-Z97	Percussion Instruments

OCCUPATIONAL THERAPY

Spear, Head

For Graduates and Upperclassmen

502 (428) Advanced Weaving 2 hrs. Spring

Studies in the more complex forms of fabric structure and design.

504 (425A) Ceramics 2 hrs. Spring

A course in the functional form in clay. Emphasis is placed on ceramic processes, glazing and kiln management.

505 (425B) Jewelry 2 hrs. Fall

A studio course in the design and technical essentials in jewelry. Includes study of ceramics, copper, sterling silver, stone setting and enamel.

524 (410B) Medical Lectures 3 hrs. Fall

A series of lectures given by local physicians specializing in various fields of medicine and surgery. These will be integrated with occupational therapy treatment.

525 (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.

530 (410A) Theory of Occupational Therapy 2 hrs. Fall, Spring

Specific instruction in the organization and administration of various types of occupational therapy departments. Changes, trends and social factors involved in allied agencies and organizations are discussed by staff members and resource persons.

532 (430) Training of Amputee Patients 2 hrs. Summer

Provides instruction in the rehabilitation of both the child and adult amputee. Course will involve some field work at hospitals specializing in this area.

For Graduates Only

600 (515) Advanced Design 2 hrs.

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. Not offered 1958-59.

640 (511) Advanced Clinical Training 6 hrs. Summer, Fall, Spring

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

650 (503) Clinical Training and Scheduling 2 hrs.

Objectives of clinical training and evaluation of existing hospital training centers. Mechanics of the student training schedule and the student-rating program. Not offered 1958-59.

PAPER TECHNOLOGY

Nadelman, Head; Professor Diehm.

For Graduates and Upperclassmen

530 (434) Chemistry and Technology of Plastics 2 hrs.

A general survey of the chemistry and technology of plastics with emphasis upon the synthetic resinous materials used by paper makers and converters. Prerequisite: Organic Chemistry. Not offered 1958-59.

540 (437A) Principles and Practice of Coated Paper Manufacture 1 hr. Spring

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 calendaring. Visitations to nearby mills engaged in coating paper and paperboard.

541 (437B) Principles and Practice of Coated Paper Manufacture

A continuation of 540. Not offered 1958-59.

550 (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 1958-59.

560 (446) Paper Mill Management 2 hrs.

A course of study for paper technician students on the duties of management in paper mill organization, finance, marketing, sales, research, personnel, labor relations, engineering, purchasing, traffic and management attitudes. Not offered 1958-59.

570 (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.

571 (436B) Research Problems in Pulp and Paper 2 hrs. Spring

A continuation of course 570.

PHYSICAL EDUCATION FOR MEN

Gary, Head; Professor Maher; Associate Professors Boven, Dales, Gabel and Schlosser.

For Graduates and Upperclassmen

530 (403) Sports Officiating 2 hrs.

This course considers rules and officiating techniques with the emphasis on the four major sports, football, basketball, baseball and track. Prerequisite: Fundamentals and technique courses in the various sports. Not offered 1958-59.

560 (401) Curriculum Planning in Physical Education 2 hrs. Summer

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

561 (402) Problems in Interscholastic and Intercollegiate Athletics 2 hrs. Summer

Relationship of athletics to education is considered. Problems in the organization of an athletic program including eligibility, finance, liability, transportation, safety, facilities and equipment will be discussed.

For Graduates Only

630 (504a) Advanced Techniques in the Coaching of Football 1 hr. Summer

The course will consider 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.

- 631 (504b) Advanced Techniques in the Coaching of Basketball
1 hr. Summer

The same as 630.

- 632 (504c) Advanced Techniques in the Coaching of Baseball
1 hr. Summer

The same as 630.

- 633 (504d) Advanced Techniques in the Coaching of Track
1 hr. Summer

The same as 630.

- 634 (505) Advanced Techniques in the Coaching of Minor Sports
2 hrs. Summer, Fall

This course 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.

- 660 (501) Current Studies in the Administration of Physical Education
2 hrs. Summer, Spring

For administrative officers as well as for teachers and directors of physical education. Includes a study of representative programs of physical education and a discussion of standards for evaluating such programs.

- 670 (502) Community Recreation
2 hrs.

Course considers problems in community recreation. The essential elements pertaining to leadership, areas, facilities, program, activities and methods of organization and administration are considered. A study is made of outstanding programs in operation. Recreation material is surveyed. Not offered 1958-59.

- 671 (503) Camp Administration
2 hrs. Summer

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.

- 672 (506) Methods and Materials in Recreation
2 hrs. Summer, Fall

A study of the best methods and materials for the teaching and organization of recreation activities. 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; Professor Roell

For Graduates and Upperclassmen

544 (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. Opportunity for observation and making of lesson plans. Prerequisite: Introduction to Physical Education.

550 (473) Individual Gymnastics 3 hrs. Spring

The study of preventive as well as prescribed exercises for remedial defects in case of curvature and physical abnormalities. Practice with patients will be given. Prerequisite: Anatomy, Physiology and Applied Anatomy.

561 (445) Administration and Organization of Physical Education 2 hrs. Fall

This course presents the problems that arise in the everyday experience of the instructor. Among the topics considered are administration of activities, physical examinations, excuses, special cases, records, schedules and relations with other services in the school. Prerequisite: Methods in Physical Education.

For Graduates Only

640 (531) Rhythms in Elementary Education 2 hrs. Summer, Fall

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.

641 (532) Physical Education for the Elementary Classroom Teacher 2 hrs. Summer, Fall

A study of the developmental needs of the child in terms of physical activity; the role of physical education in childhood education; the responsibility of the classroom teacher in this area; demonstrations and practice in teaching activities.

661 (550) Problems and Trends in Physical Education 2 hrs. 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.

662 (520) Curriculum Building in Physical Education 2 hrs. Summer

A course in the development of a practical progressive physical education program for the elementary schools and for secondary school girls. A review of characteristics of children, particularly those con-

cerned with physical education, will be used as a basis for thorough analysis of the development of the fundamental and basic skills at the various age levels.

PHYSICS

Rood, Head; Professors Kruglak and Marburger; Associate Professors Bradley and Nichols; Assistant Professors Derby and Miller.

For Graduates and Upperclassmen

531 (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, Calculus. Not offered 1958-59.

553 (403) Applied Spectroscopy 3 hrs.

A combined class and laboratory course on methods of spectrographic analysis. The topics studied will include the history of spectroscopy, the origin of line spectra, spectrographic instruments and modern techniques of qualitative and quantitative analysis. Prerequisite: one year of General College Physics. Not offered 1958-59.

563 (462) Electrical Measurements 3 hrs. Spring, 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, Calculus.

565 (465) Advanced Electronics 3 hrs.

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: Introduction to Electronics, Calculus. Not offered 1958-59.

571 (440) Atomic Physics 3 hrs. Fall

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

573 (441) Nuclear Physics 3 hrs. Spring

A continuation of Atomic Physics. 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.

For Graduates Only

613E (502E) Current Developments in Physics 2 hrs.

This course consists of demonstration-lectures and discussions of some of the outstanding developments in physics in recent years, such as nuclear energy and its applications, artificial radioactivity, elementary particles, high energy accelerators, semi-conductors and transistors and ultrasonics. Special attention will be given to make the course of practical value to high school teachers of science. Prerequisite: one year of General College Physics. Not offered 1958-59.

POLITICAL SCIENCE

Weber, Head; Professor Stine; Associate Professors Clark and Plano; Assistant Professors Ackerman, Greenberg, Olton and Phillips.

For Graduates and Upperclassmen

500 (439) Municipal Government 2 hrs.

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. Not offered 1958-59.

506 (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 elementary and secondary teachers. Specific units for teaching may be developed by individuals or groups.

520 (427) The Constitution and Civil Liberties 2 hrs. Spring

A study of free speech, loyalty in a democratic state, citizenship, freedom of religion, rights of persons accused of crime and government's responsibility to protect persons from racial and religious discrimination, with special attention to the role of law and judges.

540 (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.

542 (452) Government and Problems of the Far East 2 hrs. Fall

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.

544 (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 1958-59.

546 (453) Government of the Soviet Union 2 hrs. Fall

The organization and government of the Soviet Union. Deals primarily with the present political structure with special emphasis on the Communist Party and its relationship to the organization of the state. Attention will be paid to youth organizations and education in general as well as to the socio-economic basis of the current system.

548 (448) Comparative Government Workshop 4 hrs. Summer

A foreign-study program especially designed for teachers and advanced college students. The program involves visits to the capitals of major European countries and other important cities. Side trips have been planned which are historical as well as scenic. Students will be given an opportunity to live in the home of a European teacher for a few days. Special attention will be paid to governmental forms and problems, as well as to the study of problems of international organization. Emphasis will be placed on aspects of decision making in European politics, executive-legislative relationships, political parties, economic aid as applied to postwar recovery, and methods of international cooperation. Registration will be through the Division of Field Services.

550 (465) American Foreign Policy 2 or 3 hrs. Fall

An analysis of the diplomatic relations of the United States with emphasis on present foreign problems. Consideration will be given to the formation and execution of American foreign policy. Prerequisite: National Government and Administration, or a course in American History, or equivalent.

For Graduates Only

600 (530) National Government 2 hrs. Summer

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.

602 (531) State Government 2 hrs. Spring

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.

604 (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.

608 (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 1958-59.

650 (565) Seminar in Contemporary American Foreign Policy

2 hrs. Summer

Case studies of the major foreign policy problems currently confronting the United States. Analysis of background, principal issues, alternative actions, formations of policy. Prerequisite: 550 American Foreign Policy, or consent of instructor.

652 (560) Problems of International Politics

2 hrs. Spring

Analysis through case studies of major current international problems, their backgrounds, solutions offered and current status. Not offered 1957-58.

655 (562) The United Nations

2 hrs.

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. Not offered 1958-59.

660 (593) American Political Thought

2 hrs. Fall

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

666 (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 1958-59.

PSYCHOLOGY

Kuffel, Head; Associate Professors Fatzinger, Schmidt; Assistant Professors Asher, Pavlik and Reynolds.

For Graduates and Upperclassmen

510 (410) Learning and Memory

2 hrs.

A survey of the general principles of learning and memory and an introduction to learning theory. Lectures and laboratory. Not offered 1958-59.

512 (400) Physiological Psychology 2 hrs. Fall

Neurophysiological correlates of learning, perception, emotion motivation and problem solving. Interrelation between physiological processes and behavior theory is considered.

514 (411) Motivation-Emotion 3 hrs.

The psychological and physiological aspects of the topics are examined. Presents the current theories of motivation and emotion and attempts to integrate the conflicting views. Shows the influence of motivation on human behavior. Not offered 1958-59.

534 (401) Sensation and Perception 3 hrs.

Laboratory projects in the psychology of sensation and perception. Emphasis on experimental methods. One hour lecture, four hours laboratory. Prerequisite: Elementary Experimental Psychology. Not offered 1958-59.

542 (404) Occupational Analysis and Classification 2 hrs. Fall, Spring

Sources of occupational information; procedures and techniques of job analysis and job classification; applications in employment procedures, placement and vocational counseling.

560 (406) Vocational Psychology 2 hrs. Summer, Fall, Spring

The problems of vocational choice and of occupational group-differences. Lectures, reading and an occasional laboratory period substituted for a class hour.

For Graduates Only

615 (500) Systematic Psychology 3 hrs.

An examination of the various schools of psychology with emphasis on the development of contemporary theoretical explanations of human behavior. Not offered 1958-59.

624 (531) Personality Theory 2 hrs. Spring

Consideration and evaluation of the major theories of personality with emphasis on those theories having implications for counseling and therapy. An examination of experimental evidence and illustrative case studies.

644 (508) Personnel Psychology 2 hrs. Spring

A survey of the psychological problems of personnel administration and to the methods of personnel psychology. Lectures, discussions and examination of research.

645 (510) Psychology of Work Effectiveness 2 hrs. Fall

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.

646 (511) Psychology of Industrial Training 2 hrs.

A survey of learning principles as applied to training in industry with emphasis on practical techniques. The training of interns, apprentices, inspectors, new workers and supervisors is considered. Not offered 1958-59.

650 (505) The Deviant Individual 2 hrs. Summer, Fall

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

651 (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: Abnormal Psychology.

661 (535) Psychological Counseling 2 hrs. Fall

A consideration of the counseling process, various theoretical approaches to counseling, tests and techniques used in counseling. Techniques used in counseling children are considered.

662 (536) Counseling Practicum 2 hrs. Summer, Spring

Supervised practice of counseling in the clinical setting. Training in diagnosis, the use of counseling techniques, writing of case notes, etc. Prerequisite: Permission of instructor.

680 (507) Measurements of Intelligence 2 hrs. Summer, Fall

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

681 (502) Measurements of Interests, Aptitudes and Personality 2 hrs. Spring

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

682 (532) Individual Testing 2 hrs. Fall

Supervised practice in administration, scoring and interpretation of individual tests of general intelligence: Wechsler-Bellevue, WISC. Prerequisite: Permission of instructor.

684 (533) Survey in Projective Techniques 2 hrs.

Theory and basic concepts underlying the use of projective techniques. The Rorschach, TAT, CAT and various other techniques will be considered. Not offered 1958-59.

685 (534) Projective Testing

2 hrs.

Supervised practice in the administration and interpretation of projective techniques appropriate to the student's professional interest area. Prerequisite: Permission of instructor. Not offered 1958-59.

SCIENCE DIVISION

Professors Mallinson, Marburger, Osborn and Van Deventer; Associate Professor Nichols.

For Graduates Only

610 (503) Science for Elementary Teachers

2 hrs. Post-Session Workshop, Fall

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.

620 (571) The Teaching of Science

2 hrs. Summer, Spring

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

630 (501E) Modern Advances in Physical Science

2 hrs. Summer

This course consists of demonstration-lectures and discussions of some of the outstanding developments in physics and in chemistry in recent years. Such topics as additions to the periodic table, radioactive isotopes, new organic compounds, ultrasonics, semi-conductors and transistors and nuclear energy will be considered. Prerequisite: 16 hrs. in physics and/or chemistry.

SOCIAL SCIENCE DIVISION

Professors Macmillan and Stine; Assistant Professor Beinhauer.

For Graduates and Upperclassmen

500 (400) Teaching of the Social Studies 3 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.

502 (401) Social Studies Seminar: England

6 hrs.

A foreign-study seminar especially designed for teachers and advanced college students in the social studies. It consists of regularly

scheduled lectures and discussions on British life, institutions and international relations. Conducted trips relate the lectures to the contemporary scene. The seminar is in formal session at Ashridge College, England, for a period of five and a half weeks. Credit, up to a maximum of three semester hours in one department, may be distributed among economics, history, political science and sociology. Not offered 1958-59.

For Graduates Only

600 (500) Seminar in the Teaching of the Social Studies 2 hrs. Spring

The course is designed to assist social studies teachers to evaluate their philosophy and teaching methods in the light of accepted principles and current practices in social studies instruction. Students will be encouraged to do individual studies which will enable them to remedy their own weaknesses. Prerequisite: Open only to graduate students who are teaching or have taught social studies in the public schools.

SOCIOLOGY

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

For Graduates and Upperclassmen

500 (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 or Social Dynamics of Human Behavior. Not offered 1958-59.

502 (449) Contemporary Social Movements 3 hrs.

A study of the growth and place in contemporary society of selected social movements, including communism, fascism, Ku Klux Klan, the Townsend movement and the like. Prerequisite: Principles of Sociology or Social Dynamics of Human Behavior. Not offered 1958-59.

514 (446) Juvenile Delinquency and the Community 2 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. When possible, extensive use of community resource people is made. Prerequisite: Principles of Sociology or Social Dynamics of Human Behavior, or equivalent.

534 (448) Comparative Culture Studies: Britain and the United States 2 hrs.

A comparative study of the structure and the functioning of selected aspects of culture in Britain and America. The courts, the educational system, the welfare state, class stratification, correctional institutions,

political organization and the basic structure of government are considered. Prerequisite: Principles of Sociology or Social Dynamics of Human Behavior. Not offered 1958-59.

542 (445) Family Life Counseling and Education 2 hrs.

This course is designed to acquaint the student with procedures for increasing competence for family living. The course will focus on interpersonal competence as an aim of family life counseling and education and will concern itself with methods, appropriate in the school, church and social agency, for working with individuals and small groups who desire preparation for marriage and parenthood. Not offered in 1958-59.

554 (443) Population Problems 3 hrs. Fall

A study of population trends and their human significance. The social and cultural factors influencing the reproductive behavior of man are examined. Bio-social facts are presented and analyzed, but primary stress is on the social implications of present and probable future population trends. World pressure spots as well as the United States are considered. Prerequisite: 12 semester hours of Social Science.

572 (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, teachers, etc.

For Graduates Only

600 (540) Social Dynamics of Human Behavior 2 hrs. Summer, Spring

The concepts of sociology, cultural anthropology and social psychology essential to understanding human development and social behavior are systematically explored and integrated. The student is taught how to assess the concrete social situations in which he finds himself, and in which he observes other people from day to day. This course is designed for those who have not had a foundation course in sociology.

610 (542) Social Pathology and Personal Deviation 2 hrs. Summer

A study of the social aspects of personal deviation. Subject-matter would include consideration of the alcoholic, the drug addict, the marginal man and the sexually maladjusted. Course considers deviate behavior in light of social background, causative factors and possible therapy. Prerequisite: Principles of Sociology, or Social Dynamics of Human Behavior, or equivalent.

615 (544) Techniques of Intercultural Adjustment 2 hrs.

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, or Social Dynamics of Human Behavior, or equivalent. Not offered 1958-59.

616 (516) Seminar in Social Problems 2 hrs.

A detailed study of a social problems area through student reports and seminar discussion. Instructor will select specific topic. Course is intended to provide intensive joint exploration of significant sociological issues. Not offered 1958-59.

624 (541) Primary Group Dynamics 2 hrs. Fall

A study of the forces that influence the outcomes of primary group activity. The effects of diverse personalities, of varying leadership roles, of person-to-person interaction and of the responses of the group as a whole are considered. Principles of effective group dynamics are practiced, as well as observed and studied, in the educational setting. Prerequisite: Principles of Sociology or Social Dynamics of Human Behavior, or equivalent.

640 (545) The Family 2 hrs. Fall

The family in a changing society. The family as the molder of child personality; cooperation of school and home in guiding children; sex guidance and family life education in the school. Prerequisite: Principles of Sociology or Social Dynamics of Human Behavior, or equivalent.

SPEECH

York, Head; Professors Becker, Brown and Van Riper; Associate Professor Pruiss.

For Graduates and Upperclassmen

501 (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.

511 (416) Oral Interpretation of the Drama 2 hrs.

Platform reading of the one-act and the three act play. Through class analysis and criticism, a basis for judging the drama is established. Prerequisite: Fundamentals of Speech, Interpretive Reading, Acting, and Advanced Interpretive Reading, or the consent of the instructor. Not offered 1958-59.

521 (414) Children's Theatre 2 hrs.

Deals with the production of formal plays with and for children. Consideration is given to the dramatic literature of the field, the selec-

tion, staging and direction of children's plays, as well as the psychology of child audiences. Not offered 1958-59.

523 (415) Acting 2 hrs.

A continuation of the work done in Acting 221, with more intensive work in the techniques of creative acting. Each student will create at least one role in a play. Prerequisite: Fundamentals of Speech, Interpretive Reading, Acting. Not offered 1958-59.

525 (422) Problems of Play Direction 2 hrs.

Deals with special problems facing the teacher who has had little or no formal training in theatre. The area of study is limited to selecting and casting the play, to the approach and preparation of the role and and to the direction of the play. Laboratory provided in summer dramatic and opera workshop productions. Not offered 1958-59.

527 (424) Technical Problems of Play Production 2 hrs. Summer

A companion course to 525 with the emphasis placed on technical problems in planning and executing scenery, lighting, costuming and makeup. Laboratory provided in summer dramatic and opera workshop productions.

531 (406) Public Speaking II 2 hrs. Summer, Spring

Advanced study of speech composition and audience psychology, analysis of model speeches and frequent practice in constructing speeches for special occasions. Students interested in coaching or participating in oratorical contests will find this course useful. Prerequisite: Fundamentals of Speech, Public Speaking or consent of instructor.

533 (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.

543 (441) Radio in Education 2 hrs.

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. Not offered 1958-59.

545 (442) 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.

551 (451) Basic Voice and Speech Science 3 hrs. Summer, 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.

553 (452) Stuttering and Allied Disorders 3 hrs. Summer, 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 aphasics individuals will be surveyed as well as the various methods for treating these disorders. Prerequisite: Principles of Speech Correction.

555 (453) Applied Speech Correction 3 hrs. Spring, Fall

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 university, service in a traveling speech clinic and the study of the principles of clinical practice. Prerequisite: Fundamentals of Speech, Principles of Speech Correction, and consent of instructor.

559 (454) Organic Speech Disorders 2 hrs. Spring

This course is concerned with the diagnosis and treatment of the speech disorders of organic origin; cleft palate, cerebral palsy, aphasia, aphonia and dysarthria.

561 (401) Teaching Speech in the Elementary School 2 hrs. Summer, Spring

This course is designed to give the teacher in the elementary school an understanding of the role of general speech training in the elementary school curriculum, the relationships between speaking and reading and writing, methods of teaching individual and group speaking activities, types of speech improvement programs and methods of improving listening skills.

563 (499) Teaching Speech in the Secondary School 3 hrs. Fall, Spring

Emphasizes problems of teaching speech in high schools. Considers aims, principles, materials and techniques related to speech teaching.

565 (404) Creative Dramatics for Children 2 hrs. Summer, Fall, Spring

Designed primarily for teachers in the elementary grades. It will deal with the principles, materials and techniques of creative dramatics. The course is planned to prepare the elementary school teacher in the use of these activities to enrich the classroom program and to develop creativity in the individual child.

567 (408) Direction of Forensic Activities 2 hrs. Summer

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.

For Graduates Only

601 (505) Problems in Listening 2 hrs. Summer

This course concerns itself with the principles and problems of listening. Studies and experiments in the field will be the main emphasis. In addition, applications to classroom situations will be made. Each member of the class will take tests and experiment with various listening techniques in order to gain insight to the relationship of language, attitudes and learning as seen from the perspective of listening behavior.

631 (501) Group Problem Solving 2 hrs. Post-Session Workshop

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.

633 (502) Speech and Social Control 2 hrs. Summer

Inquires into the factors and forms of speech and the areas of social experience which are involved in the use of speech for social control. The use of speech is observed in politics, social movements, business and industrial relations, advertising and selling, promotional drives and the like. The aim of the course is to develop in the individual the ability to evaluate critically the many verbal efforts to influence human belief and behavior which are thrust upon us daily.

635 (526) Public Address in American Society 2 hrs.

Deals with the study of the history and criticism of public address in America. Will include a study of the important speakers in American history, an analysis of their speeches, their impact upon American society and their relationship to political and social movements in the United States. Not offered 1958-59.

651 (554) Teaching of Speech Correction 2 hrs. Spring

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

653 (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 1958-59.

655 (556) Speech Therapy 2 hrs. Fall

Includes a historical survey of the speech therapy field; the philosophy of speech correction; professional problems; the administration of private, hospital, public school speech clinics and the basic principles of psychotherapy as applied to speech disorders.

661 (591) School Assemblies and Community Programs 2 hrs. Fall

This course is designed to provide help to teachers and administrators in planning and executing school assemblies, educational conferences and special programs for various community groups. It will deal with sources of materials, problems in planning, techniques and skills involved in readying such programs for their presentation.

VOCATIONAL DIVISION

Kohrman, Dean

For Graduates and Upperclassmen

520 (470) Principles of Practical Arts and Vocational Education 2 hrs. Fall

The place and function of the practical arts and vocational education in the modern school; fundamental principles upon which this work is based. For teachers of agriculture, business, home economics, industrial subjects and administrators.

For Graduates Only

620 (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.

625 (578) Administration and Supervision of Practical Arts and Vocational Education 2 hrs. Spring

The functions of administration and supervision; problems involved in the organization and operation of practical arts and vocational education programs. For administrators, supervisors of vocational education and those wishing to prepare for such positions.

626 (590) Trends in Technology and Employment 2 hrs.

Major occupational shifts resulting from recent advances in science and technology. The changing nature of the labor force, economic and sociological implications of automation and atomic power. Attention will be given to educational programs needed to meet technical and skilled manpower requirements. Not offered 1958-59.

628 (580) Seminar in Vocational Education 2 hrs. Summer

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



1. EDUCATION BUILDING
2. CAMPUS SCHOOL—UNIVERSITY ELEMENTARY & UNIVERSITY HIGH
3. LIBRARY BUILDING
4. NATURAL SCIENCES BUILDING
5. HEALTH SERVICE BUILDING
6. EAST CAMPUS GYMNASIUM
7. VANDERCOOK HALL
8. SPINDLER HALL
9. THE THEATRE
10. WALWOOD HALL (UNION & RESIDENCE)
11. ELECTRONICS BUILDING
12. MECHANICAL TRADES BUILDING
13. INDUSTRIAL ARTS BUILDING
15. a. WALDO STADIUM—N. W. STANDS
b. WALDO STADIUM—S. E. STANDS
16. HYAMES FIELD
17. BUSINESS EDUCATION BUILDING

18. THEATRE STORAGE
19. SPEECH ANNEX
20. INDUSTRIAL EDUCATION ANNEX
21. MAINTENANCE BUILDING
22. GREENHOUSE
23. a. PANHELLENIC HOUSE
b. COLHEDON HOUSE
c. "TY HOUSE" HERALD OFFICE & BROWN & GOLD OFFICE
d. FACULTY RESIDENCE
e. FACULTY RESIDENCE
f. FACULTY RESIDENCE
24. TEMPORARY CLASSROOM BUILDING
25. ARCADIA
26. a. HILLSIDE APARTMENTS
b. HILLSIDE APARTMENTS
27. McCRACKEN HALL & PAPER INDUSTRY LABORATORIES
28. BURNHAM HALLS

29. MAYBEE HALL
30. DRAPER-SIEDSCHLAG HALLS
31. KANLEY CHAPEL
32. ADMINISTRATION BUILDING
33. PRESIDENT'S RESIDENCE
34. GOLF COURSE CLUB HOUSE
35. TOOL HOUSE
- 37.-44. ELMWOOD APARTMENTS (a-h)
45. DAVIS HALL
48. ZIMMERMAN HALL
49. PHYSICAL EDUCATION BUILDING & FIELD HOUSE
- 50.-53. ELMWOOD APARTMENTS (j-m)
- 54.-57. ELMWOOD APARTMENTS (n-q)
58. ELLSWORTH HALL
59. UNIVERSITY CENTER
60. THEODORE S. HENRY HALL
61. WALDO LIBRARY

